



Cumbria County Council

WORKINGTON GATEWAY (LUF2)

Options Assessment Report





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Options Assessment Report

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CONTENTS

1	INTRODUCTION	1
1.1	PURPOSE OF THE REPORT	1
1.2	BACKGROUND	2
1.3	STUDY AREA	2
1.4	OPTIONS ASSESSMENT REPORT STRUCTURE	3
2	UNDERSTANDING THE CURRENT SITUATION	4
2.1	OVERVIEW	4
2.2	RELEVANT POLICIES AND STRATEGIES	4
2.3	SOCIO-ECONOMIC CONTEXT	5
2.4	WIDER-ECONOMIC CONTEXT	6
2.5	CURRENT TRANSPORT SITUATION	7
2.6	ENVIRONMENTAL CONTEXT	16
3	UNDERSTANDING THE FUTURE SITUATION	19
3.1	OVERVIEW	19
3.2	POPULATION, HOUSING AND EMPLOYMENT GROWTH	19
3.3	FUTURE GROWTH IN CYCLE TRIPS	22
3.4	FUTURE OPERATION OF THE LOCAL TRANSPORT NETWORK	23
4	ESTABLISHING THE NEED FOR INTERVENTION	26
4.1	OVERVIEW	26
4.2	SUMMARY OF EVIDENCE AND INFORMATION	26
5	IDENTIFYING STRATEGIC OBJECTIVES AND THE GEOGRAPHICAL SCOPE OF INTERVENTION	30

5.1	OVERVIEW	30
5.2	OBJECTIVE SETTING	30
6	GENERATING OPTIONS	33
<hr/>		
6.1	OVERVIEW	33
6.2	DEVELOPING THE LONG LIST	33
7	UNDERTAKE ALIGNMENT SIFT	35
<hr/>		
7.1	ALIGNMENT SIFTING	35
8	DEVELOPMENT AND ASSESSMENT OF POTENTIAL AND PREFERRED OPTIONS	44
<hr/>		
8.1	OVERVIEW	44
8.2	CYCLING: SCHEME DEVELOPMENT PROPOSALS	44
		46
8.3	LANDSCAPE & URBAN DESIGN	47
8.4	RAMSAY BROW ASSESSMENT	50
8.5	SCHEME DRAWINGS	52

TABLES

Table 2-1 – Policy Reviewed	4
Table 2-2 – Strategic Priorities	5
Table 2-3 – Socio-economic Context	6
Table 2-4 – Alignment with other planned investments	7
Table 2-5 – Wider Economic Context	7
Table 2-6 - Distance Travelled to Work	11
Table 2-7 - Current Transport Situation	16
Table 2-8 – Environmental Context	18
Table 3-1 - Site Allocations in Workington LCWIP	19
Table 3-2 - Summary	22

Table 3-3 – Summary	25
Table 4-1 – Need for Intervention	26
Table 5-1 – Study Objectives	31
Table 6-1 – Long-list	33
Table 7-2 – Alignment Criterion	35
Table 7-3 – Conclusion: Ramsay Brow	37
Table 7-5 – Conclusion: Hall Brow	39
Table 7-6 – Conclusion: Hall Park – Access and Path Network	41
Table 7-9 – Scheme Dependencies	42
Table 8-1 – LTN 1/20 CLoS Critical Fail Criteria	44
Table 8-2 - Comparison of Mean Max Queue (MMQ) values for the Ramsay Brow Link between modelled scenarios	51
Table 8-3 – Comparison of Practical Reserve Capacity (PRC) and Total Network Delay (Delay)	51

FIGURES

Figure 1-1 - Study area	2
Figure 2-1 - Regional Road Network	8
Figure 2-2 - Local Road Network	9
Figure 2-3 - Vehicle Length Restrictions along the A66	10
Figure 2-4 - Hall Brow	11
Figure 2-5 - NCN Routes	13
Figure 2-6 - Strava Heat Map (Workington)	14
Figure 2-7 – Hall Brow Flooding	17
Figure 2-8 – Hall Park View flooding mechanisms	18
Figure 3-1 - PCT Output: Forecast Cycle Flows Mapped to Route Network, Based on Government Target Scenario	23
Figure 3-2 - Modelled Junctions in Workington	24
Figure 8-1 – Route Selection Flowchart	46
Figure 8-2 – Cycle Proposals & Aspirations Spatial Strategy	47

APPENDICES

APPENDIX A

POLICIES AND STRATEGIES

APPENDIX B

SCHEME DRAWINGS

APPENDIX C

LANDSCAPE IMAGERY

1 INTRODUCTION

1.1 PURPOSE OF THE REPORT

- 1.1.1. WSP was commissioned in June 2022 by Cumbria County Council and Allerdale Borough Council to support an application for the Levelling Up Fund Round 2 (LUF2).
- 1.1.2. An Options Assessment Report (OAR) is required to support a bid of >£20m. Although this application from Allerdale is for <£20m, this OAR has been prepared to provide additional evidence to demonstrate the need for intervention that specifically support the case for the proposed Transport Scheme LUF2 interventions:
- Ramsay Brow Junction
 - Hall Brow Widening
 - Active Travel Infrastructure – Hall Park Cycle Route
- 1.1.3. This report therefore sets out the analysis undertaken and the scheme development process in line with the Department for Transport (DfT) Transport Analysis Guidance (TAG) Stage 1 (Option Development) process.
- 1.1.4. Stage 1 of the TAG process involves understanding the current and future situation, and the resulting need for intervention, before generating and sifting options that look to address a clear set of locally developed objectives. The option generation process should seek to identify a broad range of interventions, which reflect a range of modes, approaches and scales of intervention. These can then be considered and assessed against criteria from the Transport Business Case (DfT, 2013) ‘Five Case Model’, in order to identify the highest performing options to be taken forward for further appraisal.
- 1.1.5. The key steps in the Stage 1 process are as follows:
- **Step 1: Understanding the Current Situation** – Including current transport policies, existing travel demands, former study work and previously identified opportunities and constraints.
 - **Step 2: Understanding the Future Situation** - Including future land-use and policies, planned changes to the transport system and forecast traffic demand, in the short term (up to five years) and the medium to long term (up to ten years, and beyond).
 - **Step 3: Establishing the Need for Intervention** – Including understanding the underlying causes of current and potential future issues, and the potential implications.
 - **Step 4: Identifying Objectives and Defining the Geographic Area of Impact** - Including consideration of the desired strategic aims and ambitions, and the defining of specific objectives that will allow these strategic aims to be achieved.
 - **Step 5: Generating Options** - Identification of a broad range of options, inclusive of all modes, that have the potential to contribute to achieving the objectives.
 - **Step 6: Undertake Initial Alignment Sift** – High level appraisal to identify the options that are most likely to achieve the scheme objectives, that are affordable, and that have the potential to deliver value for money.
 - **Step 7: Development and Assessment of Potential and Preferred Options** – Further development of the highest performing options, including order of magnitude cost estimates, and more detailed appraisal to determine their relative costs, benefits and overall impact.

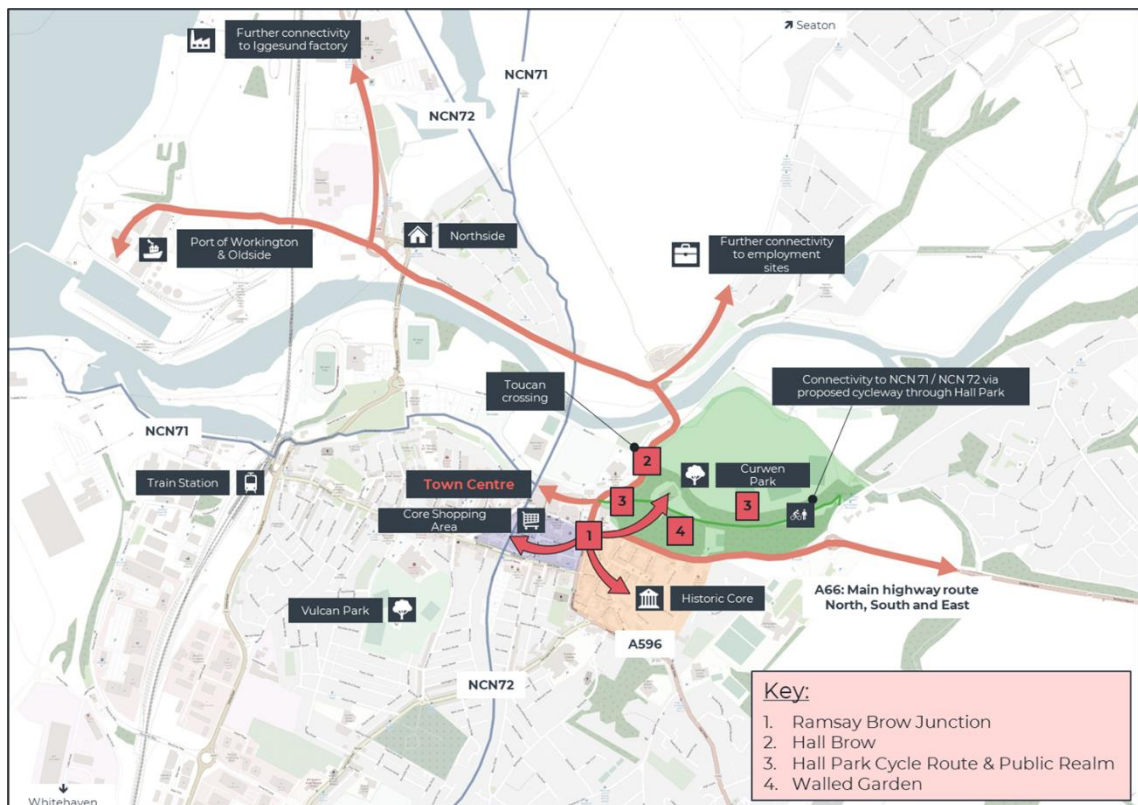
1.2 BACKGROUND

- 1.2.1. The town of Workington is located in Cumbria, in the North West of England. It is located on the west coast providing access to the Irish Sea and Solway Firth. The town is located in the Borough of Allerdale and has a population of just over 25,000 people according to the 2011 Census.
- 1.2.2. The town is the main shopping centre for the west of Cumbria, offering a range of retail services alongside leisure facilities including bars and restaurants, an Arts Centre and Opera House, plus a Leisure Centre. Workington also provides education facilities, including the Workington Academy.
- 1.2.3. Workington is well connected with a railway station on the Cumbria Coast Railway Line, with trains towards Carlisle and Barrow in Furness via Whitehaven. The town is located at the western end of the A66 road, part of the national Strategic Road Network (SRN) – providing connections to the national motorway network via the M6 at Penrith and also to the North East of England and Yorkshire via the A66 Trans Pennine route. The A596 passes through the town serving coastal locations to the north (including Maryport). Meanwhile the A595 bypasses the town to the east, connecting to Whitehaven, Sellafield and locations in the south of Cumbria.
- 1.2.4. The Port of Workington is located immediately north west of the town centre and provides cargo handling and storage facilities. The Port currently handles up to 500,000 tonnes of cargo per year and is also used for the servicing and maintenance of the Robin Rigg Wind Farm in the Solway Firth.

1.3 STUDY AREA

- 1.3.1. Figure 1-1 shows the proposed study area and highlights the four key elements of the scheme.

Figure 1-1 - Study area



- 1.3.2. Note: The Walled Garden shown (item #4) is a separate element of the overall LUF2 bid, sitting within the associated Cultural package and is therefore not included as part of this OAR.

1.4 OPTIONS ASSESSMENT REPORT STRUCTURE

- 1.4.1. This OAR documents the process of determining the need for intervention - based upon both the current and forecasted future situations - and the process of option development and sifting, including preliminary high-level appraisal using DfT's Early Assessment and Sifting Tool (EAST).
- 1.4.2. The remainder of this report is structured as follows:
- **Chapter 2** sets out the current situation in the study area in terms of previous transport related studies, policy, travel demand and patterns, opportunities and constraints;
 - **Chapter 3** considers the future transport situation, taking into account future land-use policies, proposed changes to the transport system, traffic growth and forecast travel demands;
 - **Chapter 4** examines the need for intervention, based upon the body of evidence presented in Chapters 2 and 3;
 - **Chapter 5** presents a clear set of Strategic and Specific Objectives, derived from the issues outlined in Chapter 2 and 3, and sets out how these have been used to inform option identification and appraisal within the geographic context of the study;
 - **Chapter 6** discusses option identification, and how the long list of interventions has been determined;
 - **Chapter 7** provides detail of the process and outcomes of the option sifting, including a rapid sift of the long-list against critical success factors; and
 - **Chapter 8** presents the preferred options and assessment undertaken on each to inform the preparation of the bid.
- 1.4.3. A summary of the key findings is provided at the end of each section.

2 UNDERSTANDING THE CURRENT SITUATION

2.1 OVERVIEW

2.1.1. This Chapter considers the current context of the Workington LUF2 study area, providing a base of information on the current challenges facing the area, as well as potential opportunities. The information provided here sets out:

- Relevant strategies and policies;
- The socio-economic context;
- The wider-economic situation in Cumbria;
- Local transport context including current network performance, road safety and sustainable transport offer;
- Current environmental conditions and constraints; and
- Committed development in the area, including both transport schemes and development sites, which have the potential to impact upon operation of the existing transport network.

2.2 RELEVANT POLICIES AND STRATEGIES

2.2.1. Table 2-1 summarises the strategy and policy documents that have been reviewed as part of this study. Further detail on the content of these documents, and how they apply in the context of this study, is set out in **Appendix A**.

Table 2-1 – Policy Reviewed

Category	Document
National	DfT Local Transport White Paper “Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen”
	National Planning Policy Framework
	Fixing the Foundations: Creating a More Prosperous Nation
	National Infrastructure Delivery Plan 2016 to 2021
	UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations
Sub-National	One North: A Proposition for an Interconnected North
	The Northern Powerhouse: One Agenda, One Economy, One North
	The Northern Transport Strategy
	Northern Powerhouse Independent Economic Review (NPIER)
Local	Port of Workington Masterplan
	Cumbria LEP – Cumbria Infrastructure Plan (2020)
	Cumbria LEP – Local Industrial Strategy (2020)
	Workington Town Centre Masterplan (SPD March 2021)

LOCAL POLICY

2.2.2. There are longstanding strategic priorities in Workington that Cumbria County Council and Allerdale Borough Council are seeking to address through the Levelling Up Fund 2 bid (LUF2).

2.2.3. Table 2-2 summarises the local strategies and planning documents which have identified the need for the proposed scheme. These include investment priorities for Workington Town Centre, the Port of Workington and for heritage and cultural assets within the wider Allerdale borough, including those located within Hall Park.

Table 2-2 – Strategic Priorities

Strategic priority	Alignment with local strategies and planning documents
<p>Improving and enhancing access to the Port of Workington</p>	<ul style="list-style-type: none"> • The Cumbria Local Transport Plan states that the Port of Workington is integral to its ambitions for the Energy Coast and commits to improving the port and the A595/A66 roads. • Policy S23 in the Allerdale Local Plan (2014) states that the Council will “<i>protect and enhance access to the Port of Workington</i>”. Improvements to the A66/A595 are described as being key to ensuring that the Port “<i>fully realises (its) long term ambitions</i>”. • The Workington Town Centre Supplementary Planning Document (SPD), 2021 states that the A66 and A596 are “<i>crucial to supporting Workington’s port and industries... Interventions will be needed to ensure that the road network has the capacity to accommodate Workington’s future growth and support the town’s economy</i>”. • Workington’s Town Investment Plan, 2020 (TIP) identifies the Port as a key asset and outlines plans for significant growth on surrounding employment sites. The proposed Ramsay Brow scheme is recognised as being a complementary intervention which will support these plans. • The Allerdale Recovery & Growth Strategy (2021) identifies a priority action to “<i>work with CCC to address key network pinch points</i>”. These pinch-points include Ramsay Brow and Hall Brow.
<p>Town Centre connectivity</p>	<ul style="list-style-type: none"> • The Workington Town Centre SPD recognises the severance issues caused by traffic and states that it is “<i>vital to ensure that connectivity and movement within and between the town centre and adjoining areas is maintained and enhanced</i>” • The TIP also refers to this severance, noting that that the heritage area is “<i>cut off</i>” from the rest of the town centr. It states that connectivity improvements are required to expand the town centre, enabling the attraction of new visitors and residents and in order to provide a high-quality sense of place. • Allerdale Recovery and Growth Strategy recognises that the quality of the built environment does not always complement its natural setting and identifies an opportunity to enhance this by prioritising action to make “<i>targeted public realm investments that would enable wider regeneration</i>”
<p>Protecting and enhancing heritage assets</p>	<ul style="list-style-type: none"> • The Allerdale Local Plan states that “<i>the Council will conserve and maintain the Grade I listed building and schedule ancient monument of Workington Hall and enhance the exceptional beauty of its historic Hall Park and gardens and recognise the importance of this area for recreational uses</i>”. • The ‘Revitalising Workington’ theme in the TIP prioritises support for Workington’s key visitor attractions including Workington Hall and states that it will “<i>seek targeted investment in new visitor facilities</i>”.

