



A41 South

Baseline Review and Long Listing of Schemes

December 2020

Mott MacDonald
Ground floor
Royal Liver Building
Pier Head
Liverpool L3 1JH
United Kingdom

T +44 (0)151 482 9910
mottmac.com

A41 South

Baseline Review and Long Listing of Schemes

December 2020

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	Sept 2020	KD/DB	CS	CH	First Draft for client review
B	Dec 2020	KD/DB	CS	CH	Updated version for issue

Document reference: 419653 | 1 | B

Information class: Standard

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Contents

1	Introduction	1
1.1	Study Area	1
1.2	Study Context	2
1.3	Purpose of this Report	4
1.4	Report Structure	4
2	Policy Context	5
2.1	Local Policy	5
2.2	Regional Policy	13
2.3	National Policy	20
2.4	Policy Review Conclusion	24
3	Land Use Context	25
3.1	Current Land Uses	25
3.2	Proposed Development	28
3.3	Environmental Context	29
3.4	Air Quality	32
3.5	Summary	33
4	Transport Context	34
4.1	Highways	36
4.2	Bus Network	39
4.3	Rail Connectivity	44
4.4	Walking	51
4.5	Cycling	58
4.6	Road Safety	65
4.7	Traffic Modelling	68
5	Socio-Economic Context	90
5.1	Population	90
5.2	Economic Activity	92
5.3	Deprivation	94
5.4	Car Ownership	97
5.5	Summary	99
6	Stakeholder Engagement	102
6.1	Cheshire West and Chester Council (CW&C) and Highways England	102
6.2	Active Travel Forum	102

6.3	Wirral Borough Council Officers	102
7	Defining the character of the corridor	103
7.1	Developing the Study Vision	103
7.2	Study Aims and Objectives	104
8	Long List Schemes	106
8.1	Active Travel	107
8.2	Bus	116
8.3	Highway	118
8.4	Multi Modal	120
8.5	Park & Ride and Parking	121
8.6	Public Realm	122
8.7	Rail	122
8.8	Rapid Transit	123
9	Next Steps	124
A.	Rail Station Walking Isochrones	126
B.	Scheme location plans	136

Tables

Table 2.1: Wirral Local Plan timetable	5
Table 3.1: Land Use context- key issues and opportunities	33
Table 4.1: Summary of Bus Services Serving the Study Area	39
Table 4.2: Rail service specification	44
Table 4.3: Station accessibility overview	45
Table 4.4: Station utilisation and parking	45
Table 4.5: Personal Injury Collision Clusters	65
Table 4.6: Transport context- key issues and opportunities	88
Table 5.1: Mid-year population estimates	90
Table 5.2: Employment and Unemployment (Jul 2018-Jun 2019)	92
Table 5.3: Number of Employees in Wirral's Top Employment Sectors	93
Table 5.4: Socio-economic context- key issues and opportunities	99

Figures

Figure 1.1: Study Area	2
------------------------	---

Figure 1.2: The A41 South Wider Development Process	3
Figure 2.1: Birkenhead Regeneration Framework (BRF) Strategy Area	8
Figure 2.2: Artistic Impression Wirral Waters	9
Figure 2.3: LCR LCWIP proposed cycling and walking network (31 corridors)	15
Figure 3.1: Current Land Uses	27
Figure 3.2: Wirral Local Plan Proposed Development	28
Figure 3.3: Flood Risk Map	30
Figure 3.4: Conservation Areas	31
Figure 3.5: 2015-2019 Annual Average NO ₂ Levels in Wirral	32
Figure 4.1: Strategic Connectivity	35
Figure 4.2: Road Hierarchy	38
Figure 4.3: Key Bus Corridors – Full study area	40
Figure 4.4: Key Bus Corridors – Northern focus	41
Figure 4.5: Key Bus Corridors – Central focus	42
Figure 4.6: Key Bus Corridors – Southern focus	43
Figure 4.7: Rail Connectivity, Patronage and Station Provision – Full study area	46
Figure 4.8: Rail Connectivity, Patronage and Station Provision – Northern Focus	47
Figure 4.9: Rail Connectivity, Patronage and Station Provision – Central Focus	48
Figure 4.10: Rail Connectivity, Patronage and Station Provision – Southern Focus	49
Figure 4.11: Rail Station Walking Isochrones – Full study area	50
Figure 4.12: Pedestrian Connectivity – Full study area	52
Figure 4.13: Pedestrian Connectivity – Northern Focus	53
Figure 4.14: Pedestrian Connectivity – Central Focus	54
Figure 4.15: Pedestrian Connectivity – Southern Focus	55
Figure 4.16: Pedestrian Coastal Accessibility	56
Figure 4.17: Poor surface quality along pedestrian / cyclist coastal route in Rock Ferry	58
Figure 4.18: Narrow Cycle Lane on A41 adjacent to Wirral Business Park (looking north)	59
Figure 4.19: Cycling Network – Full study area	61
Figure 4.20: Cycling Network – Northern Focus	62
Figure 4.21: Cycling Network – Central Focus	63
Figure 4.22: Cycling Network – Southern Focus	64
Figure 4.23: Personal Injury Collision (PIC) Cluster Map	67
Figure 4.24: 2015 AM Actual Flow Plot	70
Figure 4.25: 2015 PM Actual Flow Plot	71
Figure 4.26: 2015 AM Link Volume-Over-Capacity Plot	72
Figure 4.27: 2015 PM Link Volume-Over-Capacity Plot	73
Figure 4.28: 2015 AM Junction Volume-Over-Capacity Plot	74
Figure 4.29: 2015 PM Junction Volume-Over-Capacity Plot	75
Figure 4.30: 2035 AM Actual Flow Plot	76
Figure 4.31: 2035 PM Actual Flow Plot	77
Figure 4.32: 2035 AM Link Volume-Over-Capacity Plot	78
Figure 4.33: 2035 PM Link Volume-Over-Capacity Plot	79

Figure 4.34: 2035 AM Junction Volume-Over-Capacity Plot	80
Figure 4.35: 2035 PM Junction Volume-Over-Capacity Plot	81
Figure 4.36: 2015 AM A41, M53 Link Flow Comparison	82
Figure 4.37: 2015 AM A41 Select Link Analysis – Northbound	84
Figure 4.38: 2015 AM M53 Select Link Analysis – Northbound	85
Figure 4.39: 2015 AM Kingsway Tunnel Select Link Analysis – Eastbound	86
Figure 4.40: 2015 AM Queensway Tunnel Select Link Analysis – Eastbound	87
Figure 5.1: A41 South Study Area- Population Age breakdown	91
Figure 5.2: Population density, 2018	92
Figure 5.3: Employment density (employees per hectare), 2018	94
Figure 5.4: Wirral according to the overall Index of Multiple Deprivation (IMD), 2019	95
Figure 5.5: Average claimant count, 2019	96
Figure 5.6: Average claimant count, June 2020	97
Figure 5.7: Percentage of Households with and without access to a car	98
Figure 5.8: Map of proportion of households with no access to a car or van	99
Figure 9.1: Overview of next steps	125

Photos

No table of figures entries found.