2.3 SOCIO-ECONOMIC CONTEXT

2.3.1. Table 2-3 sets out details of the Socio-economic context for the area covered by the application to the LUF2. Workington has a population of just over 25,000 people according to the 2011 Census.

The town has several large employers, including Iggesund Paper Mill as well as industrial estates at Clay Flatts and in nearby Lillyhall. The Port of Workington, located immediately west of the town centre is an active port, used for storage and cargo handling for a range of local and regional businesses.

- 2.3.2. Workington town centre currently provides a range of services to its local hinterland, including shops, restaurants and bars – with the large Washington Square Shopping Centre located in the middle of the town. The town centre also hosts amenities and social facilities including the Workington Leisure Centre, Allerdale Borough Council offices, Workington Opera House, Carnegie Theatre and Arts Centre, plus the County Library. The town centre therefore plays a key social and economic role within the area, providing employment opportunities as well as access to leisure services.

Table 2-3 – Socio-economic Context

Socio-economic Context – Summary
<ul style="list-style-type: none"> Workington has a lower proportion of younger residents; this is likely to result in unsustainable economic development in the future.
<ul style="list-style-type: none"> Workington study area is characterised by relatively high levels of deprivation with respect to health in the urban areas. Given the health benefits that can be realised by active travel, these areas should be a key focus for infrastructure interventions.
<ul style="list-style-type: none"> A large proportion of residents within Workington travel less than 5km to work, which is a realistic distance to travel actively.
<ul style="list-style-type: none"> Median annual income is slightly higher in Allerdale (£26,292) when compared against the average for England (£26,055) according to ONS data for 2020.

2.4 WIDER-ECONOMIC CONTEXT

- 2.4.1. Within the wider West Cumbrian economy, Workington is closely linked with the nuclear industry due to proximity of the Sellafield Nuclear Site, situated approximately 15 miles to the south. Meanwhile, the offshore wind energy industry is a key economic area, RWE having a base at the Port of Workington to service and maintain the Robin Rigg Wind Farm in the Solway Firth. The Port of Workington has significant ambitions to grow and maintain its commercial links and opportunities within the region and beyond.
- 2.4.2. There are other planned investments impacting Workington Town Centre and / or the Port of Workington, including various Towns Fund priority projects. These investments are summarised in Table 2-4. There is an opportunity to maximise the impact of these investments through use of the LUF2 – this is set out in Table 2-5.

Table 2-4 – Alignment with other planned investments

Investment	Funding	Alignment with bid
Port of Workington Clean Energy and Logistics Hub	£4.8m (Towns Fund, MHCLG)	This will provide serviced employment land at the port and on the neighbouring Oldside site to enable investment in key sectors serviced by the port. The proposed improvements at Ramsay Brow and Hall Brow through the LUF2 scheme will complement this intervention by improving access to the site and making it more attractive for investment.
Townscape and Connectivity Measures	£4.8m (Towns Fund, MHCLG)	This project is designed to enhance accessibility to and within Workington Town Centre by delivering public realm and pedestrian connectivity improvements at Oxford St, Murray Road and Central Way. These will complement the proposed LUF2 investment at Ramsay Brow by addressing severance issues, improving the town centre environment and attracting more visitors to Workington.
Siddick Bridge Replacement (recently completed)	£4m (Cumbria LEP, Cumbria County Council and Network Rail)	Siddick Bridge provides the only vehicular access to the Port of Workington and neighbouring employment sites. The investment has replaced the existing bridge which had a weight restriction and crossings restricted to one lane. This addresses a key pinch-point for vehicles needing to access the port and is therefore complementary to the proposed improvements at Ramsay Brow and Hall Brow.

Table 2-5 – Wider Economic Context

Wider Economic Context – Summary
<ul style="list-style-type: none"> ■ There is an opportunity to make the planned Port of Workington Clean Energy and Logistics Hub more attractive for investment by improving access to the Port of Workington.
<ul style="list-style-type: none"> ■ The Townscape and Connectivity Measures planned as part of the Towns Fund are set to deliver public realm and pedestrian connectivity improvements at Oxford St, Murray Road and Central Way.
<ul style="list-style-type: none"> ■ The replacement of Siddick Bridge has improved access to the Port of Workington, as the existing bridge had a weight restriction and crossings restricted to one lane. The LUF2 provides an opportunity to complement the bridge replacement scheme.

2.5 CURRENT TRANSPORT SITUATION

LOCAL ROAD NETWORK

- 2.5.1. Workington is accessed via the Strategic Road Network (SRN), with the A66 Trans-Pennine route ending at Ramsay Brow junction with the A596, in the town centre. Workington is a primary route destination and therefore signed from the M6 Junction 40. The journey between the M6 and Workington takes approximately one hour in normal traffic conditions. A further SRN route is also located nearby, with the A595 to Sellafield passing within 2 miles (3.5km) of the town. Both the A595 and the A66 are therefore managed and maintained by Highways England rather than Cumbria

County Council as the local highway authority. The A596 also serves the town (linking to Maryport and Wigton), managed and maintained by CCC (Figure 2-1); this route connects the A595 in the south, linking to the A66 in the town centre at the Ramsay Brow junction, and extends north to the Port of Workington, Iggesund, and onwards along the northern coast.

2.5.2. At the local level (Figure 2-2) the main route from the M6 to the Port of Workington comprises the A66 and A596; both of which operate as arterial routes on the periphery of the centre of the town. As such, vehicles heading towards the Port of Workington from the M6 are required to travel around the town centre. Some HGVs take a circuitous route to the PoW via Lillyhall due to the constrained turning movements at the Ramsay Brow junction.

Figure 2-1 - Regional Road Network

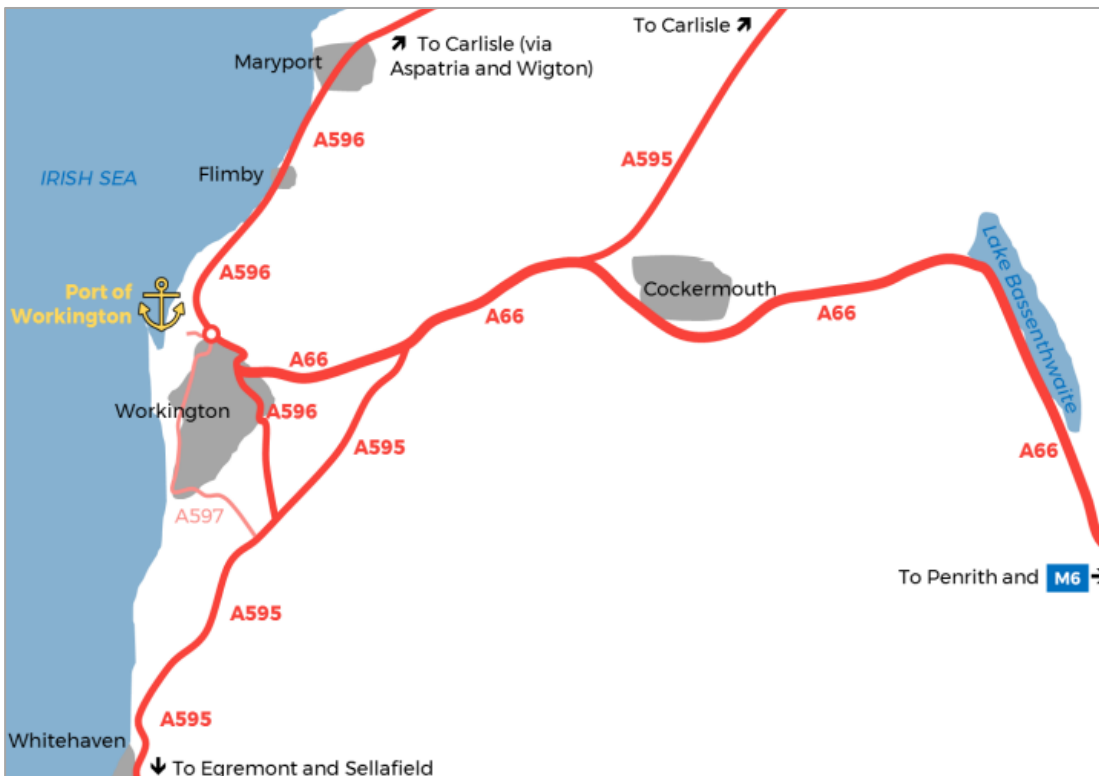
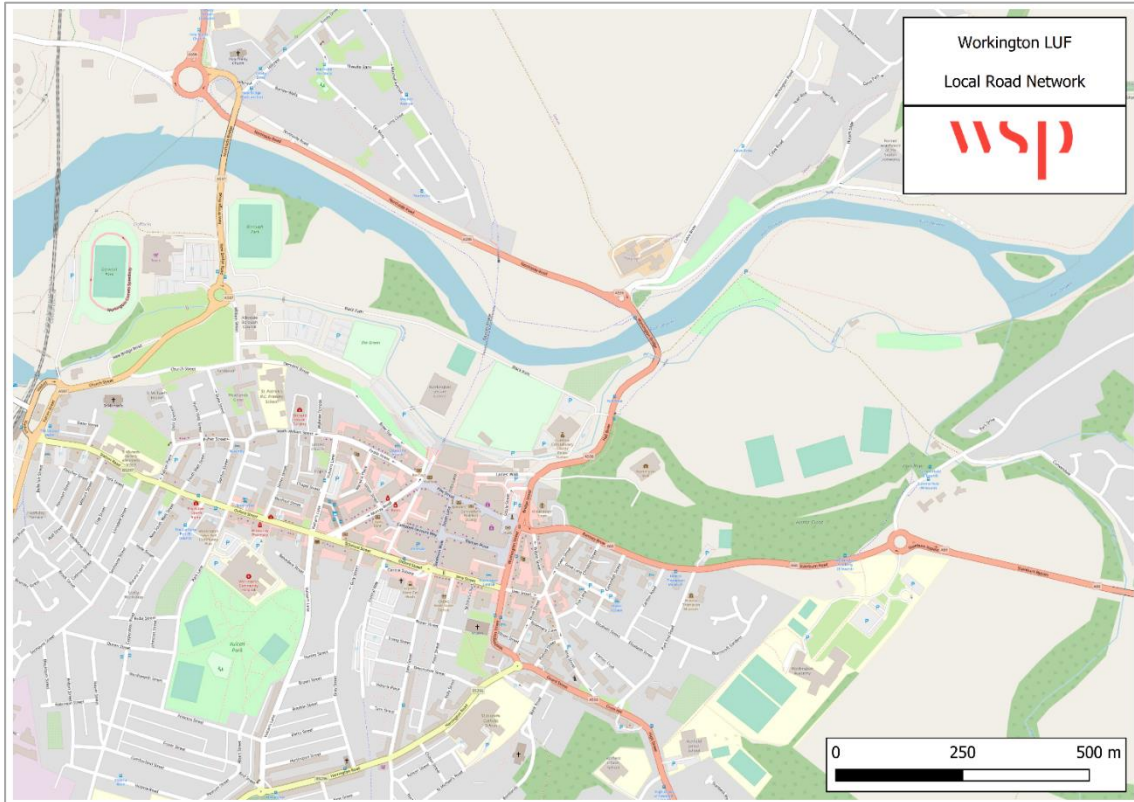


Figure 2-2 - Local Road Network



EXISTING ISSUES: RAMSAY BROW / HALL BROW

2.5.3. Within Workington town, there is a longstanding issue whereby HGVs coming from the A66 (and therefore the M6 or wider-Cumbria) reach the terminus of the route at Ramsay Brow junction with the A596. The layout of the Ramsay Brow junction makes it very difficult (and in some cases impossible) for large vehicles to navigate the junction safely. As a result, a vehicle length restriction is in place on the A66 at Park End Road, limiting access along this route to vehicles that are less than 55 feet in length. This is illustrated within Figure 2-3 below.

Figure 2-3 - Vehicle Length Restrictions along the A66



- 2.5.4. HGVs choosing to avoid turning at Ramsay Brow therefore use alternative routes to approach the junction from the south (negating the need to make a turning manoeuvre). This use of alternative routes results in longer journey times and increased use of the A596 to avoid making the turn at Ramsay Brow, causing disruption to local communities where alternative routes pass through rural villages. It is also noted that this additional use of the A596 as an alternative route, leads to issues associated with capacity and severance at Washington Street – a road which bounds the edge of the retail core of the town centre.
- 2.5.5. Beyond Ramsay Brow, there are additional issues associated with HGVs travelling along the section of the A596 north of the junction. This area is known as Hall Brow and is located to the north of Black Path (see Figure 2-4). The average carriageway width (kerb-to-kerb) along this section is restricted to approximately 7.3 metres, with the narrowest point being only 7 metres wide.
- 2.5.6. This section acts as a pinch-point for port-related traffic due to the narrow width of the road and the presence of parked cars along the western side of the street for adjacent housing. This means that large vehicles are unable to pass and must informally agree priority - this causes delays and safety concerns. This constrained section of road also has the potential to make the routing of abnormal loads impossible, respective of the vehicle's dimensions. This could lead to a scenario by which an abnormal load is required to travel to / from an alternative port instead.
- 2.5.7. It is considered that improving this section of Hall Brow would dramatically benefit connectivity to the Port of Workington, reducing journey times and improving productivity. This is also essential to allow for further growth objectives at the Port.

Figure 2-4 - Hall Brow



ACTIVE MODES

2.5.8. While Workington has a number of longer distance cycle routes running through it, there is minimal existing cycle infrastructure, and the town lacks a cohesive cycling network. Perhaps because of this, the town has significant aspirations to develop a more inclusive active travel network through the Local Cycling and Walking Infrastructure Plan (LCWIP). Any schemes proposed through this would be in accordance with the recently released Local Traffic Note 1/20: Cycle Infrastructure Design, which sets a new national standard in cycle provision.

TRAVEL BY BICYCLE

2.5.9. Census data (2011) collected in regards to the Workington LCWIP study area was used to determine the distance travelled to work internal to that study area, displayed in Table 2-6.