Maps

No table of figures entries found.

Charts

No table of figures entries found.

Tables - Appendices

No table of figures entries found.

Figures - Appendices

No table of figures entries found.

Photos - Appendices

No table of figures entries found.

Maps - Appendices

No table of figures entries found.

Charts - Appendices

No table of figures entries found.

1 Introduction

This report documents the findings from our assessment of baseline characteristics for the A41 South Corridor and summarises the initial 'long list' of transport infrastructure schemes identified to support Wirral Borough Council's growth and development ambitions for the area.

1.1 Study Area

The A41 corridor is a key route through the east side of the Wirral, located parallel to the River Mersey. This study will focus on the section of the corridor from Borough Road in the north through to the A41/M53 junction in the south and B5132/M53 Clatterbridge junction to the west. The eastern side of the study area is bounded by the River Mersey. The western extent covers the Merseyrail line and the residential areas of Bromborough, Port Sunlight, Rock Ferry, New Ferry and Eastham plus the Cammell Laird shipyard in the north.

Whilst the A41 corridor is the main focus of this work, the extents of the study area have deliberately been expanded beyond, recognising the role the surrounding area has on the way the A41 is used, accessed and viewed. Travel to school, work and for local facilities occur between and within areas, and therefore consideration of an area wider than just the A41 corridor itself allows us to take a holistic approach to the identification of schemes to improve connectivity and accessibility in the area, and support further growth aspirations.

The extent of the study area surrounding the A41 route can be seen in Figure 1.1, denoted by the red boundary line.

Figure 1.1: Study Area



Source: Mott MacDonald © OpenStreetMap contributors

1.2 Study Context

Wirral Borough Council's aspirations for growth are set out within its Strategic Regeneration Framework (SRF). The SRF sets out the priorities and challenges for economic growth in the borough, to help guide and proactively drive investment and development activity across Wirral. The Strategic Transport Framework (STF) was later developed to enable this growth and to ensure that the transport network is fully aligned with Wirral's regeneration plans / proposals.

Figure 1.2 below highlights where this study sits in context alongside the Council's programme to identify a transport investment programme to support borough wide development.

Figure 1.2: The A41 South Wider Development Process



Source: Mott MacDonald

One of the key factors driving the need for this A41 South study is the proposed development outlined within the Local Plan which will change the characteristics of the study area and result in significant residential and employment growth in this area of the borough, which will require substantial improvements and changes to the transport network.

Therefore, a review of this section of the A41 is required to provide a continuation of the work undertaken to the northern part of the A41 and ensure that forward planning and development proposals along the corridor are joined up and provide a cohesive solution for the corridor, enabling it to function efficiently in the face of future demand and changing land use.

1.2.1 Wider A41 Strategy

Prior to the development of this study, similar work has been undertaken for the A41 North area. Two schemes identified through this work package are currently being progressed through the Business Case process to explore appropriate funding opportunities. The A41 North study area is located in Birkenhead and refers to the northern-most section of the A41 in Birkenhead, stretching approximately from its junction with Green Lane at the Rock Retail Park to Woodside at the northern end of the site. In addition to the highways and junctions, the site includes the large-scale development areas of Hind Street (site of the former M53 Ford garage behind Birkenhead Central rail station) and bounded by Argyle Street South to the west, the A41 to the east and the Queensway Tunnel toll plaza to the north; and Woodside including the existing bus station and ferry terminal, the adjacent commercial area, the large gyratory and its interface with Hamilton Square. From the wider A41 North Strategy, two priority schemes have been progressed as a 'Phase 1' package of works. The 2 key elements of the scheme include:

- **Dock Branch Park:** An iconic, catalytic and transformational project for Birkenhead's regeneration. The scheme proposes the implementation of a Green Corridor within

the historical street pattern of Birkenhead, utilising the former rail line. This scheme will seek to bring this rail corridor back into active usage for pedestrians and cyclists and improve connectivity between Birkenhead Town Centre and major development opportunities at Wirral Waters and Hind Street. The scheme will also provide a unique linear park, creating an impressive space within the East West cultural axis. It is anticipated that the scheme will also create opportunities for new neighbourhoods across surrounding sites which will permeate the corridor. The scheme could also enable the delivery of the LCR digital spine in tandem.

- **Birkenhead Central Landing:** This element of the scheme is based around the comprehensive re-modelling of the flyovers around the A552 to the south of Birkenhead Town Centre to open up the Hind Street site as a major development opportunity, with at-grade access to be provided, maximising the potential of the Hind Street site being brought forward in a holistic form. Flyover removal will also reduce severance between the town centre and communities to the south for motorists, cyclists and pedestrians. It is also anticipated that the re-modelling of the existing toll plaza will improve safety for users and provide a welcoming gateway to Birkenhead and the wider Wirral.

1.3 Purpose of this Report

This report summarises the key issues and opportunities associated with the study area and includes issues in relation to transport, changing land use and the socio-economic make up of this part of the borough. This will help identify the baseline conditions of the A41 South in order to inform the aspirations for change and ensure the most appropriate schemes are developed to support this.

After a review of the evidence to identify key issues to be addressed, the study will consider the future role of the corridor in relation to new surrounding land uses and changing transport context. This will further inform the scheme development for the A41 South corridor before developing a long list of options.

This report will summarise the key issues identified, define the role of the corridor and present a long list of options before discussing potential next steps for progressing schemes towards funding.

1.4 Report Structure

This report is structured in the following order:

- Section 2: Policy Context
- Section 3: Land Use Context
- Section 4: Transport Context
- Section 5: Socio-Economic Context
- Section 6: Stakeholder Engagement
- Section 7: Defining the character of the corridor
- Section 8: Long list of schemes
- Section 9: Next steps

2 Policy Context

This section provides a review of the local, regional and national policies, strategies and relevant guidance documents that frame and influence transport investment in Wirral and that schemes identified within this study will therefore need to align with. The policy review demonstrates how this study fits with strategic objectives set out in policy, helping to achieve local, regional and national ambitions.

2.1 Local Policy

2.1.1 Wirral Local Plan 2020-2035¹

A new Local Plan is being prepared to shape the future of the borough for the 15-year period between 2020 and 2035. It is not yet adopted. The timetable for the preparation of the Local Plan is set out in Table 2.1. Once adopted it will be used to make decisions on individual planning applications.