Table 2-6 - Distance Travelled to Work

Distance Travelled to Work	Percentage
Less than 2km	20.9%
2km to less than 5km	19.4%
5km to less than 10km	13.6%
10km to less than 20km	13.2%
20km to less than 30km	11.2%
30km to less than 40km	1.6%
40km to less than 60km	4.2%
60km and over	2.3%

Work mainly at or from home	7.7%
Other	5.8%

Census, 2011 – Dataset QS702EW

- 2.5.10. Table 2-6 indicates 40.3% and 53.9% of people travel less than 5km and 10km, respectively. This suggests there is an opportunity to encourage cycling and walking as viable and more natural choices for those shorter trips to work, or as part of an onward longer distance journey using public transport.
- A large proportion of the residential population within Workington LCWIP study area live and work within the area itself, demonstrating a potential to encourage modal shift for commuter trips.
 - Currently, 72.7% of the internal trips are made by car, suggesting that there is scope to encourage a further shift towards active modes for those working and living in the town.
 - A large proportion of residents within the study area travel less than 5km to work, which is a realistic distance to travel actively.
 - The implementation of infrastructure that encourages safe and efficient walking routes.
- 2.5.11. While there are many reasons why people do not always walk and cycle when distance travelled might suggest that they could, perceptions of safety when on the road and sharing with vehicles is considered to be the main barrier to cycling uptake. The A596 is referenced in the emerging Workington LCWIP as a barrier to movement by active modes in the town, being one of the key vehicular links in the town with longer distance connections. The route not only leads to the Port of Workington in the north, but also connects to Maryport, Flimby, and the Lillyhall industrial estate (with onward connectivity via the A595).
- 2.5.12. The extensive Public Right of Way network provides opportunity to create more permeable walking and cycling networks away from vehicular routes, which can also enhance access to longer distance recreational routes.
- 2.5.13. The existing cycle network comprises of both on-road and off-road cycle infrastructure, with the off-road mostly consisting of shared use foot/cycleways. National Route 71 and 72 also form part of the Workington cycle network. National Route 71 makes up the western third of the C2C route between Whitehaven, Workington and Blencow (Penrith). National Route 72 starts in Kendal and makes its way around the Cumbrian coast via Barrow-in-Furness, Whitehaven and Workington to Silloth.
- 2.5.14. Navvies Bridge (opened 2011) provides a pedestrian and cycle only crossing point over River Derwent, which connects directly into Workington town centre. Further west, there are on-road advisory cycle lanes on Northside Bridge (A597), which address the barrier of crossing the river Derwent near the Port of Workington and Workington Railway station. However, there is lack of a coherent cycle network to the south of River Derwent, particularly on Solway Road. There are further gaps in the completeness of cycle network, particularly on routes connecting the south-west and east of Workington to the town centre.
- 2.5.15. Further afield, the Lake District National Park can be accessed via the on-road national cycle routes, presenting additional potential for active recreation and leisure.

Figure 2-5 - NCN Routes



- 2.5.16. Within our study area (Section 1.3) there is limited existing infrastructure; NCN 72 runs in a north south alignment some 200m to the west, with connectivity via Black Path and a circuitous route around the north of Hall Park, connecting in around the Stainburn area. The only other connection of note is a shared use path connecting Stainburn to Workington Academy, avoiding the busy roundabout junction of the A66 / Stainburn Road. There are currently no LTN 1/20 compliant links between these routes and key origin / destination points such as the town centre or the residential areas to the south of the A66.
- 2.5.17. Strava is a social fitness network, primarily used to track cycling, running and swimming activity and typically uses GPS. Strava is a free service (although paid features are available) and, in 2018, the developers claimed to be adding a million new users every 45 days, with circa 8 million activities uploaded each day.
- 2.5.18. Basic Strava data is published freely online and is available as a heatmap showing where activities are most concentrated. This free data has significant limitations when it comes to analysis, as the heatmap only shows usage in comparison with other routes, rather than actual numbers. Strava data is also more likely to be recorded by those undertaking activities for competitive purposes, rather than casual, daily usage (such as commuting), and by certain age groups and demographics. Nevertheless, the heat maps can be useful in broadly showing where cycling (and running / swimming / walking) occurs and, specifically, where these activities take place regardless of a lack of infrastructure or legal right of way.

2.5.19. Figure 2-6 shows Strava cycling data in and around Workington displayed as a heat map. White denotes the 'hottest' routes, i.e., those with the highest relative usage, while dark red routes are considered 'cool', as they have the least number of relative users.

Figure 2-6 - Strava Heat Map (Workington)



LOCAL WALKING AND CYCLING INFRASTRUCTURE PLAN (2022)

2.5.20. The Workington LCWIP was developed in 2021/22 and the Prioritised Cycling Network Map were approved. Figure xxx shows the Priority Cycle Network.

Workington LCWIP Prioritised Cycling Network

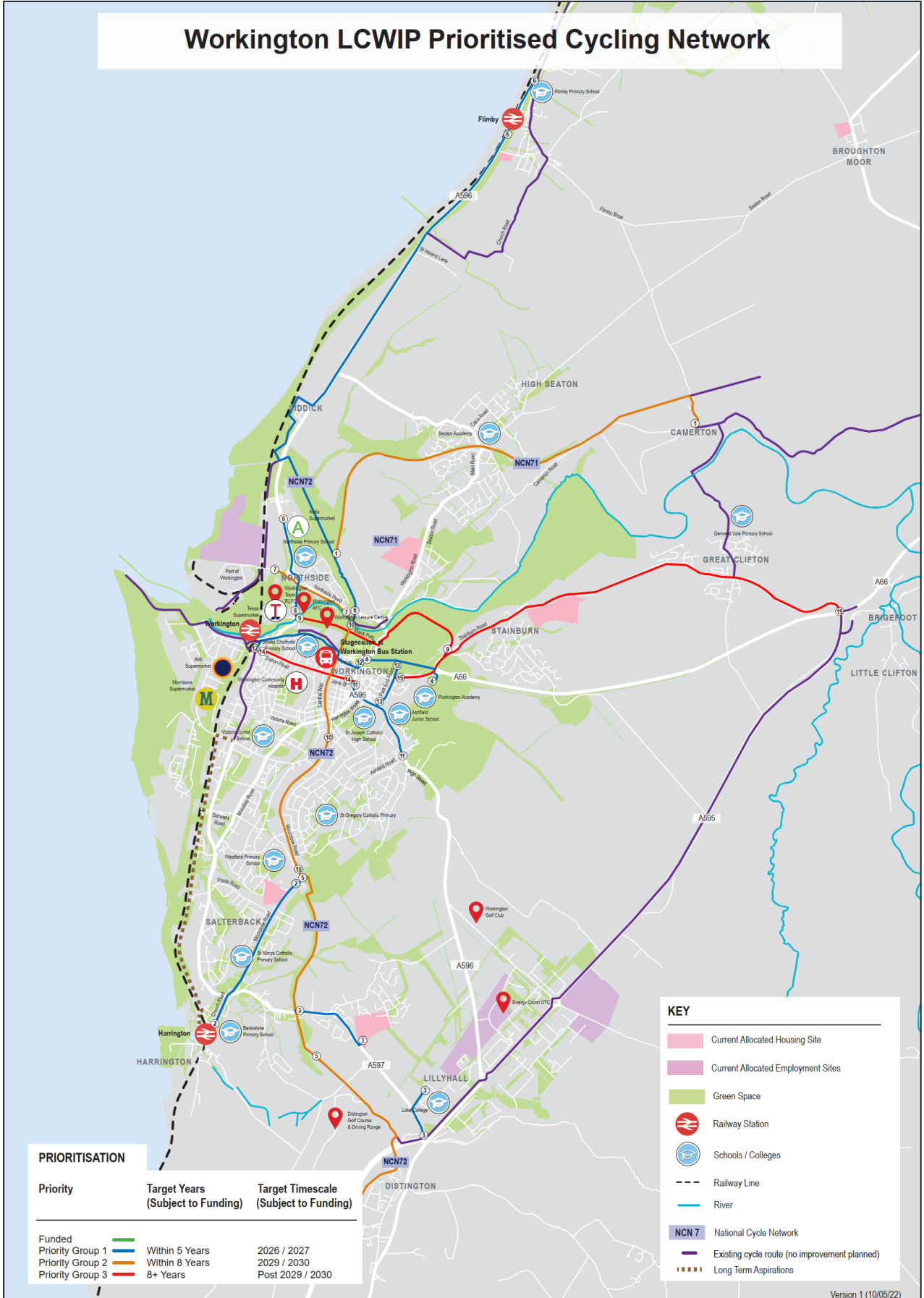


Table 2-7 - Current Transport Situation

Current Transport Situation - Summary

- There are longstanding issues associated with HGVs being unable to turn right at the Ramsay Brow junction. This requires drivers to use alternative routes, impacting the local area and adding to severance between the heritage and nightlife areas of Workington (A596 Washington Street).
- The section of Hall Brow to the north of Black Path acts as a pinch-point for port-related traffic due to the narrow width of the road and parked cars in this area. This results in large vehicles being unable to pass simultaneously, thus needing to informally agree priority. This causes delays and safety concerns. It is known that occurrences of large vehicles being unable to pass at Hall Brow take place.
- Despite the number of key trip origin and destination points in the area and longer distance cycle routes nearby, there are very few cycle routes within the study area connecting these together. Implementing LTN 1/20 compliant infrastructure within the local highway network is likely to pose significant challenges where segregated infrastructure is required, and needs careful consideration of wider links to ensure proposals contribute to a joined up network as developed for the recently approved LCWIP (2022).

2.6 ENVIRONMENTAL CONTEXT

AIR QUALITY

- 2.6.1. Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{1 2}.
- 2.6.2. Research from the Department for Environment, Food and Rural Affairs (Defra) has indicated that the annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion.
- 2.6.3. As detailed in Allerdale Borough Council's 2020 Air Quality Annual Status Report, Allerdale has relatively low levels of pollution due to the rural nature of the district, but recognises that both urban and rural areas are constantly threatened by pollution from human activities.

¹ Environment equity, air quality, socioeconomic status and respiratory health, 2010

² Air quality and social deprivation in the UK: an environmental equalities analysis, 2006

- 2.6.4. In 2019, monitoring of Nitrogen Dioxide (NO₂) was carried out in Allerdale via diffusion tube monitoring sites. The sites were positioned at 12 locations across Allerdale deemed to be worst affected by road traffic pollution. A few of these sites are located in within Workington:
- Hall Park View, Workington;
 - Murray Road, Workington; and,
 - **Ramsay Brow, Workington.**
- 2.6.5. Overall due to the good air quality demonstrated by monitoring and data gathered, there are no requirements for any Air Quality Management Areas (AQMA) in Allerdale at the time of reporting.
- 2.6.6. To summarise, previous studies have determined that air quality is not a major issue in Allerdale or Workington town centre. However, Ramsay Brow is one of the worst junctions affected by traffic pollution in the area. As such, it remains a key concern as an area of poorer air quality within the town, and therefore needs consideration to be addressed in line with air quality improvement objectives.
- 2.6.7. While not directly aligned with managing air quality, the proposed scheme does include a number of capacity improvement measures that should help alleviate existing and potential future issues, reduce queueing and engine idling, and potentially improve air quality at this location.

FLOOD RISK

- 2.6.8. Workington previously experienced significant damage from a flood event in 2009, and again in 2015. Hall Brow was significantly affected with associated property damage, as illustrated in Figure 2-7 (from the 2009 event).

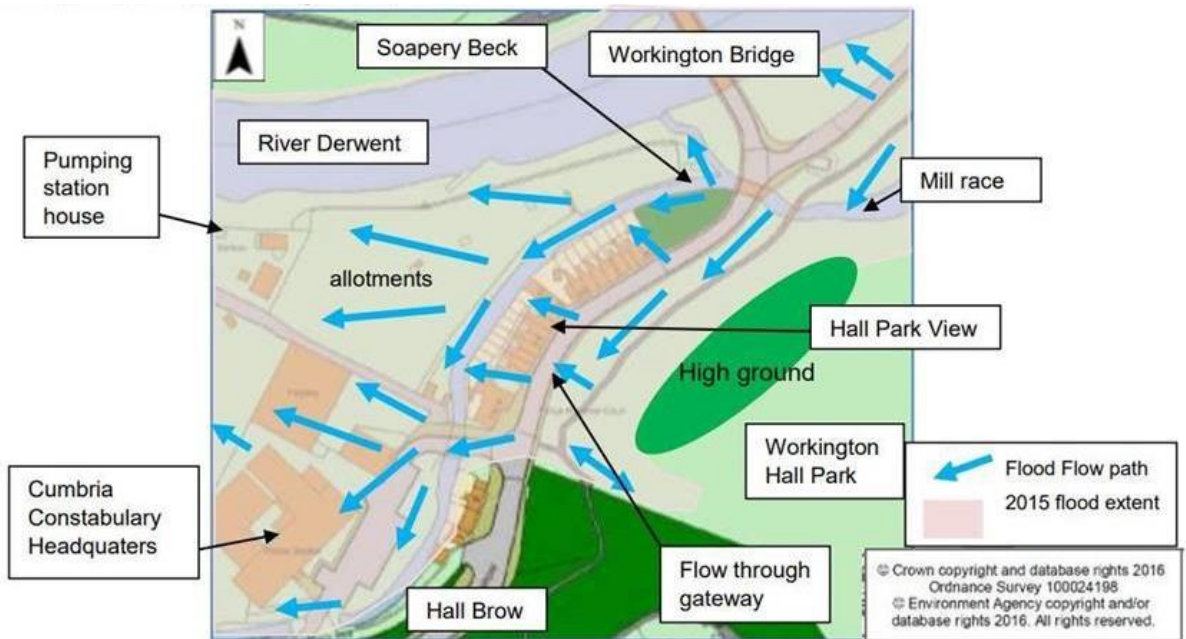
Figure 2-7 – Hall Brow Flooding



Credit: David Wilson: Photography North West

- 2.6.9. In terms of flood risk, the majority of the town centre lies within flood zone 1. However, lower lying land at Coopers Walk and Ladies Walk Brewery is vulnerable to flooding from Soapery Beck and the River Derwent, exacerbated by its tidal nature. There are also surface water drainage issues on Central Way beneath Oxford Street in times of heavy rain. Figure 2-8 shows the extent of the 2015 flooding and the flow path of the flooding from nearby water bodies.

Figure 2-8 – Hall Park View flooding mechanisms



There is the potential to reduce surface water run-off and increase flood resilience in the town through the design of public realm improvement schemes, and the incorporation of sustainable drainage features in all new development.

- 2.6.10. At this stage, it is unclear whether the existing wall at Hall Brow has any impact on flooding, either beneficial or adverse. It is presumed the wall has no overall impact given its existing construction and condition; nevertheless, there may be potential for the scheme to contribute toward flood defense through collaboration with the EA at the preliminary design stage and following the correct assessment process.

Table 2-8 – Environmental Context

Environmental Context - Summary
<ul style="list-style-type: none"> Workington Town Centre contains two conservation areas, and several listed buildings. As well as constraining the highway network, and limiting improvements that could be made, they are also likely to be impacted by the level of traffic and congestion in this area of the town, eroding their quality and attractiveness.
<ul style="list-style-type: none"> There are areas within Workington that are deemed be negatively affected by road traffic pollution (including Ramsay Brow junction). With vehicular traffic one of the key contributors to air pollution, increases in traffic levels – particularly as a result of new developments – will become an increasingly important issue.
<ul style="list-style-type: none"> There is flood risk associated with the majority of the town, with some areas increasingly at risk due to the Soapery Beck, River Derwent, and surface water run-off. This presents an opportunity to increase flood resilience through the Levelling Up Fund 2 (LUF2), although this is to be determined.

3 UNDERSTANDING THE FUTURE SITUATION

3.1 OVERVIEW

- 3.1.1. DfT's Transport Analysis Guidance (TAG) states that when determining the case for intervention an understanding should be developed of the future transport situation, taking into account:
- Future land-uses and policies;
 - Future changes to the transport system; and
 - Future travel demands and levels of service.
- 3.1.2. This chapter considers how Workington, and the surrounding area, is expected to grow; it highlights the proposed locations of significant development, and the potential resulting impact this will have on the existing transport network.

3.2 POPULATION, HOUSING AND EMPLOYMENT GROWTH

- 3.2.1. This section of the report summarises the growth aspirations within proximity of Workington, including the proposed site allocations currently considered as part Allerdale and Copeland Local Plans. Consideration is also given toward recent and committed development schemes.

Site Allocations

- 3.2.2. The site allocations shown in Table 3-1 are taken from the Allerdale and Copeland Local Plans. This shows development allocations that are located in or around Workington (those further afield are shown in italics).

Table 3-1 - Site Allocations in Workington LCWIP

Reference	Location	Dwellings / Site Area (Ha)	Proposed Land Use
SA8	Stainburn Road, Workington	130	Housing
SA9	Main Road, Harrington	115	Housing
SA10	Land off Seaton Road, Seaton	150	Housing
SA11	Former Southfield School, Workington	65	Housing
SA13	<i>Whitecroft, Maryport</i>	<i>300</i>	<i>Housing</i>
SA23	<i>Land adjacent to Meadowlands, Broughton Moor</i>	<i>25</i>	<i>Housing</i>
SA24	<i>Rose Farm, Broughton</i>	<i>55</i>	<i>Housing</i>
SA25	Read of Marona, West Lane, Flimby	10	Housing
SA31	Former caravan park, Oldside	1.5	Gypsy and Traveller Site
SA36	Land north of Port of Workington, Oldside	9.34	Employment
SA37	Land at Oldside	10.36	Employment
SA38	Land off Jubilee Road	9.92	Employment

SA39	Land off Joseph Noble Road, Lillyhall East	2.38	Employment
SA40	Land off Hallwood Road, Lillyhall West	9.57	Employment
SA41	Land north of Branthwaite Road	17.51	Employment
SA47	Central Car Park, Workington	0.89	Retail
SA48	Royal British Legion, Workington	0.2	Retail
H26	Hinnings Farm, Distington	80	Housing
H32	<i>Ghyll Bank, Lowca</i>	21	<i>Housing</i>
H33	<i>Croft Head Farm, Lowca</i>	34	<i>Housing</i>

Committed Developments

3.2.3. Stainburn Road, Workington

3.2.4. The Stainburn Road housing development will deliver 130 housing units on 7.6 hectares of greenfield land. Proposals should seek to achieve a density of approximately 25-30 dwellings per hectare.

Land off Seaton Road, Seaton

3.2.5. The Seaton Road housing development will deliver 150 housing units on 7.03 hectares of greenfield land. A density of approximately 25-30 dwellings per hectare should be achieved.

Land north of Port of Workington, Oldside

3.2.6. The land north of Port of Workington is seen as a real economic driver for the next 20 to 25 years. Allerdale Council is in talks with companies interested in potential opportunities at the key employment site.

3.2.7. Allerdale Council has provided part of the land to be developed by Greenwise Energy Ltd., which would produce energy from waste. The energy plan is expected to create up to 30 jobs. Those plans for development on the land are predicted to be the first step in the wider development of the 10 hectares of land.

Vision for Workington (Allerdale Local Plan)

3.2.8. The vision for Workington, as set out within the local plan is as follows:

- Role - Principal Service Centre and focus for strategic housing, employment, retail and leisure development within the Allerdale Plan Area;
- Vision - By 2029 Workington will have retained and enhanced its role as West Cumbria's principal residential, educational, leisure, cultural and commercial centre. Taking advantage of its port and rail links it will have become a focus for major development delivering a stronger employment base, housing renewal and greater choice of housing as well as a vibrant town centre with an expanded night-time economy.

Improving access to Employment Sites and the Port of Workington.

3.2.9. The Port of Workington is central to the economic growth prospects of the town. The Port of Workington Masterplan shows there is strong potential for growth in the future, being ideally

positioned to exploit growth opportunities in offshore wind, nuclear and biomass. There is 20 ha of employment land allocated in and around the port, including 3 ha which will be remediated as part of the Town Investment Plan (TIP). This will create new opportunities to attract investment from those sectors serviced by the port and drive job creation.

- 3.2.10. If Workington and the wider area is to fully capitalise on the growth and investment potential of the Port it is critical that the surrounding area has a robust road network that provides fast and reliable connections to the east, particularly to the M6 and wider country. Current operations at the port are hampered by pinch-points on the local road network, most notably at Ramsay Brow and Hall Brow. These pinch points often mean that larger HGVs must use alternative routes through locations not suited to such volumes of traffic, and necessitating additional journey time / length. In some circumstances, very large vehicles have no viable alternative routes, and the PoW has failed to capitalise on certain opportunities.
- 3.2.11. The Port of Workington Masterplan identifies the A66/A596 as a key constraint, as do several key stakeholders including the NDA, Cumbria LEP and local employers Thomas Armstrong Aggregates and Iggesund. These issues already increase costs for businesses using the port and, if not addressed, will act as a barrier to attracting future investment.

Enhancing pedestrian connectivity in and around Workington

- 3.2.12. Workington Town Centre's main weakness is the high level of traffic on Washington Street which acts as a barrier between the retail core and the heritage and nightlife areas. The Workington Town Centre Healthcheck (Nexus, 2021) stated: "Washington Street and Wilson Street have noticeably fewer pedestrians during the day, which is contributed to by the main road which dissects these streets from the main shopping area". It also found that Wilson Street had a particularly high concentration of vacant units. The 2018 Healthcheck also reported the high level of traffic has a "negative impact on the environmental quality" of the area.
- 3.2.13. Given the anticipated growth in the area, it is likely that the severance caused by the A596 at Washington Street will become more pronounced, with more people seeking to access the town centre and the employment / retail opportunities located there.

Enhancing cultural and heritage assets

- 3.2.14. Hall Park (including Workington Hall) is a key leisure and heritage asset for Workington and is designated as being of national importance, although in recent years it has seen a decline in use. The need for improved pedestrian access to and within the park was identified in a 2016 feasibility study. This found the A66 and A596 unwelcoming access points and poor signage acted as a barrier to accessing the park. It further identified a number of ways in which footpaths and cycle paths could be improved to enhance the visitor experience and better showcase the historic Hall. 41% of respondents to an online survey reported that improvements to access and footpaths would increase the likelihood of them using the park.
- 3.2.15. Increasing access to the park aligns well with broader targets relating to health and well-being. The park presents opportunities for recreation and leisure that could attract people to the town, and also play a vital role in COVID recovery. The park's location parallel to the A66 also means that a desirable and more practicable alternative route for cycle users could be implemented as part of any access improvements, enabling people to make more trips by bike and reduce the need to travel by car – something which may well increase if the town's development aspirations are realised.

Table 3-2 - Summary

Population, Housing and Employment Growth - Summary
<ul style="list-style-type: none"> Significant levels of growth – both residential and employment – are proposed within proximity of Workington. The impact of this growth on the local network, could potentially deter further inward investment, and exacerbate the transport issues at Ramsay Brow, Washington Street, and Hall Brow.
<ul style="list-style-type: none"> It is recognised within the Allerdale Local Plan that Lillyhall and the Port of Workington are key employment sites in the plan area (Policy S13). Additionally, it is stated within the Local Plan that supporting road and rail infrastructure improvements are required to deliver economic growth and key economic projects (SO4b).
<ul style="list-style-type: none"> The restricted access to the port is likely to limit growth opportunities to key employment sites and the Port of Workington.
<ul style="list-style-type: none"> There is a need to address the lack of connectivity between the town centre, and the heritage and nightlife areas for pedestrians. This is particularly significant to ensure that business is able to endure and recover post-COVID.
<ul style="list-style-type: none"> Hall Park is currently considered to be an underused asset, with its access points on the A66 and A596 being deemed unwelcoming. There is the potential to improve these ‘gateways’ and to develop a greenway via Hall Park, noting that this aligns with the green agenda, and is expected to encourage use of the park (as indicated through the 2016 feasibility study via public engagement). There is also an opportunity to improve links to the National Cycle Network, which is likely to have a positive impact on leisure / tourism.

3.3 FUTURE GROWTH IN CYCLE TRIPS

- 3.3.1. The Propensity to Cycle Tool (PCT) is a web-based tool that can assist with understanding potential demand for cycling across a study area, under a variety of forecast scenarios. The tool can aid in identifying the most promising routes for potential cycle growth. The PCT allows the identification of key routes under various future growth scenarios. The Government Target scenario is the least aspirational, but also considered the most immediately realistic, presenting a doubling of cycle trip stages by 2025.
- 3.3.2. Figure 3-1 shows the potential route network under the government target scenario. These figures show an increase in cycling, particularly in the urban centre of Workington.
- 3.3.3. The routes around Stainburn and the A66 are anticipated to be less well used, feeding into busier routes around Hall Brow and the NCN Route 72. While the PCT has significant limitations – particularly as it relies on census travel to work data, and therefore only considers commuter cycle users – it still serves as a useful tool to quickly evidence what potential suppressed demand exists, and where it might be.
- 3.3.4. It is not only future demand that should be considered when developing cycling infrastructure; current demand is likely to be heavily suppressed by the lack of infrastructure designed to modern standards. Without a high-quality network, this demand is likely to remain unrealised. Given the

likely future demands that will be placed on the highway network, ensuring that trips are made by the right mode of transport for the journey length and purpose, including active modes, will be an essential part of managing demand for an increasingly limited resource.

Figure 3-1 - PCT Output: Forecast Cycle Flows Mapped to Route Network, Based on Government Target Scenario



3.4 FUTURE OPERATION OF THE LOCAL TRANSPORT NETWORK

Allerdale Transport Improvements Study (TIS), 2018

- 3.4.1. WSP were commissioned by Cumbria County Council (CCC) and Allerdale Borough Council (ABC) to undertake a Transport Improvements Study (TIS) for the Allerdale Borough to support the Allerdale Local Plan proposals for the period up to 2029.
- 3.4.2. Several junctions within Workington were identified as having capacity issues, and as a result, were modelled as part of the TIS. The location of each of these junctions is shown in Figure 3-2.

- ID 3
 - Harrington Road / Guard Street Operation (2029 Local Plan AM Peak Scenario – Existing Alignment) – the results demonstrated that all arms of the junction are operating over-capacity in three of the future scenarios without intervention.
- ID 4
 - A596 / Newlands Lane Operation (2029 Local Plan PM Peak Scenario – Existing Alignment) – the results highlighted that the existing junction is forecast to operate over-capacity in the 2029 Local Plan PM Peak scenario.

Table 3-3 – Summary

Future Operation of the Local Transport Network – Summary
<ul style="list-style-type: none"> ■ The Port of Workington is recognised within the Allerdale Local Plan as being a key employment site in the plan area (Policy S13). It is recognised within the Local Plan that supporting road and rail infrastructure improvements need to be delivered in order to support key economic projects such as the delivering growth at the Port of Workington (SO4b).
<ul style="list-style-type: none"> ■ There is the potential to improve the ‘gateways’ into Hall Park, and to develop a cycleway via Hall Park. This aligns with the green agenda and is expected to encourage use of the park. There is also an opportunity to improve links to the National Cycle Network, which is likely to have a positive impact on leisure / tourism. This link can also help create a wider coherent network in the vicinity of the Workington Gateway away from the constrained arterial roads.
<ul style="list-style-type: none"> ■ Transport modelling undertaken as part of the ‘Allerdale Transport Improvements Study’ demonstrated that without intervention, each of the junctions that were modelled within Workington Town Centre (including the Ramsay Brow junction) are expected to exceed operational capacity by 2029, stymieing wider growth aspirations.
<ul style="list-style-type: none"> ■ Future growth, set out in ABC and CBC’s Local Plans, will result in an increase in trips on the local road network. The impact of this growth on the local network, could potentially deter further inward investment, and exacerbate the transport issues at Ramsay Brow, Washington Street, and Hall Brow.

4 ESTABLISHING THE NEED FOR INTERVENTION

4.1 OVERVIEW

4.1.1. This chapter summarises the body of evidence, discussed in the preceding chapters, and outlines how the evidence, as well as the wider strategic context, supports the need for intervention.

4.2 SUMMARY OF EVIDENCE AND INFORMATION

4.2.1. The summary has been presented in tabular format, according with the main sections of the report. Key evidence, deemed to be of particular relevance or importance to the study, has been included.

Table 4-1 – Need for Intervention

Establishing the Need for Intervention	
Strategies and Policies	<p><u>National Policy</u></p> <ul style="list-style-type: none"> ▪ At national level, key transport policies reaffirm the focus on schemes that enhance connectivity and contribute to economic growth across the north. <p><u>Sub-National Policy</u></p> <ul style="list-style-type: none"> ▪ The Northern Transport Strategy sets out its ambition for rebalancing and growing the economy, stating that transport provision is critical to delivering this, through a faster and less congested network. ▪ Improved strategic local connectivity is highlighted as a key issue, and the solution as requiring a network that not only joins the major urban centres, but also provides local links to the strategic network. ▪ The Northern Powerhouse Independent Economic Review identifies a need for transport investment to support productivity growth and employment growth, to create more and better paid jobs. Transport can also help to promote higher productivity, by improving the attractiveness of an area for investment. ▪ Congestion in urban areas and at localised pinch points can negatively impact connectivity through resulting longer and/or unpredictable journey times, constraining access to labour markets and movement of goods and services. In turn this can influence business decisions to locate in certain areas. <p><u>Local Policy</u></p> <ul style="list-style-type: none"> ▪ Improving and enhancing access to employment sites and the Port of Workington. <ul style="list-style-type: none"> ○ The Cumbria Local Transport Plan states that the Port of Workington is integral to its ambitions for the Energy Coast and commits to improving the port and the A595/A66 roads. ○ Policy S23 in the Allerdale Local Plan (2014) states that the Council will “protect and enhance access to the Port of Workington”. Improvements to the A66/A595 are described as being key to ensuring that the Port “fully realises (its) long term ambitions”. ○ The Workington Town Centre Supplementary Planning Document (SPD), 2021 states that the A66 and A596 are “crucial to supporting Workington’s port and industries... Interventions will be needed to ensure that the road network has the capacity to accommodate Workington’s future growth and support the town’s economy”.

	<ul style="list-style-type: none"> ○ Workington’s Town Investment Plan, 2020 (TIP) identifies the Port as a key asset and outlines plans for significant growth on surrounding employment sites. ○ The Allerdale Recovery & Growth Strategy (2021) identifies a priority action to “work with CCC to address key network pinch points”. These pinch-points include Ramsay Brow and Hall Brow. ▪ Town Centre connectivity. <ul style="list-style-type: none"> ○ The TIP also refers to this severance, noting that that the heritage area is “cut off” from the rest of the town centre by Washington Street. It states that connectivity improvements are required to expand the town centre, enabling the attraction of new visitors and residents and in order to provide a high-quality sense of place. ○ Allerdale Recovery and Growth Strategy recognises that the quality of the built environment does not always complement its natural setting and identifies an opportunity to enhance this by prioritising action to make “targeted public realm investments that would enable wider regeneration”. ▪ Protecting and enhancing heritage assets. <ul style="list-style-type: none"> ○ The Allerdale Local Plan states that “the Council will conserve and maintain the Grade I listed building and scheduled ancient monument of Workington Hall and enhance the exceptional beauty of its historic Hall Park and gardens and recognise the importance of this area for recreational uses”. ○ The ‘Revitalising Workington’ theme in the TIP prioritises support for Workington’s key visitor attractions including Workington Hall and states that it will “seek targeted investment in new visitor facilities”.
<p>Socio-Economic Context</p>	<p><u>Population and Employment</u></p> <p><i>Current Situation</i></p> <ul style="list-style-type: none"> ▪ Workington has a lower proportion of younger residents; this is likely to result in unsustainable economic development in the future. ▪ Workington study area is characterised by relatively high levels of deprivation with respect to health in the urban areas. Given the health benefits that can be realised by active travel, these areas should be a key focus for infrastructure interventions. ▪ A large proportion of residents within Workington travel less than 5km to work, which is a realistic distance to travel actively. <p><i>Future Situation</i></p> <ul style="list-style-type: none"> ▪ There are significant levels of planned residential and employment growth focussed in and around Workington. ▪ Trips associated with the allocated local plan sites within vicinity of Workington are likely to result in large volumes of additional traffic. The impact of this growth on the local network, could potentially deter further inward investment, and exacerbate the transport issues at Ramsay Brow, Washington Street, and Hall Brow.
<p>Wider Economic Context</p>	<p><u>Wider Economic Context</u></p> <p><i>Future Situation</i></p>