Table 2.1: Wirral Local Plan timetable

Plan Preparation Stage	Purpose of the Stage	Dates*
Evidence gathering and draft plan preparation	Formulate vision and objectives for the Local Plan, evidence gathering, identify development requirements, identify potential spatial options, identify relevant economic, social and environmental objectives to inform the sustainability appraisal	During 2019
Public Consultation on draft local plan (Regulation 18 of the Local Plan Regulations 2012) and continued work on evidence gathering	This document brings together all the strategic evidence and sets out the housing and employment requirements for the Borough over the plan period and set out the Council's preferred options for distributing this development including preferred sites.	January 27th-April 6th 2020
Council approval of publication of the Local Plan	This is the full Local Plan that the Council wishes to submit to the Secretary of State for Examination. It will include both strategic and non-strategic policies. All the evidence will be in place at the time of publication. It is the version that the Council considers "sound" in terms of the legal requirements placed on plan preparation and to be justified and deliverable. Following the Council's approval of the Publication version of the Local Plan the policies and proposals in the Local plan will have significant weight in the decision-taking process.	February 2021
Publication of the Local Plan: (Regulation 19)	This will be the formal period for representations to the draft plan for a minimum period of 6 weeks, and will give communities, stakeholders and other interested persons the final opportunity to make comments on the	6-week period commencing

¹ New Local Plan | www.wirral.gov.uk

Plan Preparation Stage	Purpose of the Stage	Dates*
	plan relating to the “soundness” and legal compliance of the Local Plan. The Council will not review these comments other than to identify key issues and potential modifications to the Local Plan. The representations will be passed directly to the Inspector undertaking the Local Plan Examination.	g February 2021
Submission (Regulation 22)	This is an administrative stage and relates to the formal submission of the documents (including all formal representations received during the Publication Deposit period, statutory assessments, and evidence base documents) to the Secretary of State for independent examination by a Planning Inspector.	June 2021
Local Plan Examination	The formal examination of the Local Plan will start when the plan is submitted. Hearings will be held into specific aspects of the plan during the examination, and “objectors” will have the right to be involved in that process. The Planning Inspector will assess the Local Plan to determine whether it has been prepared in line with the duty to cooperate, other legal requirements, and whether it is “sound” in line with the requirement of planning legislation. At this stage the Council can request that the Inspector makes recommendations which would address the issues identified during the Examination in order to ensure that the plan is “sound”, including proposed modifications to the Local Plan, which may require additional public consultation. The Inspector’s conclusions will be set out in a report issued to the Council.	September 2021
Local Plan Adoption	The Council will receive the Inspector’s report and consider the recommendations, before it formally adopts the Local Plan.	Mid 2022

Source: Wirral Borough Council *Note that all timings are subject to the programming of Committee and Council meetings Taken from <https://www.wirral.gov.uk/planning-and-building/local-plans-and-planning-policy/local-plans/local-development-scheme>

The Local Plan will be guided by a Vision of what Wirral should be like in 2035. The Vision for Wirral outlined within the Local Plan is ‘A Healthy, Sustainable and Prosperous Borough’.

Development needs outlined within the Local Plan include:

- 12,000 new homes between 2020 and 2035
- 5,050 new homes to need to be delivered by 2025
- 80ha of land for new jobs
- Support major regeneration of brownfield sites in and around Birkenhead

What does this mean for the A41 South Study?

This study will be essential to supporting the development of the Local Plan over the period from 2020 to 2035 ensuring sites are fully accessible and the transport network has the required capacity to facilitate a growing number of residents and employees and enabling them to make sustainable travel choices. The delivery of some of the Local Plan sites should be aligned to the implementation of schemes noted in this study.

2.1.2 Wirral Strategic Regeneration Framework²

The draft Wirral Strategic Regeneration Framework (SRF) sets out the priorities and challenges for economic growth in the borough in order to guide and drive investment and economic activity across Wirral to deliver the borough's ambitions for the local economy. Wirral is already an attractive place to live and work, and nationally significant economic development projects such as Wirral Waters Enterprise Zone and key growth sectors such as advanced manufacturing, visitor economy and energy. The SRF identifies seven spatial priority areas which are significant for growth potential and for which individual masterplans and more detailed regeneration frameworks will be developed. These are:

- Birkenhead Town Centre (see 2.1.2.1)
- Hamilton Square and Woodside
- Wirral Waters Enterprise Zone (see 2.1.2.2)
- A41 Corridor (partially covered by this report and the ongoing work for the A41 N area (see 1.2.1)
- Wirral International Business Park
- New Brighton
- Local Town Centres

The SRF has the ambition of delivering 5,000 new jobs, £250m of new inward investment, £450m of tourism revenue, 3,500 new homes, 250 new businesses and 250,000 sq. ft of new employment space by 2020.

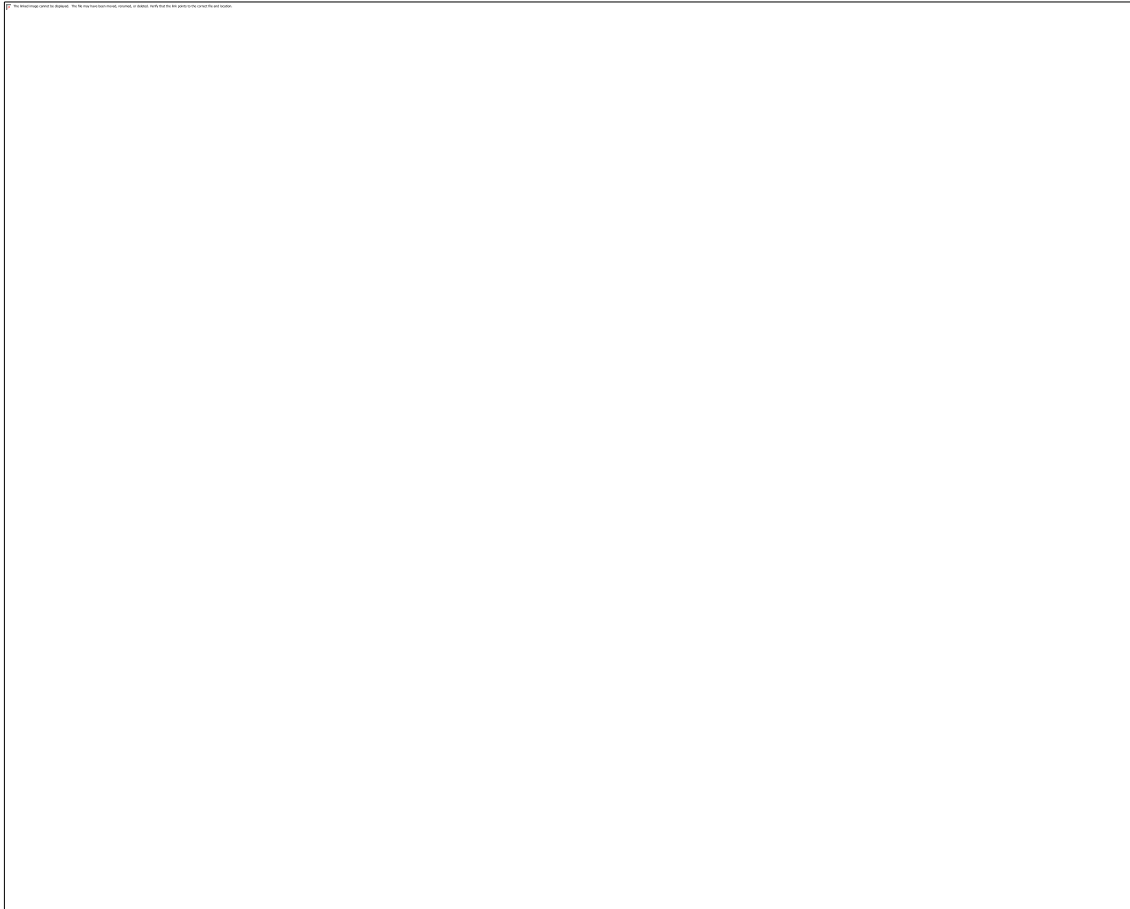
2.1.2.1 Birkenhead Regeneration Framework