	<ul style="list-style-type: none"> ▪ There is an opportunity to make the planned Port of Workington Clean Energy and Logistics Hub more attractive for investment by improving access to the Port of Workington. ▪ The Townscape and Connectivity Measures planned as part of the Towns Fund are set to deliver public realm and pedestrian connectivity improvements at Oxford St, Murray Road and Central Way. ▪ The planned replacement of Siddick Bridge will improve access to the Port of Workington, as the existing bridge has a weight restriction and crossings restricted to one lane. The LUF2 provides an opportunity to complement the bridge replacement scheme.
<p>Transport Context</p>	<p><u>Traffic Flows</u></p> <p><i>Current Situation</i></p> <ul style="list-style-type: none"> ▪ The Port of Workington is recognised within the Allerdale Local Plan as being a key employment site in the plan area (Policy S13). It is recognised within the Local Plan that supporting road and rail infrastructure improvements need to be delivered in order to support key economic projects such as the delivering growth at the Port of Workington (SO4b). <p><i>Future Situation</i></p> <ul style="list-style-type: none"> ▪ Transport modelling undertaken as part of the ‘Allerdale Transport Improvements Study’ demonstrated that without intervention, each of the junctions that were modelled within Workington Town Centre (including the Ramsay Brow junction) are expected to exceed operational capacity by 2029. ▪ Future growth, set out in ABC and CBC’s Local Plans, will result in an increase in trips on the local road network. The impact of this growth on the local network, could potentially deter further inward investment, and exacerbate the transport issues at Ramsay Brow, Washington Street, and Hall Brow.
<p>Sustainable Transport</p>	<p><i>Current Situation</i></p> <ul style="list-style-type: none"> ▪ There is a currently a lack of connectivity between the town centre, and the heritage and nightlife areas for pedestrians. This is particularly significant as business undergoes COVID recovery. ▪ There is also a lack of attractive LTN 1/20 compliant cycle routes to encourage people to use active modes of travel around the town, not just for leisure purposes. <p><i>Future Situation</i></p> <ul style="list-style-type: none"> ▪ The growth expected in the town is likely to exacerbate the existing severance caused by Washington Street, both in increased vehicle demand on the road and increased pedestrian demand to cross. Enabling easy access to the town centre and nightlife will be essential in enabling COVID recovery in the immediate future. ▪ There is the potential to improve the ‘gateways’ into Hall Park, and to develop a greenway via Hall Park. This aligns with the green agenda and is expected to encourage use of the park. There is also an opportunity to improve links to the National Cycle Network, which is likely to have a positive impact on leisure / tourism.
<p>Environmental Context</p>	<ul style="list-style-type: none"> ▪ Workington Town Centre contains two conservation areas, and several listed buildings. As well as constraining the highway network, and limiting improvements that could be made, they are also likely to be impacted by the

	<p>level of traffic and congestion in this area of the town, eroding their quality and attractiveness.</p> <ul style="list-style-type: none"> ▪ There are areas within Workington that are deemed to be negatively affected by road traffic pollution (namely Ramsay Brow). With vehicular traffic one of the key contributors to air pollution, increases in traffic levels – particularly as a result of new developments – will become an increasingly important issue. ▪ There is flood risk associated with the majority of the town, with some areas increasingly at risk due to the Soapery Beck, River Derwent, and surface water run-off. This presents an opportunity to increase flood resilience through the Levelling Up Fund 2 (LUF2).
<p>Development</p>	<p><u>Development Sites</u></p> <p><i>Current Situation</i></p> <ul style="list-style-type: none"> ▪ The majority of sites, either planned or currently being delivered in the study area, tend to be small-scale developments. However, the cumulative impact of associated trips has the potential to add additional strain to the local network. ▪ It is recognised within the Allerdale Local Plan that Lillyhall and the Port of Workington are key employment sites in the plan area (Policy S13). <p><i>Future Situation</i></p> <ul style="list-style-type: none"> ▪ Additionally, it is stated within the Local Plan that supporting road and rail infrastructure improvements are required to deliver economic growth and key economic projects (SO4b).

5 IDENTIFYING STRATEGIC OBJECTIVES AND THE GEOGRAPHICAL SCOPE OF INTERVENTION

5.1 OVERVIEW

5.1.1. This Chapter sets out the geographic area of intervention, along with the study objectives that will be used for high level appraisal of the interventions

5.2 OBJECTIVE SETTING

5.2.1. As per the DfTs TAG, objectives should be consistent with specific challenges, identified as part of the Stage 1 baseline evidence review, and should be based on a realistic understanding of the issues (both future and current), reflecting the specific opportunities and constraints identified. Whilst objectives should be consistent with wider local, regional and national objectives, they should focus on addressing identified need, rather than seeking to contribute to all policy objectives.

5.2.2. Further, TAG states that consideration should be given to developing a hierarchy of objectives, which provides a framework for future appraisal and evaluation, as follows:

- **Strategic or High-Level Outcomes:** Typically expressing the desired end state and reflecting the aims and ambitions for the area or population. These are generally objectives to which transport contributes, but not always in a direct manner.
- **Specific or Intermediate Objectives:** Typically representing the intermediate effects of the transport intervention, including the direct and short-term objectives that need to be achieved for the Strategic Outcomes to be realised.

5.2.3. For the purposes of this study, three Strategic Objectives have been identified. Under these, a number of Study-Specific Objectives have been developed (referenced SO1 to SO7 in Table 5-1); these have been derived in line with the need for intervention, identified through the review of the current and forecast future situations, as set out earlier in this report.

5.2.4. The Strategic and Study-Specific Objectives have associated Performance Measures, which have been used to better understand how each of the interventions could address existing issues within the study area; these are also set out in Table 5-1.

Table 5-1 – Study Objectives

Ref.	Objectives	Performance Measures
Improve Access to Employment Sites and the Port of Workington		
SO1	Support the economic growth objectives of ABC’s Local Plan, Allerdale Recovery and Growth Strategy, Workington’s Town Investment Plan, Workington Town Centre SPD and CCC’s Local Transport	Does the intervention align with national, regional and local policies, plans and strategies?
SO2	Enable the future use of the A66 / A596 for access to the port as the most desirable and direct local and strategic route	Does the intervention improve access for HGVs to and from employment sites and the Port of Workington via the A66 / A596? Does the intervention negate the need for significant diversions for traffic accessing employment sites and the Port of Workington?
Enhance Active Travel Connectivity in and around Workington		
SO3	Reduce the severance caused by Washington Street / Ramsay Brow	Does the intervention support the ease of access for pedestrians and cyclists crossing Washington Street / Ramsay Brow?
SO4	Improve connectivity between the heritage area and central business district	Does the intervention improve connectivity between the retail core and the heritage and nightlife areas?
SO5	Align with and contribute towards a wider strategy for cycle movements through and around the town	Does the intervention connect with the wider network of cycling and walking routes across Workington?

Protect and Enhance Cultural and Heritage Assets.

SO6	Enhance access to and within Hall Park, a significant heritage asset including a Grade 1 listed building and scheduled ancient monument.	Does the intervention improve access to Hall Park from the wider area? Does the intervention help facilitate movements within the park by active travel modes? Does the intervention enhance the gateway to Hall Park, enticing users and providing a more welcoming façade to the town centre?
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6 GENERATING OPTIONS

6.1 OVERVIEW

- 6.1.1. This chapter details the option generation process and resulting long list of interventions. The purpose of option generation is to develop a range of measures, or interventions, focussed on addressing the identified issue(s) and meeting the objectives.
- 6.1.2. Given the rapid need to develop scheme options to respond to the LUF2 timescales, only those projects which were already developed to a certain extent were considered against the Strategic and Specific scheme objectives.

6.2 DEVELOPING THE LONG LIST

- 6.2.1. Following the evidence review, and subsequent engagement with CCC and ABC Officers, a long-list of interventions has been developed; this has considered the following:
- Existing policies and strategies in Allerdale and relevant strategies in Cumbria;
 - A review of proposed transport improvements, included in previous studies;
 - Previous stakeholder consultations;
 - Consideration of the issues and opportunities identified earlier in this report; and
 - Engagement with CCC and District Council Officers.
- 6.2.2. In undertaking option generation, it is necessary to consider a range of interventions that could be delivered at a strategic level across all modes of transport.
- 6.2.3. A total of eighteen interventions were identified as part of the long-list; these were subsequently agreed with both CCC and ABC and are set out in Table 6-1.

Table 6-1 – Long-list

Scheme Name	Description	Critical Sift Factor
Ramsay Brow Option A – West of M6 Study	Widening of Ramsay Brow approach through third party land acquisition	Unacceptable impacts on active modes.
Ramsay Brow Option B	Widening of Ramsay Brow approach through third party land acquisition and enhanced pedestrian facilities	Preferred Option
Ramsay Brow Option C – Allerdale Transport Improvements Study	Localised improvements to capacity	Doesn't alleviate issues for HGVs and access to Port
Ramsay Brow Option D – Transport Improvement Design Study	Small gyratory requiring significant highways changes	Increased journey time and negative benefits to active modes
Hall Brow Option A	Widen to 2 way within physical constraints of housing and wall	Creates a safety concern.
Hall Brow Option B	Widen to 2 way removing physical constraints	Preferred Option

Scheme Name	Description	Critical Sift Factor
Hall Brow Option C	Widen to 2 way avoiding physical constraints	Unacceptable land take required
Hall Brow Option D	Remove Parking	Politically unacceptable
Hall Brow Option E	One Way Locally	Traffic flows too high
Hall Brow Option F	One Way Strategically	Time critical, High Cost
Hall Brow Option G	Bypass through the park	Previously ruled out, Environmental impacts too high
Hall Park Cycle Track	New LTN 1/20 compliant cycle scheme parallel to the constrained A66.	Preferred Option

7 UNDERTAKE ALIGNMENT SIFT

7.1 ALIGNMENT SIFTING

7.1.1. Following engagement with ABC and CCC, Hatch and WSP have carried out a focused review of the three prioritised transport elements which meet the objectives of the study and could go forward as part of a Workington Levelling Up Fund bid. Each project is considered against the Levelling Up Fund criteria.

LEVELLING UP FUND READINESS ASSESSMENT

7.1.2. The schemes were assessed against the key criterion set out in Table 7-1.

Table 7-1 – Alignment Criterion

Criterion	Key Requirements
Strength of Alignment with LUF2 Investment Themes	Need to demonstrate that project is strongly aligned with one or more intervention themes including transport investments, regeneration and town centre investment, cultural investment
Capital investment	Ceiling of £20 million capital with transport projects, with larger transport schemes eligible for £20-50 million and potential for joint bids between local authorities at £20 million maximum per area.
Business case status	Bid requires submission of a detailed application form structured around the five cases (strategic, economic, commercial, financial and management) included in a standard business case.
Strength of support	Bidders need to demonstrate support from communities and key stakeholders and provide letter of support from Member of Parliament.
Readiness to spend and deliver	Delivery or investment must start in financial year 2022-23, with expenditure complete by 31 st March 2025 (exceptionally March 2026 for larger schemes).
Strength of need and market failure evidence	Bids must provide strong evidence of the challenges and needs investment will address, including details of market failures.
Alignment with local and national policy priorities	Bids should demonstrate how they align with and support relevant local strategies and objectives, UK government policy objectives and statutory commitments.
Deliverability	A key criterion, with bidders required to demonstrate deliverability of each project including any statutory procedures to be completed, other funding in place including minimum 10% local contributions, procurement strategies and delivery plans, risk assessment and monitoring and evaluation plans.
Value for money	Bids require benefit-cost ratio (BCR) assessment as core of value for money details, applying green book methods to provide robust assessment.

7.1.3. WSP and Hatch have assumed that the criteria described above should either be met already or be well-advanced in order to be swiftly progressed to a 'bid-ready' stage of scheme development.

7.1.4. The schemes assessed are:

- Ramsay Brow (Option B/ Nugen);
- Hall Brow (Option B);
- Hall Park – Access and Path Network;

SCHEME OPTIONS

RAMSAY BROW (OPTION B)

7.1.5. Ramsay Brow is considered a significant pinch point on the local highway network with strategic ramifications; the route doesn't currently allow for right-turn movements from Ramsay Brow to Bridge St for particularly large vehicles commonly seeking to access the Port of Workington. Instead, these vehicles seek an alternative route to the north of the town to approach along the A596, necessitating additional travel miles and journey times.

7.1.6. The scheme is also likely to alleviate existing and future capacity issues, which also allows improved pedestrian facilities.

7.1.7. Current supplied estimates are anticipated to be circa £4 million – these require updating to account for change in project definition and land / property acquisition.

LUF2 Alignment:

7.1.8. Strong alignment with the LUF2 theme of transport. The project will deliver a much-needed improvement to a strategically important junction in Workington.

Business case status:

7.1.9. An OAR has been produced to identify a preferred option. The preferred option requires some minor changes to satisfy National Highways (a statutory consultee). Models are available to assist the Economic Case but are not validated against queue lengths as this data does not exist.

Strength of support:

7.1.10. Clear evidence of strong support from a number of stakeholders. The local MP identifies the junction improvement as a high priority on his website and the Port of Workington confirmed its support for the project through its feedback to the OAR. There is some limited existing evidence of support from local communities. There was no adverse feedback during consultation through the NuGen Project where the scheme concept was first developed; any feedback was to ensure the technical design of an improvement followed due process.

Readiness to spend and deliver:

7.1.11. The Ramsay Brow junction improvement has progressed to outline design and could be progressed to detailed design commencing Spring/Summer 2022, with construction following in early Spring 2023.

Strength of need evidence:

7.1.12. Evidence is primarily based on the tracking (turning requirements) for large vehicles. Junction layout is not fit for intended purpose, particularly as part of Strategic Road Network. Issue is well

documented and recognised by Highways England. Additional evidence relating to capacity and future modelling forecasts.

Alignment with local and national priorities:

- 7.1.13. Strong alignment with the Workington TIP and Workington SPD which identifies Ramsay Brow as a priority project for improving connectivity to the Port.

Deliverability:

- 7.1.14. A key element of the scheme is the acquisition of property and subsequent demolition to cater for the increased space needed. CCC's land value and property owner have reached an aligned position for the sale of the property. A price has yet to be agreed but there has been positive dialogue which means a compulsory purchase order should not be necessary (although this remains a risk). Highways England support the scheme and Connect Roads operate the A596 PFI operation and maintenance contract. Procurement routes are in place through CCC professional services framework and construction services framework to develop the scheme through to procurement by a contractor in March 2023.
- 7.1.15. Feedback from Highways England noted the need for cycle provision. The scheme could include cycleway within the northern footway, but this would not form part of a cycle network, it would be isolated so unlikely to add any value. This strengthens the need to provide a parallel route through Hall Park, which has potential for onward connectivity to the NCN via Black Path and into the northern extent of the town.
- 7.1.16. Scheme has a considerable gradient. Levels are not available, and no contact established with survey company. Risks to feasibility may derive from the vertical highway alignment which is not yet considered.
- 7.1.17. Further land may be required from Magistrate's court, unknown prior to vertical alignment being designed.
- 7.1.18. LUF2 requirement is 10% local funding.

Value for money:

- 7.1.19. Difficult to determine the BCR at this stage. However, there is potential for a high BCR through journey time savings and wider economic benefits through growth at the Port. These will need to be assessed in more detail.

Table 7-2 – Conclusion: Ramsay Brow

Conclusion:

It is recommended that the Ramsay Brow is included in the LUF2 bid given its strategic importance and the progress made in developing the project.

The main risk is that that terms for the acquisition of the property are not agreed with the landowner, meaning a CPO would be necessary. This would cause delays to the project although it is feasible that the project could still be delivered by March 2024, even with a CPO.

HALL BROW (OPTION B)

7.1.20. The Hall Brow carriageway improvement has progressed to feasibility design although a number of risks have been identified to scheme deliverability, primarily related to the relocation of the wall on the eastern side of the carriageway. The scheme will relieve a pinch point for heavy good vehicles travelling between the Port of Workington and the A66 strategic road network. The constraints of the scheme require sympathetic land take within park land in the Workington Hall estate to alleviate conflict between HGV traffic and parked cars directly outside residences on Hall Brow. It is likely that flood issues for residences would inform the design of the relocation of the wall.

7.1.21. Capital cost is unknown at this stage.

LUF2 Alignment:

7.1.22. Strong alignment with the LUF2 theme of transport, improving a strategically important road.

Business case status:

7.1.23. No business case currently exists, although the scheme has been a long-standing issue noted in a number of previous studies.

Strength of support:

7.1.24. The local MP has indicated his support for this project on his website. However, there is no other specific evidence of support from local communities or businesses in any of the documents reviewed. This would need to be addressed if it formed part of the bid.

Readiness to spend and deliver:

7.1.25. The Hall Brow improvement has progressed to feasibility design and has a number of risks associated with readiness to spend outlined in the Deliverability section below.

Strength of need evidence:

7.1.26. This short section of the route is recognised by the Local Highway Authority and Highways England as a significant pinch point in the network for the movements of large vehicles, particularly those associated with the advanced manufacturing and heavy industrial uses present at the Port of Workington. HGVs / buses are unable to pass and must informally agree priority, causing delay, uncertainty, and presenting a safety concern. It is considered that addressing this pinch point would be crucial in unlocking this route for access to the Port in conjunction with the proposed Ramsay Brow scheme.