Whilst outside of the study area for this report, the interface between the study area and development proposals to the north in and around Birkenhead are important to consider. Birkenhead is a hive of activity and interest – both from a public sector and a private sector investment perspective. It is recognised that wider regeneration and additionality in terms of community, market and place impact, a clear vision and framework for delivery is required to avoid development being delivered in a piecemeal manner, and to ensure that any investment leverages.

The Birkenhead Regeneration Framework (BRF) covers the area across East Wirral as indicated in Figure 2.1 below.

² [Strategic Regeneration main report.pdf \(wirral.gov.uk\)](https://www.wirral.gov.uk/Strategic-Regeneration-main-report.pdf)

Figure 2.1: Birkenhead Regeneration Framework (BRF) Strategy Area



Source: Open

The Framework breaks the area down into development areas as shown in Figure 2.1. For some of the areas, detailed Delivery Action Plans will be developed. These areas include:

- Hamilton Park
- Hind Street
- Birkenhead Town Centre; and
- Scott's Quay.

The Delivery Action Plans will represent Masterplan frameworks for each development area, which will consider; key sites and development capacity /density, alternative land use mix and options for public realm, open space / landscape and movement framework / options.

What does this mean for the A41 South Study?

Although the majority of these areas lie outside of the A41 South study boundary they will need to be considered alongside any proposals to ensure a cohesive transport network is developed across the borough which supports and compliments all development.

2.1.2.2 Wirral Waters

Whilst also outside of the study area, Wirral Waters represents a major development opportunity for the borough and therefore important to consider alongside this study. Located north of Birkenhead Town Centre, around the East and West floats, Wirral Waters³ forms part of Mersey Waters Enterprise Zone⁴, one of the first four UK Enterprise Zones created in 2011. Wirral Waters was granted a 30-year planning consent in 2012. Based on the original Masterplan, the Wirral Waters regeneration programme is forecast to provide:

- Up to 14,000 homes of different types across a number of sites;
- 420,000 sqm of office floor space;
- 60,000 sqm retail
- 38,000 sqm hotel and conference facilities;
- 100,000 sqm of cultural education and amenity; and
- 250,000 sqm B2/B8 consent.

Figure 2.2: Artistic Impression Wirral Waters



Source: Peel

Wirral Metropolitan College, comprising 38,000 sq. ft of development, became the first new building completed as part of Wirral Waters in 2015. This was followed by a new development for The Contact Company, providing commercial space for more than 500 jobs at Wirral Waters. The next phase of Wirral Waters to be delivered will focus on the Northbank area and will include a mixed-use development including substantial residential, this is on course for delivery in Summer 2021. The focus now on Wirral Waters is the creation of a desirable 'place' that is complementary to Liverpool Waters (located on the opposite side of the Mersey) for new occupiers and investors.

³ See: <https://www.wirralwaters.co.uk/>

⁴ See: <http://enterprisezones.communities.gov.uk/enterprise-zone-finder/mersey-waters-enterprise-zone/>

What does this mean for the A41 South Study?

Wirral Waters forms a large development which will significantly increase the number of people living and working in Wirral. This therefore demonstrates the need to ensure that the transport network across Wirral remains resilient and is able to sustainably support travel to, from and across the borough for an increasing number of residents and employees.

2.1.3 Wirral Strategic Transport Framework (STF) Action Plan⁵

The Wirral Strategic Transport Framework Action Plan sets out a number of transport improvement schemes by structuring schemes in terms of cost, timescale and priority for the borough. The following key transport issues have been identified within the study area:

- Capacity, flow and connectivity of the A41 and A552 Corridors;
- Creating a transport network which supports the delivery of the Growth Plan by supporting Wirral's major development areas;
- Infrastructure improvements and maintenance to support a resilient network, addressing pinch points and hotspots;
- Safety and attractiveness of cycle and pedestrian facilities;
- Active mode access issues due to limited infrastructure, poor quality routes, severance particularly from the south, and unattractive Public Realm.

As is becoming clear, several of the schemes noted in the STF to better connect and support the development of the spatial priority areas are identified within the Action Plan for this A41S study.

What does this mean for the A41 South Study?

The A41 South study forms the next step following on from the development of the Strategic Transport Framework Action Plan to develop transport improvement schemes along the corridor which will help address the issues identified above.

2.1.4 Wirral Network Management Plan⁶

The Wirral Network Management Plan sets out how Wirral intends to make transport accessible for all, to enable everyone to move around and access the goods and services they require.

A joined-up transport network helps the LCR to grow and to be a better place to live, but the biggest challenge is to achieve this growth in an environmentally sustainable way with equal opportunity for all. Consequently, it has five key objectives all of which will be well aligned with schemes identified within the A41 South Feasibility study:

1. Provide appropriate infrastructure for regeneration
2. Ensure accessibility for all

⁵ https://www.wirral.gov.uk/sites/default/files/all/planning_and_building/Local_plans_and_planning_policy/Local_Planning_Evidence_Base_and_Research/Wirral_Documents/Reg_18_Issues_and_Options_2020/Transport/Draft_Wirral_Strategic_Transport_Framework_Action_Plan_2019/T_6.1_Draft_Wirral_Strategic_Transport_Framework_Action_Plan_2018.pdf

⁶ <https://www.wirral.gov.uk/sites/default/files/all/Parking.%20roads%20and%20travel/transport%20policy/Network%20Management%20Plan.pdf>

3. Manage demand through effective management strategies and awareness programmes
4. Promote healthier communities
5. Protect and enhance the environment

There is also an overarching objective to make best use of existing resources.

What does this mean for the A41 South Study?

This study will directly support the above objectives through ensuring significant development and regeneration, such as that outlined within the Local Plan, is able to come forward effectively through enhancing accessibility to the area and ensuring the transport network remains resilient. Schemes outlined within the A41 South Study will also aim to promote healthier communities and enhance the environment through improving quality of place, enhancing infrastructure for active modes and improving access to public transport.

2.1.5 The Wirral Council Plan – 2025⁷

The Wirral Council Plan is a set of goals and objectives which every everyone involved in Wirral Borough Council owns and will strive to achieve over the period through to 2025. The key ambitions of the plan are to achieve:

- A prosperous, inclusive economy where local people can get good jobs and achieve their aspirations
- A cleaner, greener borough which celebrates, protects and improves our environment and urgently tackles the environmental emergency
- Brighter futures for our young people and families – regardless of their background or where they live
- Safe, vibrant communities where people want to live and raise their families
- Services which help people live happy, healthy, independent and active lives, with public services there to support them when they need it.

What does this mean for the A41 South Study?

The A41 South study offers a starting point to contribute towards achieving the above objectives improving accessibility in this part of the borough to enhance access to jobs, education and training opportunities, improving active travel infrastructure which promotes the use of more sustainable modes and reduces the impact of travel, and enhancing the quality of places to create more vibrant communities which are attractive for people to live and work.

2.1.6 Wirral Growth Plan⁸

The Wirral Growth Plan set out the aspiration for growth for the borough and the implementation of the plan will support the delivery of the following thematic outcome areas:

- Growing competitive businesses

⁷ [Appendix 1 Wirral Council Plan 2025.pdf](#)

⁸ [https://www.wirral.gov.uk/sites/default/files/all/About the council/Wirral Plan/Wirral Growth Plan.pdf](https://www.wirral.gov.uk/sites/default/files/all/About%20the%20council/Wirral%20Plan/Wirral%20Growth%20Plan.pdf)

- Increasing employment
- Workforce skills that match business needs
- Increase inward investment
- Develop a vibrant visitor economy
- Provide efficient, well maintained and accessible transport networks
- Assets and buildings are fit for purpose for Wirral businesses
- The provision of good quality housing.

What does this mean for the A41 South Study?

Schemes outlined within the A41 South Study will support aspirations outlined within the Wirral Growth Plan through enhancing the accessibility of the area and key development sites, and ensuring the area remain highly attractive to potential new investors in order to encourage inward investment for housing and employment.

2.1.7 Cool 2: A Strategy for Wirral in the face of the Global Climate Emergency⁹

In May 2019, Wirral Council declared a climate emergency. In response to this, a new climate strategy for the borough was developed, building in the existing climate strategy in place – Cool 2. This strategy seeks to speed up the action and investment needed to change Wirral into a place that:

- No longer adds to the problem of unnatural climate change
- Is adapted to cope with the damage already being done by climate change; and
- Plays a part in reversing this damage

The strategy sets Wirral on the path to achieve two main goals:

- To stay within a local emissions 'budget' of 7.7 million tonnes (Mt) of CO₂ between 2020-2100 and to reach 'net zero' pollution as early as possible before 2041.
- To ensure a climate resilient Wirral adapted to cope with existing change and further unavoidable disruption this century

Cleaner travel is recognised as the key factor in achieving these goals. This will be achieved by:

- A greater proportion of local journeys made by bike or on foot
- A greater proportion of journeys in town and between towns made by public transport
- Easier connection between different modes of sustainable travel – walk and ride, cycle and ride, park and ride, bus and train
- A shift from individual ownership of vehicles to the use of travel services, e.g. car clubs, travel passes
- Increase in the proportion of zero emission vehicles with widespread adoption of electric vehicles and plug-in hybrids
- More people adopting smarter efficient and safer driving styles

⁹ <https://www.wirral.gov.uk/sites/default/files/all/About%20the%20council/climate%20change/Cool%202%20-%20Approved%20by%20Partnership.pdf>

What does this mean for the A41 South Study?

Sustainable travel is recognised as the key factor in achieving Wirral's Climate Strategy goals. Schemes outlined within the A41 South Study will look to support the above objectives through enhancing infrastructure for active travel, improving access to public transport and enhancing integration between modes therefore directly contributing towards objectives outlined within Wirral's Climate Strategy.

2.2 Regional Policy

2.2.1 Liverpool City Region Transport Plan Facilitating Inclusive Economy¹⁰

The Liverpool City Region Combined Authorities (LCRCA) Transport Plan for the Liverpool City Region (LCR) published in June 2019 articulates the Region's vision for transport and focuses on short term delivery. Whilst it is not statutory, it acts as the framework for deciding the allocation of funds for transport schemes in the LCR.

The Liverpool City Region Transport Plan sets the strategic transport vision for the LCR. The Plan provides a strategic investment guideline to support the Local Transport Plans (LTP) for each borough, which sets the context for transport as the key factor in enabling the LCR's objectives for economic growth, skills, health, housing and regeneration.

The document sets a number of key objectives to ensure the best possible benefits for the LCR:

- To support inclusive economic growth across a thriving LCR by developing a transport network that effectively and efficiently connects people, freight, businesses and visitors, and in a way that is fully integrated with wider policy objectives.
- To exploit the LCR's role as a global gateway that is served by all forms of transport and that supports Northern Powerhouse and Transport for the North's aims to rebalance the UK's economy, through economic agglomeration and de-congestion benefits.
- To deliver the objectives above through a new mobility culture, where transport services are modern, safe, clean, healthy and inclusive. This has a focus on boosting healthy forms of travel for short trips and where the public transport networks are the modes of choice.
- To develop a mobility system that enhances the health and wellbeing of our citizens. This will include the development of liveable and resilient city region that addresses the challenges of poor air quality and supports the move to a zero carbon LCR by 2040.
- To secure a transport network that is well maintained, safe and resilient.

What does this mean for the A41 South Study?

This study will look to deliver a number of transport schemes across the borough which will ensure the transport network remains resilient and is able to offer sustainable modes of travel in order to support growth and facilitate trips for a growing number of residents, commuters and visitors.

¹⁰ <https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCRCA-TRANSPORT-PLAN.pdf>

2.2.2 Liverpool City Region Local Journeys Strategy¹¹

This document presents the LCRCAs strategy for local journeys and provides a framework for guiding the development of services and infrastructure that support sustainable trips across the LCR. The strategy recognises that many journeys are short, but too many are made by car and seeks to shift this balance in favour of walking and cycling, linked to the need for infrastructure and 'placemaking'.