7.1.27. The scheme also could allow for complementary flood defence features to alleviate existing flooding issues affecting the adjacent residential dwellings. These properties were affected by flooding as recently as 2015. Additional assessment would be needed to understand the existing issue, how the existing wall and highway layout influences this, if it all, and whether the scheme has any potential in mitigating this.

7.1.28. Aspiration for the scheme is identified in various studies:

- WoM6;
- NuGen Moorside project in West Cumbria;
- Port of Workington Masterplan (ongoing);

Alignment with local and national priorities:

7.1.29. The scheme is not specifically identified as a priority in either the TIP or the SPD but is aligned with local priorities in that it would support operations at the Port of Workington which is strategically important for growth in Workington.

Deliverability:

- 7.1.30. Scheme without impact upon historic wall is considered unfeasible. It creates a worse safety prospect than the existing condition due to conflicting HGV swept paths.
- 7.1.31. Scheme must either impact upon parking or the historic wall to create sufficient space for safe operation.
- 7.1.32. Relocation of the wall may require special measures to protect the wall itself as a historic feature and its link to landscape beyond.
- 7.1.33. The wall may act (may mitigate/may worsen) to channel water during flood events, this requires further investigation which is a shared responsibility between the EA and the Local Authority. To carry out a flood risk assessment full modelling is likely to be required. Infrastructure works are not permitted to increase flood risk to properties. A study circa £20k is an anticipated requirement before any work could progress.
- 7.1.34. Should the wall be deemed a flood alleviation feature its replacement may require sheet piled foundations to prevent flowpaths forming beneath.
- 7.1.35. The additional landtake (approximately 4m strip 100m long) may be taken from flood plain and provision may be required to replace to avoid lessening the flood plain area.
- 7.1.36. Various Statutory undertakers within the carriageway and footway, not all identified within C2 information. May add circa £0.5m (estimate) diversionary works to scheme costs.
- 7.1.37. LUF2 requirement is 10% local funding.

Value for money:

7.1.38. Further work is needed to assess the BCR. The main benefits would be through enabling throughput of HGVs, creating journey time savings through improved strategic routing. There is also potential for wider economic benefits through enabling growth at the Port. These would need to be assessed in more detail. Journey time savings are likely to be difficult to calculate due to modelling limitations (rerouting of HGVs is not likely to be explicitly captured in the strategic model).

Table 7-3 – Conclusion: Hall Brow

Conclusion:

There is a strong strategic and economic case in support of this project, and it is particularly noted that this pinch point is locally considered closely tied with Ramsay Brow – by only alleviating one of the two, the route would remain unviable for larger HGVs. Creating a viable route is considered essential for the Port of Workington’s growth aspirations. It is therefore recommended that this scheme is taken forward as part of the LUF2 bid.

HALL PARK – ACCESS AND PATH NETWORK

7.1.39. The Hall Park Active Travel Network would comprise:

- Resurfacing / widening of all paths to facilitate cycling;
- Low level lighting on main pathways; and
- New route enhancements to connect to NCN via Black Path.

LUF2 Alignment:

7.1.40. Strong alignment with two of the LUF2 themes (transport and cultural investment). The scheme will encourage active travel and improve a local cultural and leisure asset (Hall Park/ Workington Hall).

Business case status:

7.1.41. Minimal existing documents. Scheme will focus on deliverable elements of the Masterplan and accompanying sketch plans.

Strength of support:

7.1.42. There is limited evidence of support for the scheme in the documents reviewed. There is mention of a previous Heritage Lottery Fund application for Hall Park which undertook consultation with the local community. We have been unable to access the details of this, but this may provide evidence of support. A letter of support from the local MP would also be required.

Readiness to spend and deliver:

7.1.43. Existing Masterplan sets a precedent for schemes, which suggests some level of stakeholder support and agreement on conceptual ideas. Scheme package is focused on more deliverable elements with fewer complexities.

Strength of need evidence:

7.1.44. More work required to understand the strength of need. Some evidence through LCWIP process. Scheme lies broadly on one priority route currently being consulted upon, although would only cover a very small section of the route. The highway alternative would require additional work to bring to LTN 1/20 standard, and onward connectivity via Washington Street would require capacity reduction and road space reallocation which has been determined to be unacceptable. Route would link Stainburn to the town centre and could provide onward connectivity to the NCN via Black Path.

Alignment with local and national priorities:

7.1.45. Strong alignment with the Workington SPD which recognises Hall Park as a key cultural and green infrastructure asset and aims to encourage use of the park. Also consistent with the 'Revitalising Workington' theme in the TIP which seeks targeted investment in visitor facilities in the town's main attractions. The scheme appears to be consistent with national policy priorities on encouraging active travel, air quality and conservation of heritage assets.

Deliverability:

7.1.46. Some additional potential complexities in allowing cycling within a park if this is not already permitted. May be some heritage / environmental aspects associated with any path widening, lighting, amendments to the wall and features etc. Planning may be required.

7.1.47. LUF2 requirement is 10% local funding.

Value for money:

- 7.1.48. Further work is needed to determine the BCR. The scheme has potential to deliver welfare and placemaking benefits by encouraging walking and improving the public realm. These will need to be assessed in more detail. Assessment is likely to be via the DfT's Active Mode Appraisal Tool (used primarily for links).

Table 7-4 – Conclusion: Hall Park – Access and Path Network

Conclusion:

It is recommended that this package is included in the LUF2 bid as an Active Travel project (subject to it being defined more clearly). It demonstrates a strong strategic fit and would strengthen the coherence of the overall bid by delivering improved cycling and walking infrastructure which is complementary to the Ramsay Brow and Hall Brow scheme(s). There is potential for lighting up of Workington Hall to be integrated into the package, although this raises some issues around ongoing operations and maintenance which will need to be addressed in the business case.

Table 7-5 – Scheme Dependencies

Identifier	Scheme element	Scheme Description	Interdependencies
WGE1	Ramsay Brow (Option B/Nugen);	<p>The scheme will widen the A66 Ramsay Brow approach to allow long vehicles (55-foot plus) to safely manoeuvre through the junction in all directions;</p> <p>The scheme will provide additional capacity through improved equipment and phasing staging made possible through the realignment; and</p> <p>This scheme will also improve pedestrian facilities at the junction.</p>	<p>Provision of LTN 1/20 compliant infrastructure at this junction is considered impracticable – as demand for cycle users likely exists, it is essential that facilities are provided along the nearest feasible route. This is considered to be Hall Park;</p> <p>The provision of new equipment and staging at this junction allows for the provision of a new crossing at Washington St. to reduce severance. The impacts of this crossing are further mitigated by the additional capacity created;</p> <p>While the scheme alleviates some access issues, Hall Brow remains a significant issue when considering access to the PoW for larger HGVs, and the route will remain undesirable until this is also alleviated.</p> <p>This scheme cannot happen in isolation – the scheme is reliant on WGE2 and collaborates with WGE3.</p>
WGE2	Hall Brow Widening (Option B)	<p>This scheme widens the existing carriageway, formalising the parking bays and creating two running lanes capable of allow two large (55-foot plus) HGVs to pass one-another.</p> <p>The scheme also includes a new controlled crossing point to allow a better connection between Hall Park and Black Path, a direct and desirable route to the NCN72.</p>	<p>The scheme alleviates the second key pinch point for larger HGVs between the A66 and the PoW – both must be alleviated in order to create a desirable and practical route for all types of movements associated with the Port;</p> <p>This scheme cannot happen isolation – the scheme is reliant on WGE1 and entwined with WGE3</p>



WGE3	Hall Park – Access and Path Network;	This scheme improves the existing access points.	This scheme cannot happen in isolation- the scheme is interlinked with WGE1, and therefore WGE2, as well as being reliant on the additional connectivity created by each of these.
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8 DEVELOPMENT AND ASSESSMENT OF POTENTIAL AND PREFERRED OPTIONS

8.1 OVERVIEW

8.1.1. Following the sift of proposed options in the previous section, it was identified that further assessment needed to be undertaken in order to support the development of the scheme, particularly relating to the highways elements of the proposed scheme (Ramsay Brow) and the need to provide good quality cycle infrastructure within the scheme in compliance with the recently released LTN 1/20

8.2 CYCLING: SCHEME DEVELOPMENT

8.2.1. LTN 1/20 clearly states that:

In order to receive Government funding for local highways investment where the main element is not cycling or walking, there will be a presumption that schemes must deliver or improve cycling infrastructure to the standards in this Local Transport Note, unless it can be shown that there is little or no need for cycling in the particular highway scheme

8.2.2. Furthermore, it goes on to state that:

There will be an expectation that local authorities will demonstrate that they have given due consideration to this guidance when designing new cycling schemes and, in particular, when applying for Government funding that includes cycle infrastructure.

8.2.3. The PCT data for Workington and location of the town centre clearly indicate that there is likely to be demand for cycling along the A66, A596 and within the area covered by the proposed package of schemes. However, LTN 1/20 sets very clear guidance on the types of infrastructure to be used and relates that to key criteria. The two key factors relate to speed and traffic volume, with scoring criteria associated with each. Of particular note are those factors relating to a 'Critical Fail', as shown in Table 8-1.

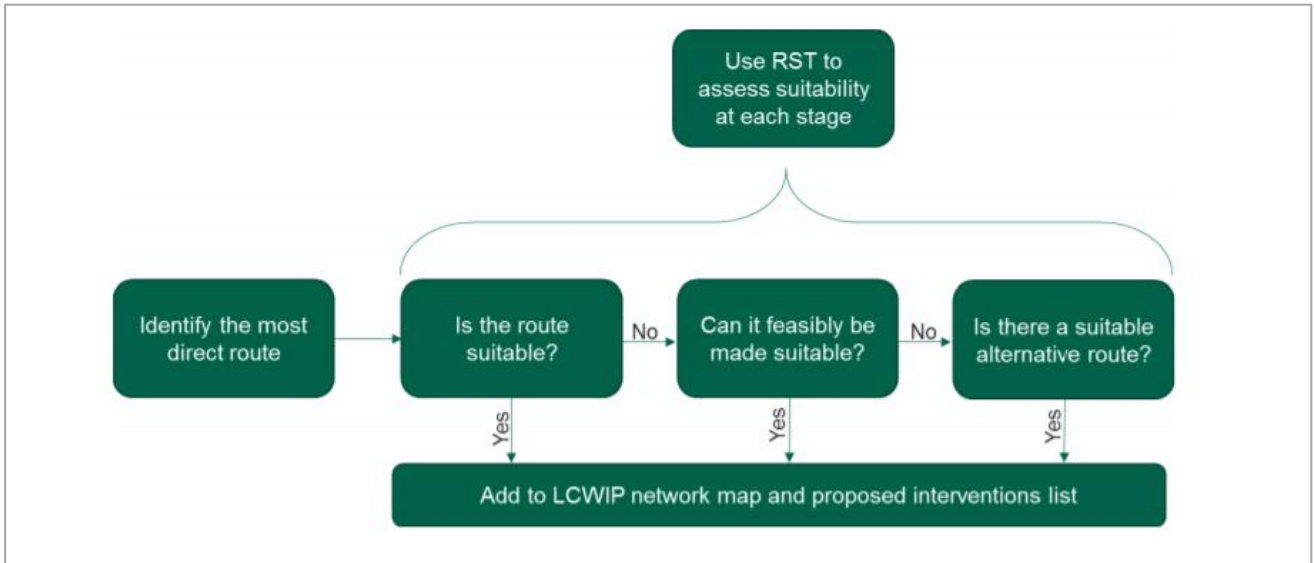
Table 8-1 – LTN 1/20 CLoS Critical Fail Criteria

Factor	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)
Reduce / remove speed differences where cyclists are sharing the carriageway	10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph

Factor	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)
Avoid high motor traffic volumes where cyclists are sharing the carriageway	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5%HGV	2500-5000 and	0-2500 AADT

- 8.2.4. Where a scheme would result in a critical fail, this would not ordinarily be considered eligible for funding.
- 8.2.5. Within the study area, the highway network consists of two of the most important highway links in Workington for vehicular movements, carrying traffic volumes at speeds that would necessitate segregated infrastructure – cyclists do not share the carriageway with vehicles at all (including at junctions). It is also noted that LTN 1/20 seeks to move away from ‘shared use’ facilities where feasible; cycle users are recognised as being ‘vehicles’ in their own right, with very different requirements in terms of desired speed and turning movements.
- 8.2.6. Segregated infrastructure would be required on both the links and junction of Ramsay Brow, requiring a significant amount of highway space. Given the nature of the highway in these locations, this would result in a large, detrimental and currently unacceptable reduction in capacity.
- 8.2.7. Relatedly, it is essential that proposals contribute to a wider network and genuinely provide connectivity between people and places. Given the restrictions that exist in the town centre, it is difficult to envisage the wider connections that would permit onward connectivity via the heart of the town.
- 8.2.8. The DfT’s LCWIP guidance sets out a flow chart process in selecting links for inclusion in the LCWIP. This process is shown in Figure 8-1.

Figure 8-1 – Route Selection Flowchart



- 8.2.9. Given the constraints, it is considered that making Ramsay Brow and the immediate links suitable for cycling, in accordance with LTN 1/20, is not currently feasible. The next step in the process is to identify a suitable alternative.
- 8.2.10. Hall Park runs in a parallel east to west alignment along the A66 and could offer such an alternative route. Cycling is already permitted within the park, while promoting access would not only increase trips through, but also to the park to enjoy, dwell, and spend time within its boundaries. The route offers easier connections to the NCN, both immediately and in the near future through small additional upgrades, while a potential scheme led by Highways England could promote wider connectivity to the east and south.

PROPOSALS

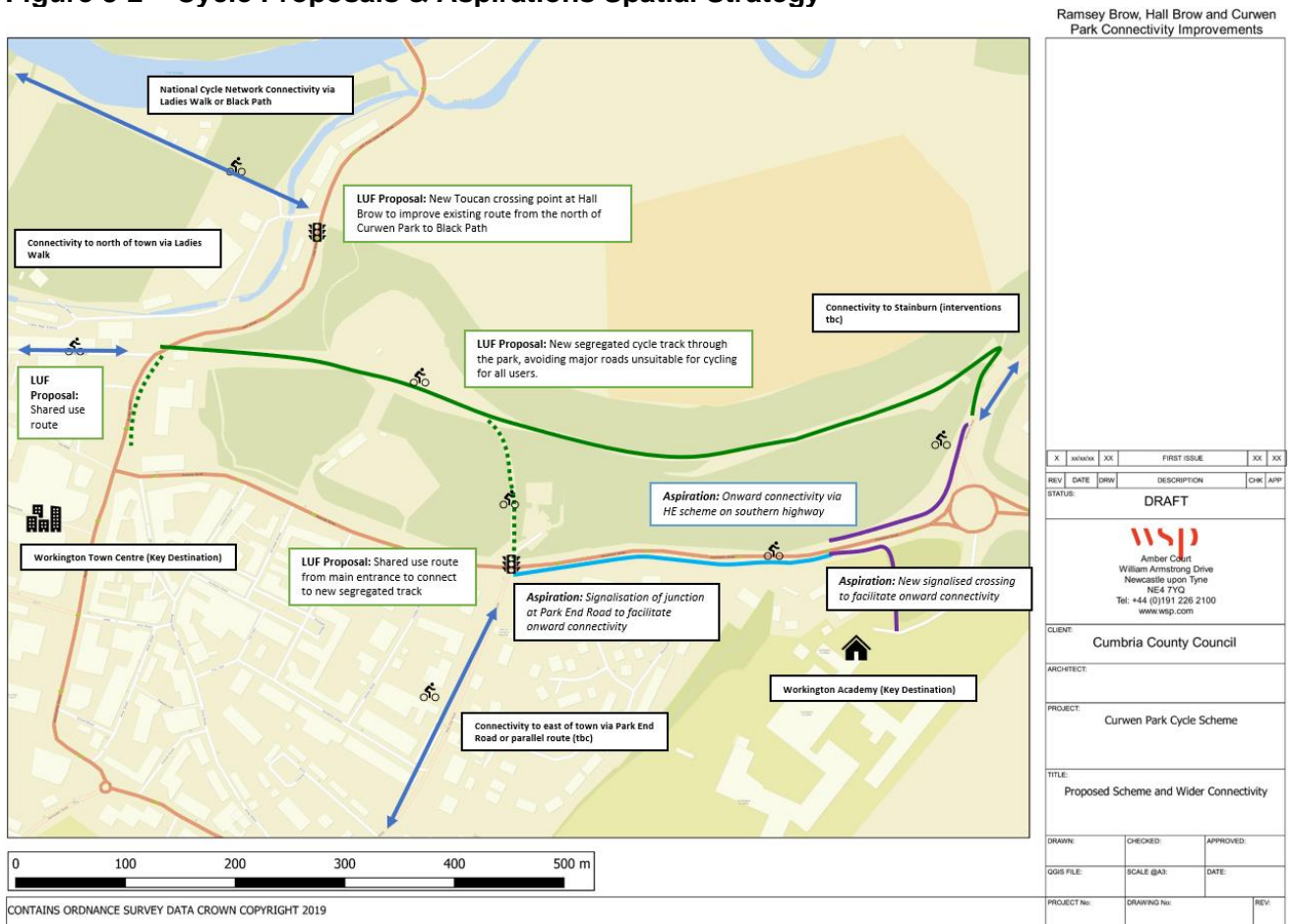
- 8.2.11. The proposed scheme therefore includes the following key features:
 - A 3m wide cycle track through the park in resin-bound aggregate, providing a high quality easily recognisable cycle route;
 - A new Toucan crossing point at Hall Brow, allowing a safer connection between Hall Park and Black Walk, with onward connections to the NCN Route 72.

The connectivity between the LUF2 proposals and future aspirations that will contribute toward a truly connected network are shown in the



8.2.12. Figure 8-2 figure below, while the accompanying technical drawings are contained in Appendix B.

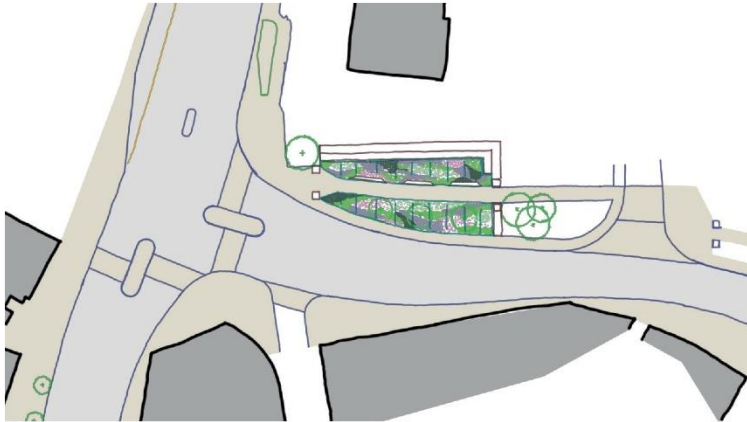
Figure 8-2 – Cycle Proposals & Aspirations Spatial Strategy



8.3 LANDSCAPE & URBAN DESIGN

- 8.3.1. Additional landscape and urban design expertise has been sought in order to better inform the scheme design cost estimation, and provide support with consultation through evocative imagery. The whole scheme has been enhanced with additional high-quality design features across each element.
- 8.3.2. The following subsections illustrate the outputs of this process, while high-resolution imagery is attached in Appendix C

RAMSAY BROW



Proposed works:

- Signalised junction improvements
- Improved quality of footway materials and use of footway materials on crossing points to improve pedestrian environment and highlight these features
- Public realm area with planting and seating on former public house building site. Opportunity for Sustainable Urban Drainage System to manage surface water run off and provide visual interest through colourful planting, a positive green gateway to Workington. Water attenuation units could be utilised in the cellar/ basement level of the former building.
- New entrance into park utilising historic path alignments
- Utilising existing materials and masonry on site to provide boundary, seating, and archways to provide vertical features reflecting the features of the nearby Workington Hall
- Raised table and continuous crossing at Magistrates Court entrance



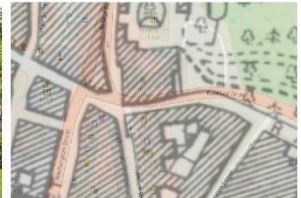
Grey to Green - Sheffield
nigeldunnett.com



Grey to Green - Sheffield
nigeldunnett.com



Masonry arch with reclaimed material
pinterest.com



OS Map 1888-1913
archiuk.com

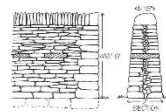


HALL BROW



Proposed works:

- New pedestrian crossing point with entrance to the park with footway materials for continuity
- Formalised residents' parking bays and bus stop with widened carriageway for safety
- Rebuilt park wall in like-for-like dry stone style, with ground level openings for surface water flows to pass through
- Tree replacement at minimum of 3:1 ratio for those lost by the scheme (until agreed otherwise with local planning authority)
- Opportunity to widen park paths and improve surfacing with resin bound gravel or other suitable material
- Opportunity for the park grounds to provide flood alleviation with storage cells beneath ground



Dry stone wall
conservationhandbooks.com

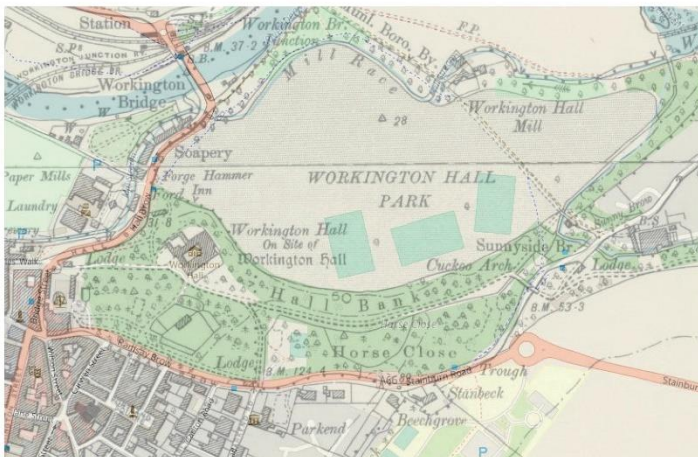


Dry stone wall
pinterest.com



Self binding gravel
pinterest.com

HALL PARK



OS Map 1888-1913
archiuk.com

Proposed works:

- Improved surfacing on paths through the park such as self binding gravel, where appropriate
- Opportunity for a segregated cycle route to be provided through the park
- Enhancements to the entrances of the park emphasising gateway features and improving the pedestrian environment around them
- Opportunity for an additional entrance at the south-western corner of the park near Ramsay Brow to provide a more legible connection from the town centre
- Architectural feature lighting on Workington Hall to highlight this heritage asset
- Restoration of former routes / paths through the park
- Woodland management, species rich planting and other enhancements for biodiversity
- Pedestrianisation of Ladies Walk entrance with private access only
- Wayfinding signage and information boards / surface treatment features to tell the story of the park and its former owners and uses



Lighting on Sudeley Castle
spectacleoflight.co.uk



Lighting on Neath Castle
neathtowncouncil.gov.uk



Belhaven Park Entrance
wikimedia.org

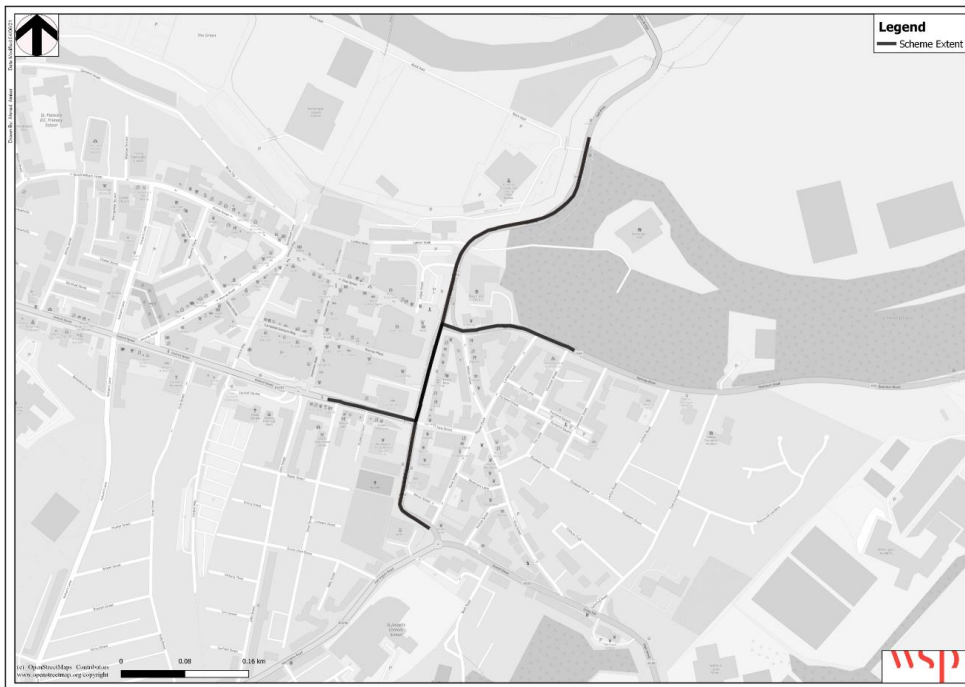
8.4 RAMSAY BROW ASSESSMENT

METHODOLOGY

- 8.4.1. The preferred option was defined and tested using the local junction modelling software, Linsig V3. The outputs of this model have been used to inform the economic appraisal of the scheme using TUBA.
- 8.4.2. The models provided by the client cover the following network extents:
- Bridge Street / A66 Ramsay Brow; and
 - Washington Street / Jane Street.

These are show in Figure 8-3.

Figure 8-3 - Model Extents



PROPOSALS

- 8.4.3. The scheme will widen the Ramsay Brow junction, allowing long vehicles (55-foot plus) to access the Port of Workington and key employment sites from the A66. This will also alleviate capacity issues on Washington Street.

MODEL DEVELOPMENT

- 8.4.4. An existing model of the junction was developed by AECOM on behalf of CCC to support the prior Pinch Point funding bid. This model was supplied along with accompanying data and bid materials to form the basis of this LUF2 bid.
- 8.4.5. WSP received two LinSig V3 models: a future year (2029) base and scheme models. Based on the data provided an audit was undertaken on these models to check the robustness and validity of the models provided.

8.4.6. The audit undertaken by WSP highlighted the need to make minor model amendments to prepare the models ready for economic appraisal. The changes were as follows:

- In order to test the scheme for opening (2025) and a future (2040) year flows were extracted from SATURN (provided by CCC and all flow scenarios were updated).
- Zones were updated to allow for better consistency and easier analysis.
- Following a refinement of the scheme design, changes were made to the following:
 - The southern junction in the scheme model was reverted back to the base design in line with the latest scheme design.
 - Subsequent link distances were updated to reflect the refinement of the design.
 - Give-way parameters were updated to better reflect conflicts.
 - The proposed crossing was added to the scheme model and placed halfway between the two-traffic signal controlled junctions as per the latest scheme proposals.
- Signal Timings and Staging with the Scheme model, at the northern junction, was updated such that the pedestrian phasing which received green in the Base was consistent within the scheme.
- Scheme Signal timings were optimised for optimum performance, a process which would be undertaken at Detailed Design and Commissioning.

8.4.7. As the modelled network extents shares a link with the Strategic Road Network, Ramsay Brow, queuing onto this link was monitored throughout the modelling process. Table 8-2 below sets out a comparison of Mean Max Queue (MMQ) values for the Ramsay Brow Link between modelled scenarios.

Table 8-2 - Comparison of Mean Max Queue (MMQ) values for the Ramsay Brow Link between modelled scenarios

Model	Base Model				Scheme Model			
	2025		2040		2025		2040	
Year	AM	PM	AM	PM	AM	PM	AM	PM
MMQ (PCUs)	20.7	10.1	55	17.7	12.3	9.9	18.6	19.7

8.4.8. Significant reductions are to be expected when comparing the AM Peak scenarios especially in the 2040 scenario, where a reduction of 36.4 PCUs (approx. 209.3m) was identified.

8.4.9. Overall Network Results were collated following the updates set out above. Practical Reserve Capacity (PRC) and Total Network Delay (Delay) have been compared to provide an overview of model performance. These comparisons are set out in Table 8-3 below.

Table 8-3 – Comparison of Practical Reserve Capacity (PRC) and Total Network Delay (Delay)

Model	Base Model				Scheme Model			
	2025		2040		2025		2040	
Year	AM	PM	AM	PM	AM	PM	AM	PM
PRC (%)	-16.1	-45.7	-22.3	-46.6	9.8	4.2	-1.4	-8.4
Delay	76.41	176.74	138.93	205.01	35.83	41.86	49.19	62.27

- 8.4.10. The above results demonstrate a significant benefit as a result of the scheme. The benefits can be attributed to the increase in storage for the left turn on Ramsay Brow as well as the general optimisation of the traffic signal timings at all three junctions.
- 8.4.11. At Opening Year, 2025, the network is expected to operate overcapacity in a Do-Nothing situation, whereas with the implementation of the proposed scheme, the network shows a 53% reduction in Network Delay in the AM Peak and 76% in the PM Peak. The network is predicted to operate within capacity.
- 8.4.12. In the Future Year, 2040, the network is expected to operate significantly over capacity in the Do-Nothing scenario. With the proposed scheme, the network is still expected to operate slightly over capacity but shows a 65% reduction in Network Delay and a 70% reduction in the PM Peak.
- 8.4.13. Journey Time matrices have been extracted from the models along with flow and trip distance matrices, ready to be used for the economic appraisal in TUBA.

8.5 SCHEME DRAWINGS

- 8.5.1. The assessment presented in this chapter has led to scheme amendments beyond the original existing schemes used to underpin the initial sifting process, creating one coherent scheme that meets current design guidance and draws on best practice from across the country. Scheme designs are presented in Appendix B.

Appendix A

POLICIES AND STRATEGIES



NATIONAL TRANSPORT POLICY

National policy and strategies set out the potential for enhancing transport infrastructure, as an opportunity to make a positive contribution to supporting economic growth and bringing about environmental improvements. National policies then become the basis for policy that is developed at regional and local levels.

There are a number of key national documents that support a focus on transport schemes which will enhance connectivity and contribute to economic growth within the north of England. These are discussed below:

DfT Local Transport White Paper “Creating Growth. Cutting Carbon: Making Sustainable Local Transport Happen” (DfT, 2011)

The White Paper’s vision is “...for a transport system that is an engine for economic growth, but one that is also greener and safer and improves quality of life in our communities”. Ultimately, the aspiration is to achieve this by improving the links that help to move people and goods around, and by targeting investment in new projects that promote ‘green’ growth. This can be realised through new construction projects, improvements to existing infrastructure and the promotion of alternative forms of travel.

The document highlights that local transport is facing a sustainability challenge; excess delay is costing urban economies £11 billion per annum, and carbon emissions impose a cost to society equivalent to up to £4 billion a year. The costs to the health of UK communities is even greater; up to £25 billion per year as a result of physical inactivity, air quality and noise, and £9 billion related to road traffic accidents.

It therefore follows that, as Workington is suffering from congestion, and the associated adverse impacts including poor journey times and increased emissions, this is likely to be negatively impacting upon the local economy and upon the communities living and working within the study area.

The key objectives, set out in the White Paper, are to:

- Encourage economic growth;
- Reduce carbon emissions; and
- Encourage the wider objectives of transport (such as more physical activity, improved road safety and air quality).

Sustainable travel is also a key consideration. On average, two-thirds of all travel comprises journeys of less than five miles; many of these journeys could be walked or cycled, yet the private car remains the main mode of choice and it is estimated that around 40% of all transport carbon emissions are generated by these short trips.

National Planning Policy Framework (NPPF) (Department for Communities and Local Government, 2019)

The NPPF sets out the government’s planning policies for England and how these are expected to be applied. The plan stresses the need to achieve sustainable development and there are three overarching objective themes including:

- Economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support

growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.

- Social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being.
- Environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

NPPF highlights the need to proactively support sustainable economic development, in order to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. It states that “significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development”. It is recognised that planning policies should seek to address potential barriers to investment, such as inadequate infrastructure.

NPPF sets out guidance for the production of planning policies that reaffirm the importance of ensuring vitality of town centres, and their role at the heart of local communities as well as for delivering sustainable economic growth. It recognises that there is a need to support town centre’s long term viability and vitality through planning for the encouragement of economic activity as well as allowing growth and diversification, ensuring resilience to future changes.