The objectives of this document are to:

- Continue momentum built up through the Sustainable Transport Enhancements Package (STEP) and Local Sustainable Travel Fund (LSTF) initiatives by developing a long-term programme of investment
- Take advantage of 'quick-win' opportunities
- Target investment to maximise value for money through creative use of revenue
- Address barriers to walking and cycling including road safety concerns, fear of crime, poor maintenance and unpleasant local environments
- Adopt a 'whole journeys' approach and promote active travel choices for access to bus and rail hubs for longer journeys
- Promote active travel for short journeys to improve health outcomes
- Contribute towards national air quality objectives
- Promote behaviour change as part of targeted programme of actions
- Develop best practice and innovation in spatial planning, infrastructure and streetscape design.

What does this mean for the A41 South Study?

A wide range of schemes within this study will look to address the objectives outlined within LCR Local Journeys Strategy by:

- addressing barriers to walking and cycling including road safety concerns;
- improving access to public transport to promote a whole journeys approach; and
- changing the nature of the transport network to better facilitate more sustainable modes, promote behaviour change and contribute towards national air quality objectives.

2.2.3 Liverpool City Region Local Walking and Cycling Infrastructure Plan¹²

The LCRCAs Local Cycling and Walking Infrastructure Plan (LCWIP) is a strategic approach to developing a cohesive network of high standard active travel routes across the region.

The LCRCAs Local Journeys Strategy noted above sets out an approved vision for sustainable travel in the Region. This LCWIP is the supporting implementation plan and sets out the next steps of delivering our plan for a region-wide high-quality cycling and walking network through a programme of prioritised investment. The LCWIP identifies 31 origin – destination links, from which the roads and routes for cycleways will be defined. Walking networks also identify high demand walking locations to be reviewed for improvements. Some of the roads on these links

¹¹ https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCRA_LCL_JRNYS_STRATEGY.pdf

¹² <https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCWIP-REPORT-FULL.pdf>

will already have cycling and walking infrastructure that is fit for purpose and some will have existing infrastructure in need of an upgrade.

Delivering the LCWIP will help deliver aspirations for active travel choices, bringing together activity through a co-ordinated approach to local journeys across the LCR.

The 31 proposed LCWIP corridors across the LCR are outlined in the figure below.

The LCWIP Phase 3 route from Birkenhead to Eastham is highlighted in red below which runs directly along the A41 within the A41 South Feasibility Study.

Figure 2.3: LCR LCWIP proposed cycling and walking network (31 corridors)



Source: LCRCA. Study area highlighted in red by Mott MacDonald

What does this mean for the A41 South Study?

A number of LCWIP corridors have been identified in Wirral as illustrated in the above figure including the Birkenhead to Eastham which runs directly along the A41 South corridor. This study will therefore consider in detail the role of the A41 as a key walking and cycling corridor and ensure that scheme proposals along this route support these aspirations.

2.2.4 LCR Long Term Rail Strategy 2017¹³

The Long-Term Rail Strategy has been developed with the aim of ensuring that the rail network meets Liverpool City Region's needs over the next 30 years and beyond. The aim of the strategy is to present a clear vision for the development of the network, and articulate the important role rail can play in the economic development of Liverpool City Region, and its hinterland, to maximise its contribution to the wider UK economy, and act as a catalyst for growth.

While trains are more generally used for longer trips, the Long Term Rail Strategy recognises that with improved ticketing options and enhanced accessibility the strategy can contribute to the overall sustainable transport offer and help deliver a low-carbon economy.

What does this mean for the A41 South Study?

The A41 South Feasibility Study offers the opportunity to consider access to rail stations within this area from surrounding residential areas with proposals intended to improve access to rail stations, particularly by sustainable modes and remove existing severances.

2.2.5 LCRCA Bus Strategy (2016)¹⁴

This Strategy aims to grow bus patronage as a flexible and sustainable transport mode, and improve its quality and reliability, currently through a Bus Alliance (Merseytravel/Operators/Local Authorities working together in partnership).

The strategy highlights how buses are vital to the LCR economy taking 100,000 people to work every day and helping 60,000 young people access education. Key aspects of the Bus Strategy include:

- Making the bus a practical option with respect to active travel choices
- Attractive journey times with more punctual services; and
- Straightforward ticketing options.

¹³ <http://moderngov.merseytravel.uk.net/documents/s21686/Enc.%201%20for%20Updated%20Long%20term%20Rail%20Strategy.pdf>

¹⁴ https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCRCA_LCL_JRNYS_STRATEGY.pdf (referenced within this document)

What does this mean for the A41 South Study?

The A41 South Study will directly consider the key aspects of the bus strategy to enhance access to and use of the network across the Liverpool City Region. Schemes outlined within the A41 South Feasibility Study may contribute towards achieving faster and more reliable services, improved waiting infrastructure and access to key interchanges.

2.2.6 Highways England Road Investment Strategy (2020-2025)¹⁵

This second Road Investment Strategy (RIS2) sets a long-term strategic vision for the network. With that vision in mind, it then specifies the performance standards Highways England must meet; lists planned enhancement schemes we expect to be built; and states the funding that we will make available during the second Road Period (RP2), covering the financial years 2020/21 to 2024/25.

In total, RIS2 commits the Government to spend £27.4 billion during RP2. Some of this will be used to build new road capacity, but much more will be used to improve the quality and reduce the negative impacts of the existing SRN, so that every part of the country will benefit.

What does this mean for the A41 South Study?

It is important to ensure that proposals in this study align with the Highways England Road Investment Strategy, as the M53 motorway network, managed by Highways England is incorporated within the study. Engagement will therefore be carried out to check what is proposed within this part of the network and how the A41 South proposals can complement these.

2.2.7 Liverpool City Region Climate Emergency¹⁶

In recognition of the pressing threat of climate change and the urgent need to act, the Liverpool City Region Combined Authority declared a climate emergency in May 2019. The CA has several policies to support tackling climate change, including:

- A Zero Carbon target of 2040
- A £10m Green Investment Fund
- The Mersey Tidal Commission
- £460m investment in new, state-of-the-art trains for the Merseyrail network – improving and future proofing green public transport
- The cleanest bus fleet outside of London – with 7/10 vehicles being low emission and 25 zero emission hydrogen buses arriving next year
- Establishment of a Clean Air Taskforce
- A “Brownfield First” approach to development
- Investment into the first phase of a £16 million 600km cycling and walking network.

¹⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872252/road-investment-strategy-2-2020-2025.pdf

¹⁶ <https://www.liverpoolcityregion-ca.gov.uk/climate-emergency-declared-for-liverpool-city-region/>

What does this mean for the A41 South Study?

Schemes outlined within the A41 South Study will look to support the above objectives through enhancing infrastructure for active and more sustainable modes within the borough therefore reducing the impact of travel. This will contribute towards a reduction in carbon emissions across the LCR in order to achieve the Net Zero Carbon targets by 2040.

2.2.8 Liverpool City Region Growth Strategy ¹⁷

The Liverpool City Region Growth Strategy provides the strategic guidelines for new interventions to drive job creation and growth in the City Region. The document articulates the ambitions of the LCRCA in terms of stimulating job creations and places emphasis on attracting private sector investment and stimulating further growth in the sector.

The strategic document identifies key priority sectors for growth including Low Carbon Energy, Advanced Manufacturing, Digital and Creative, Finance and Professional Services, Health and Life Sciences, Maritime and Logistics and the Visitor Economy.

In order to achieve the ambition of delivering economic growth in the City region, the document sets out three 'pillars' as follows:

- Productivity – focusing on businesses where the opportunity for growth is greatest
- People – ensuring residents and workers are equipped with the right skills
- Place – making the most of the City Region's physical and cultural assets and infrastructure

What does this mean for the A41 South Study?

Schemes developed within the A41 South Study will be well aligned to the three pillars of the LCR Growth Strategy ensuring people are well connected to job and training opportunities and land proposed for employment is fully accessible to promote productivity. Schemes will also enhance infrastructure and public realm within this part of the borough to make the most of its key assets such as the coastal walking and cycling routes and connectivity to the city centre.

2.2.9 Liverpool City Region Visitor Economy Strategy and Destination Management Plan ¹⁸

The Liverpool City Region Visitor Economy Plan is designed to increase the competitiveness of the City Region and maximise potential investment opportunities in the tourism sector, by presenting key priorities and targets for growth.

The key strategic aims of the city region's longer-term visitor economy strategy are:

- To promote the LCR through single, integrated marketing agency, delivering innovative and effective marketing activity;
- Deliver the highest quality experience for visitors by investing in public realm, transport, visitor information and destination welcome with a particular focus on becoming a digital destination;

¹⁷ <https://www.liverpoollep.org/wp-content/uploads/2016/06/SGS-Final-main-lowres.compressed.pdf>

¹⁸ https://www.liverpoollep.org/wp-content/uploads/2015/06/Liverpool-City-Region-DMP-2018-edit_v2.pdf

- Ensure the leading assets of the City Region continue to meet the expectations of new visitors;
- Help businesses in the Visitor Economy by working with them to improve their performance and productivity and share best practice. Identify the next generation of growth businesses for the sector and provide them with bespoke support;
- To further integrate and align Transport and Visitor Economy policy and market opportunities;
- Develop the Visitor Economy in a sustainable and responsible way and spread the benefits across the City Region.

What does this mean for the A41 South Study?

Schemes outlined within the A41 South Study will help continue to grow the visitor offer within Wirral through enhancing accessibility to its key cultural assets and features including the Wirral Circular Trail which runs through the study area.

2.2.10 Liverpool City Region Emerging Spatial Development Strategy¹⁹

The LCRCA is currently developing the Liverpool City Region Spatial Development Strategy (SDS) in partnership with the Local Authority planning teams, who are able to provide insight into what is needed in each constituency, borough and neighbourhood, helping LCR invest in the things that will make a difference to those who live in the city region.

City Region wide engagement was held in late 2019 early 2020 to see what the residents, businesses, developers and visitors to the LCR thought should be covered in the spatial planning documents. The innovative approach has seen LCR shortlisted for a national planning engagement award.

What does this mean for the A41 South Study?

As schemes identified through the A41 South Study are taken forwards, they should consider the LCR's emerging SDS to ensure that the transport network within this area of the borough is well placed and prepared to support investment and changing land use outlined within this strategy.

2.2.11 Transport for the North Strategic Transport Plan²⁰

Transport for the North's Strategic Transport Plan (TfN STP) aims to speak as one voice for the North, to connect people, connect businesses and move goods. The North trails behind the UK average in productivity and that gap appears to be continuing to widen. The biggest challenge for the North's economy is to improve the economic interaction between the key economic assets and clusters of the North to improve the sharing of knowledge, supply chains, resources and innovation to drive agglomeration benefits and productivity. To realise the benefits of agglomeration and economic mass, the North requires faster, more efficient, reliable and sustainable journeys on the road and rail networks.

¹⁹ [Housing and Spatial Planning | Liverpool City Region Combined Authority \(liverpoolcityregion-ca.gov.uk\)](https://liverpoolcityregion-ca.gov.uk/housing-and-spatial-planning/)

²⁰ <https://transportforthenorth.com/wp-content/uploads/TfN-final-strategic-transport-plan-2019.pdf>

The TfN STP, published in February 2019, identifies priorities for each mode of transport, but also considers 7 strategic development corridors which reflect the existing economic links across the North. These are the corridors which will drive transformational growth; they are: Connecting the Energy Coasts, West and Wales, Central Pennines, Southern Pennines, West Coast – Sheffield City Region, East Coast – Scotland and Yorkshire – Scotland. For each of the seven, the transport interventions required to sustain the future economy of the North have been identified to inform the Investment Programme which accompanies the TfN STP.

2.2.12 Cheshire West and Chester (CW&C) Local Transport Plan (LTP3)

Whilst this does not cover Wirral, it is recognised that cross boundary movements (between Wirral and Cheshire West and Chester as the adjacent local authority) will be important to consider within any A41 South package of schemes taken forwards. Cheshire's third LTP sets out transport plans and priorities for the 15-year period of 2011/12 to 2025/26. The following core goals were identified in the Local Transport Plan:

- To provide and develop reliable and efficient transport networks, which support sustainable economic growth in West Cheshire and the surrounding area;
- To reduce carbon emissions from transport and take steps to adapt our transport networks to the effects of climate change;
- To manage a well-maintained transport network;
- To contribute to safer and secure transport in West Cheshire and to promote types of transport which are beneficial to health;
- To improve accessibility to jobs and key services which help support greater equality of opportunity; and
- To ensure that transport helps improve quality of life and enhances the local environment West Cheshire.

To help achieve these goals, CW&C has developed a number of objectives under each of the goals. These form the basis of the actions identified in the accompanying Implementation Plan, which sets out the strategy for the first four years of the plan.

What does this mean for the A41 South Study?

It is important to ensure that proposals in this scheme align with proposals identified within the CW&C Local Transport Plan as the neighbouring authority. Engagement will therefore be carried out to check what is proposed across the borough and how the A41 South proposals can complement and support these.

2.3 National Policy

All proposals outlined within the A41 South study will be aligned to the objectives outlined within the following National Policy documents and considerations.

2.3.1 National Planning Policy Framework (NPPF)²¹

The National Planning Policy (NPPF) sets out the UK Government's planning framework for England. It provides planning guidelines within which local plans should be prepared and delivered regarding housing and other development.

The NPPF document promotes sustainable development and also sets sustainable transport as one of core elements to achieve sustainable development.