It goes on to highlight the importance of transport and to state that local authorities should seek to develop strategies for the provision of viable infrastructure necessary to support sustainable development. This is seen as a key factor in meeting economic objectives for building a strong, responsive and competitive economy.

Fixing the Foundations: Creating a More Prosperous Nation (HM Treasury, July 2015)

HM Treasury’s report sets out the importance of, and the government’s approach to, raising productivity, identifying that UK productivity lags behind other leading, advanced economies. It proposes that raising productivity can increase household incomes, improve average living standards and can also improve the UK’s trade position by better enabling UK firms to compete with foreign firms in the global marketplace.

The two pillars, identified for improving productivity, are:

- Encouraging long-term investment in economic capital including infrastructure, skills and knowledge; and
- Promoting a dynamic economy that encourages innovation and helps resources flow to their most productive use.

The report identifies that infrastructure expands the productive capacity of the economy, by reducing transaction costs and by integrating and enlarging markets. In particular, transport has a vital role to play by bringing businesses and people closer together and fostering the agglomeration economies that make towns and cities work. Transport connects people to jobs and products to markets underpinning supply chains and logistics networks, and it is fundamental to domestic and international trade.

The development of stronger economic infrastructure, including a modern transport system, is identified as a key component of raising productivity. It is recognised that, historically, the UK has not invested well enough in the transport infrastructure that is the lifeblood of business, particularly roads. England's roads carry over 95% of all passenger journeys and are used for over 85% of journeys by distance. Levels of congestion on the road network are high and continue to rise and, by 2040, it is estimated that the equivalent of more than 100 million working days could be lost to traffic congestion unless action is taken.

Some action is already being taken to channel funds into improved connectivity by road; this includes:

- Modernising the network and ensuring that it has a positive impact on the environment and communities, and on improving facilities for active users;
- Maintaining the network by upgrading the busiest junctions and alleviating bottlenecks; and
- Operating the network to keep traffic moving through better information and response to incidents.

The report makes reference to a rebalanced economy, including a Northern Powerhouse. A historical focus on the economy in London and the South East means that the UK economy cannot grow as it should and the development of a Northern Powerhouse, including committing £13 billion of investment to transport in the north of England, is seen as a key step in rebalancing the economy.

National Infrastructure Delivery Plan 2016 to 2021 (Infrastructure and Projects Authority, 2016)

The National Infrastructure Delivery Plan outlines the delivery of economic infrastructure to support growth and create jobs, raise the productive capacity of the economy, improve efficiency and boost international competitiveness over the short term (to 2020/21) and longer term (to 2050).

The Plan sets out how the government is investing in infrastructure in order to improve quality of life and create vibrant new places to live and work. It highlights that roads are fundamental to modern society by keeping people and businesses connected, with a reliable and high-performing road network helping to improve productivity.

The NIDP states that, over past decades, the quality of the transport network has declined and that congestion, noise and poor air quality have resultantly become issues at specific 'hotspots'. Poor or missing links mean cities which are close together do less business with one another. The government is committed to addressing these challenges to ensure that the country has a road which that drives growth, rather than constraining it.

UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations (DfT / DEFRA, 2017)

This document sets out the plan for reducing nitrogen dioxide (NO₂) air pollution across the UK. This forms part of the UK government's commitment to building a stronger economy and fairer society; clean air is acknowledged as creating a healthy and prosperous country for people to live and work in.

The report highlights a number of measures and initiatives the UK government has committed to deliver as part of its £2.7 billion investment into improving air quality and cleaner transport including:

- Investment in ultra-low emission vehicles (ULEV)
- National Productivity Investment Fund

- Air Quality Grant
- Green Bus Fund
- Clean Bus Technology Fund and Clean Vehicle Technology Fund
- Cycling and walking
- National road network

It is recognised that local knowledge is vital for finding solutions to achieve improvements in air quality. The report highlights that locally produced plans to tackle the causes of air pollution can include a wide range of measures such as changing road layouts at congestion and air pollution pinch points; encouraging public and private uptake of ULEVs; using innovative retrofitting technologies and new fuels; and, encouraging the use of public transport. If these measures are not sufficient, access restrictions on vehicles, such as charging zones or measures to prevent certain vehicles using particular roads at particular times can be implemented. Financial support to enable local authorities to develop and implement their plans will be available via:

- £255m Implementation Fund
- A Clean Air Fund
- £100m for retrofitting and new low emission buses

SUB-NATIONAL POLICIES

Sub-national transport policies, across the North, recognise the importance of enhancing transport connectivity to support and facilitate economic growth. Improved connectivity at this scale means reduced journey times, increased network capacity and/or capability and improved journey time reliability and punctuality.

Generally, sub-national policies apply scales of geography when considering connectivity enhancements to meet their social, environmental and economic objectives:

- **National** - including maximising opportunities from High Speed 2 (HS2) and Northern Powerhouse Rail (NPR) and, more generally, improving transport connectivity to contribute to economic growth;
- **Regional / Pan-Regional / LEP** – concerned with making interurban and city-to-city connectivity by road and rail better, to benefit the economy in terms of moving freight, ensuring that there is a skills match and unlocking strategic development sites. Enhancing connectivity to ports and airports is identified as important, to improve access to international markets and to support their growth; and
- Sub-national policy, relevant to this study, is discussed below:

One North: A Proposition for an Interconnected North (2014)

This report was the first to consider the major City Regions, within the north of England, as a collective entity in order to maximise economic growth as part of a 'Northern Powerhouse'. It sets out a combined strategic proposition for the north, formulated by the city regions of Leeds, Liverpool, Manchester, Newcastle and Sheffield.

The report highlights that the national economy is unbalanced, with London attracting high levels of investment including in transport. GDP/capita in the North is weak, compared to the national average, and investment in connectivity has been neglected, subsequently reducing wider national prosperity as well as that of the north. The One North proposition seeks to redress these imbalances, focussing transport investment for maximum economic gains.



The vision for economic growth in the north of England is based around better transport connectivity to improve journey time reliability, journey quality and deliver shortened journey times. Together, these elements contribute to strengthened labour markets, improved business efficiency and, therefore, higher productivity in the north.

The report recognises the dominance of the highway network for the movement of people and goods, and the need to improve the reliability and resilience of the network in order to facilitate this. East-west connectivity, across the north, is identified as a key issue as is congestion, with increasing delays leading to extended and less reliable journey times.

The Northern Powerhouse: One Agenda, One Economy, One North (Transport for the North, 2015)

Following on from the One North Proposition, in 2014, this report provides a more focussed view of the options which would support the Northern Powerhouse concept. It is a joint publication from the Government, Northern City Regions and LEPs, compiled to set out the shared vision for the north as a global powerhouse.

The report sets out that the number, capacity and reliability of east-west road connections is seen as a constraint on the northern economy and that a shared vision for the north is for improved east-west major road links to ensure better and more reliable journey times.

In August 2015 North Yorkshire became a new member of TfN, alongside Cheshire and Warrington, Cumbria, Lancashire and Tees Valley.

Northern Powerhouse Independent Economic Review (IER) (2016)

The IER was commissioned by Transport for the North and was published in 2016. The research sought to characterise the north's economic position, and the drivers underpinning its performance, and to identify opportunities where 'pan-northern' effort could support existing 'local' activities.

The IER identified a persistent performance gap between the north and the rest of the country, with the north's output per capita consistently lying 10-15% below the rest of England (excluding London). While the performance gap narrowed over the decade from 1999-2009, there are emerging signs that the gap is beginning to widen again. When London is included within the comparison the performance gap is more persistent, and is indicative of London's economic resilience following the 2008 financial crisis and subsequent Great Recession. The IER attributes this performance gap to two features of the northern economy:

- The relatively low proportion of working-age residents in work (economic activity rate); and
- The relatively low productivity of these employees.

In order to close this gap, the IER points towards two actions. Firstly, the workforce in the north must become more productive and, secondly, there needs to be a greater participation rate in the economy, and a greater proportion of the working age population must be in productive work.

While there are a range of factors that lead to lower productivity and economic activity rates in the north, many of these can be affected either directly or indirectly by transport connectivity. For example, people of working-age may not be in employment since they cannot find work that matches their skills and pay expectations within their search horizon. Improving transport connectivity reduces barriers to searching for employment over a larger geographical area and, once active in the labour market, allows individuals to make longer-distance commuting trips.

Connectivity improvements can also lead to improvements in productivity through:

- Better-matching people and their skills / experience to jobs;
- Attracting highly-skilled workers who value the ability to access a range of work and leisure opportunities across the north;
- Facilitating opportunities for collaboration on research and development projects;
- Attracting footloose Foreign Direct Investment (FDI) capital; and
- Knowledge spill-over effects from proximity to competitors and collaborators.

The IER goes on to state that greater productivity in the North will be led by businesses in four world-class prime capabilities (advanced manufacturing, health innovation, energy, and digital), and supported by three enabling capabilities (financial and professional services, logistics, and education). While the IER identifies these seven capabilities as having the strongest potential to grow, together, the prime and enabling capabilities account for around only a third of the north's overall economy. For the productivity gap to be closed, other sectors and industries must also grow and conditions need to be created that will support and facilitate this growth.

The IER sets out a number of barriers to growth that need to be overcome in order to create the conditions for transformational growth, both in the prime and enabling capabilities and in the wider economy. These are:

- The north's transport connectivity, which falls short of what the north's economy needs;
- The north's skill base, with the north having a higher share of people with lower skills, and a lower share of people with higher skills; and
- The approach to innovation and to inward investment.

Regional Productivity Growth

The IER predicts that productivity growth will be higher in the 'transformational' growth scenario, due to the expected performance of the seven capabilities within the economy; supportive policies will be required to achieve this scenario. Improved transport connectivity is one factor which may help in this, as previously discussed; specifically, it is assumed that faster connections between northern cities will result in increased productivity.

The IER highlights that the North's 'performance' gap, measured by GVA per capita, is around 25% below the rest of England. The most significant factors in this gap are productivity and employment which are driven by:

- **Gaps in skills** - due to out-migration of skilled workers to the southern regions, partly related to an insufficiently dynamic economy to attract and retain higher-skilled workers.
- **Gaps in investment** – this has widened significantly since the recession in 2008, particularly in areas known to boost the economy such as science, technology and infrastructure.
- **Lack of agglomeration and poor transport and connectivity** - the north is fragmented by poor transport links between key settlements and the economy, as a whole, is failing to gain the agglomeration effects which would help grow its productivity.

The IER highlights that there is a need for transport investment to support productivity and employment growth, to create more and better paid jobs. Better transport connectivity can help to promote a higher employment rate, by improving access to centres of employment. It can also help to promote higher productivity, by improving the attractiveness of an area for investment, improving



access to markets, increasing the pool of workers available to work in higher productivity urban locations and increasing the effective scale of cities and the associated benefits of agglomeration.

Strategic Transport Plan (Transport for the North, 2019)

The ambition for the Northern Powerhouse is to increase productivity and job opportunities, and to support the re-balancing and growth of the national economy. Transport provision is critical to delivering the ambitions of the Northern Powerhouse, through a faster and less congested road and rail network.

TfN's Strategic Transport Plan for the North sets out the case for strategic transport infrastructure investment through to 2050, in order to support transformational economic growth. It sets out a vision for *'a thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all'*.

Four key objectives are set out to meet this vision:

- Transforming economic performance.
- Increasing efficiency, reliability, integration, and resilience in the transport system.
- Improving inclusivity, health, and access to opportunities for all.
- Promoting and enhancing the built, historic, and natural environment.

In meeting these objectives, the plan looks at three key aims of connecting people, connecting businesses and moving goods.

It is also highlighted that improved transport infrastructure will enable the North to make a more significant contribution to the UK economy through higher productivity, increasing job opportunities and enhanced connectivity to important economic centres. The Strategic Transport Plan focuses on transformational inter-city and pan-Northern connectivity enhancements, ensuring that these are drivers of economic growth in the North and the UK as a whole.

Promotion and support of the built and natural environment is also a key transport objective in the strategy, highlighting the need to ensure that new infrastructure is designed to minimise the negative impacts on both the natural and built environment, including a negative impact on biodiversity.

The text above highlights the importance of resolving congestion and resilience issues on the north's road network in order to help make important economic areas, such as Northallerton, accessible for new housing, commercial and industrial developments. This in turn will benefit the northern economy as a whole.

LOCAL POLICY

Local policy typically relates to targeted transport enhancements designed to address social, health and environmental issues, as well as to benefit the economy by enhancing access to jobs, training and services. In many cases there is a focus on improving integration between land-use planning and transport, to support more sustainable patterns of travel and reinforce the case for targeted enhancements to the transport network.

Local policy, relevant to this study, is discussed below:

Town Centre Masterplan

Opportunities exist to encourage walking and additional journeys on foot, and increase town centre footfall by building on the above attributes and connections with public realm and wayfinding



improvements, the development of green infrastructure, and addressing the local road network which serves as a barrier to pedestrian connectivity in key locations.

The following strategic objectives are applicable to the Workington LUF2.

Improving connectivity and accessibility to and within the town

Improve accessibility into and within the town for pedestrians, cyclists, and public transport users by improving connecting routes and crossings, signage and street design.

Create a town centre that has a high-quality digital connection for use by residents and businesses.

Improve pedestrian and cycling connectivity to key destinations such as Hall Park, the railway station and the Lower Derwent Valley.

Creating an attractive townscape and public realm

Ensure that new development incorporates a high standard of design to reflect and improve on the positive locally-distinctive characteristics and qualities of the town centre, including its listed buildings and Conservation Areas.

Create an attractive town centre with a mix of uses, utilising underused spaces, enhancing public realm and creating attractive linkages.

Create high quality public realm that is well designed and connected to encourage people to stay longer in the town centre.

Improving Connectivity

- Ramsay Brow – the A66/A596 junction requires reconfiguration to facilitate the free movement of large vehicles serving the port and commercial and industrial premises in the town. Works to associated junctions are also needed as the level of traffic increases in response to increases in growth and population.
- Central Way underpass
- Connectivity to Workington Transport Hub
- Upgrade to Cumbria Coastal Rail Line

New links and Walking/Cycling Routes

Improving ease of movement and permeability can be achieved through creating new links and improved wayfinding and signage, increasing the legibility of the town and raising the visibility of key attractions within it to make it easier to access and move through the town. Routes need to be safe, convenient, and attractive with high quality and pleasant connections to the key places that people want to go.

These routes all offer the opportunity to increase 'active travel' through better signage and waymarking, improvements to public realm and green infrastructure, linking the town centre to its surroundings, new development sites, and existing green infrastructure assets such as:

- Hall Park;
- The Derwent Valley;
- Vulcans Park;
- St Michael's Churchyard



Public Realm and Green Space

The Council seeks to extend and build on these positive attributes to integrate the town centre with other parts of the town, improving connectivity along key routes and key development sites and enhancing the quality of public realm and existing open spaces, potentially through the provision of additional landscaping, street trees, open spaces and pocket parks.

Port of Workington Masterplan

The Port of Workington (PoW) is an important element in the economy of West Cumbria benefitting from a good length of quay, storage capabilities and direct rail access.

The Port has regular cargos and in 2017 saw 278,000 tonnes of freight moved through the Port. 99% of this tonnage was imports comprising; wood pulp, logs, chemicals and dry bulks. The Port also has a track record in supporting project cargo, most recently the Low Level Waste Repository and West Cumbria Pipeline project. In addition to cargo, the Port plays an important role in serving off-shore industries with E.ON using the Port to service the Robin Rigg windfarm.

Supporting the operation of the Port, proposals for an upgraded road over rail access bridge are at an advanced stage and there is the possibility of bi-directional rail access being improved. Cumbria County Council is currently finalising an asset review of the core infrastructure at the Port. This includes carrying out inspections of the key structural, mechanical and electrical assets.

Cumbria County Council is now developing a new Port Masterplan (PMP). This will set out the strategy and vision over the next 20 years and detail the development phasing road map to meet the requirements and many challenges of the future. Such a long-term approach to the port and opportunities around it has not been prepared previously and it is hoped that this study will enable the creation of a long-term strategy around its role and opportunities.

Appendix B

SCHEME DRAWINGS



Appendix C

LANDSCAPE IMAGERY





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