- A transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel.
- Transport solutions which support reductions in greenhouse gas emissions and reduce congestion.
- Developing strategies for the provision of viable infrastructure necessary to support sustainable development, including transport investment necessary to support strategies for the growth of ports, airports or other major generators of travel demand in their areas.

The NPPF states that all developments that generate significant amounts of movement should take account of:

- Prioritising opportunities for encouraging the use of sustainable transport modes depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and sustainable access can be achieved for all users; and
- Improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport ground where the residual cumulative impacts of development are severe.

What does this mean for the A41 South Study?

This study will ensure all proposed schemes are well aligned to the objectives of the NPPF through enhancing active travel infrastructure and access to public transport services in order to encourage the use of sustainable transport modes, enhance the safety of the transport network and supporting sustainable development across the borough.

2.3.2 DfT Cycling and Walking Investment Strategy (2017)²²

The DfT's Cycling and Walking Investment Strategy sets out the Government's ambition for cycling and walking in England to make Cycling and Walking the natural choice for shorter journeys or as part of a longer journey by 2040. By 2040 the ambition is to deliver:

- A safe and reliable way to travel for short journeys
- More people cycling and walking - easy, normal and enjoyable
- Places that have cycling and walking at their heart

²¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

²² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/603527/cycling-walking-investment-strategy.pdf

What does this mean for the A41 South Study?

The A41 South Study will directly contribute towards the DfT's Cycling and Walking Investment Strategy objectives through enhancing the active travel network to ensure they are safe and attractive and therefore encourage greater use of the mode. Some schemes outlined within the A41 South Study will also reconsider the use of highway space and public realm to ensure that the role of walking and cycling is increased and at the heart of the transport network within this part of the borough.

2.3.3 DfT Gear Change: A bold vision for walking and cycling (DfT)²³

The DfT released a new vision for cycling and walking, to accompany the launch of new design guidance, Local Transport Note 01/20 Cycling Infrastructure Design (see 2.3.4 below), in July 2020 outlining a vision to make England a great walking and cycling nation, with actions grouped under four key themes:

- Better streets for cycling and people;
- Cycling and walking at the heart of decision-making;
- Empowering and encouraging local authorities; and
- Enabling people to cycle and protecting them when they do.

The vision is quite clear in its intent and encourages all level of government to take bold steps to help increase active travel use. The following are key sections taken from the document:

- Empowering and encouraging local authorities to take bold decisions – the vision states that action is needed to tackle the main barriers to attract people to active travel through the provision of better-quality infrastructure and that the vision wants local authorities to take bold decisions.
- High quality separated infrastructure – the vision states that evidence from the UK and abroad is clear that providing physically separated cycle tracks on main roads and at junctions are the most important things that can be done to promote cycle use.
- Reallocation of road space – the vision states that routes must be direct and continuous, and must not stop at difficult locations, they must serve places people want to go, with these often being along major public transport corridors. It goes on to state that if road space is needed to be reallocated, from parking or motoring, to achieve this then it should be done.

What does this mean for the A41 South Study?

The proposals within the A41South Study should look to embed the Gear Change vision and provide high quality cycling infrastructure to support cycling as an alternative to private car use.

²³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf

2.3.4 DfT Cycle infrastructure design (LTN 1/20)

This local transport note (LTN) was published in July 2020 and provides guidance to local authorities on delivering high quality, cycle infrastructure including planning for cycling, space for cycling within highways and accommodating cyclists at junctions, crossings and cycle parking. It reflects current good practice, standards and legal requirements for the provision of infrastructure to support active travel as a mode for shorter journeys and to encourage increased levels of walking and cycling.

What does this mean for the A41 South Study?

Any cycling infrastructure proposals should consider this design guidance to ensure schemes are delivered to a high and consistent quality.

2.3.5 COVID-19 Transport Implications

The impact of COVID-19 on transport policy and the way people travel will be a key consideration throughout all stages of this study.

The coronavirus (COVID-19) crisis has resulted in cleaner air and quieter streets, transforming the environment in many towns and cities. During the period of COVID-19 many people have discovered, or rediscovered, cycling and walking. In some places, there's been a 70% rise in the number of people on bikes - for exercise, or for safe, socially distanced travel²⁴.

Not only will active travel become a more important form of travel as people return to work but will need to be reconsidered in order to ensure it remains safe and attractive not only from a road safety perspective but also from the perspective of public health. Local Authorities across the UK are therefore making or proposing radical changes to their roads to accommodate active travel and to give more space to cyclists and pedestrians. Such changes will help embed altered behaviours and demonstrate the positive effects of active travel.

Looking beyond COVID-19 these radial changes to the road network have the potential to produce significant long-lasting benefits creating a step change in mode shift and exceeding air quality objectives. However, more recently as we move into the later stages of the pandemic and the Autumn/Winter seasons it is likely that there has been a reduction in the number of people walking and cycling. As public transport is still discouraged in most places at this moment in time travel such as commuting trips are likely to be predominantly undertaken by car.

What does this mean for the A41 South Study?

This study therefore needs to consider how travel behaviour changes resulting from COVID-19, which saw an increase in walking and cycling within the summer months, can be maintained across the borough. Schemes will therefore need to identify how active travel can be made accessible and attractive and create seamless journeys between key residential areas and employment locations.

²⁴ <https://www.gov.uk/government/publications/reallocation-road-space-in-response-to-covid-19-statutory-guidance-for-local-authorities/traffic-management-act-2004-network-management-in-response-to-covid-19>

2.4 Policy Review Conclusion

This section has outlined a number of policies and strategies which set the context for the A41 South Study and the types of proposals to be explored. Local policies will be particularly important for guiding the direction of the study which all have a focus on supporting growth, enhancing opportunities for more sustainable forms of travel to support air quality objectives and ensuring the transport network remains reliable, efficient and well connected.

3 Land Use Context

This section sets out the context of the study area in terms of the existing land uses, proposed development sites, and environmental constraints. This chapter identifies where there are growth ambitions and constraints to inform the development of schemes to support positive change and development.

3.1 Current Land Uses

Figure 3.1 highlights the different land uses within the study area today including:

- Commercial Areas
- Industrial Areas
- Residential Areas
- Park Area
- Greenbelt
- Primary/nursery school
- Secondary school
- Local shops/centres

As can be seen, the majority of land within the study area is used for residential or industrial purposes. There is also a significant area of Green Belt land to the south of the study area.

This plan shows a large amount of commercial, industrial and employment land in the east of the study area which requires an efficient and reliable transport network to support and encourage economic growth. The majority of land in the west of the study area comprises mature residential development. This mix of land use requires east west movement across the A41 and therefore it will be important to ensure this can be facilitated to connect people to schools, employment and local facilities in a sustainable manner.

3.1.1 Accessibility

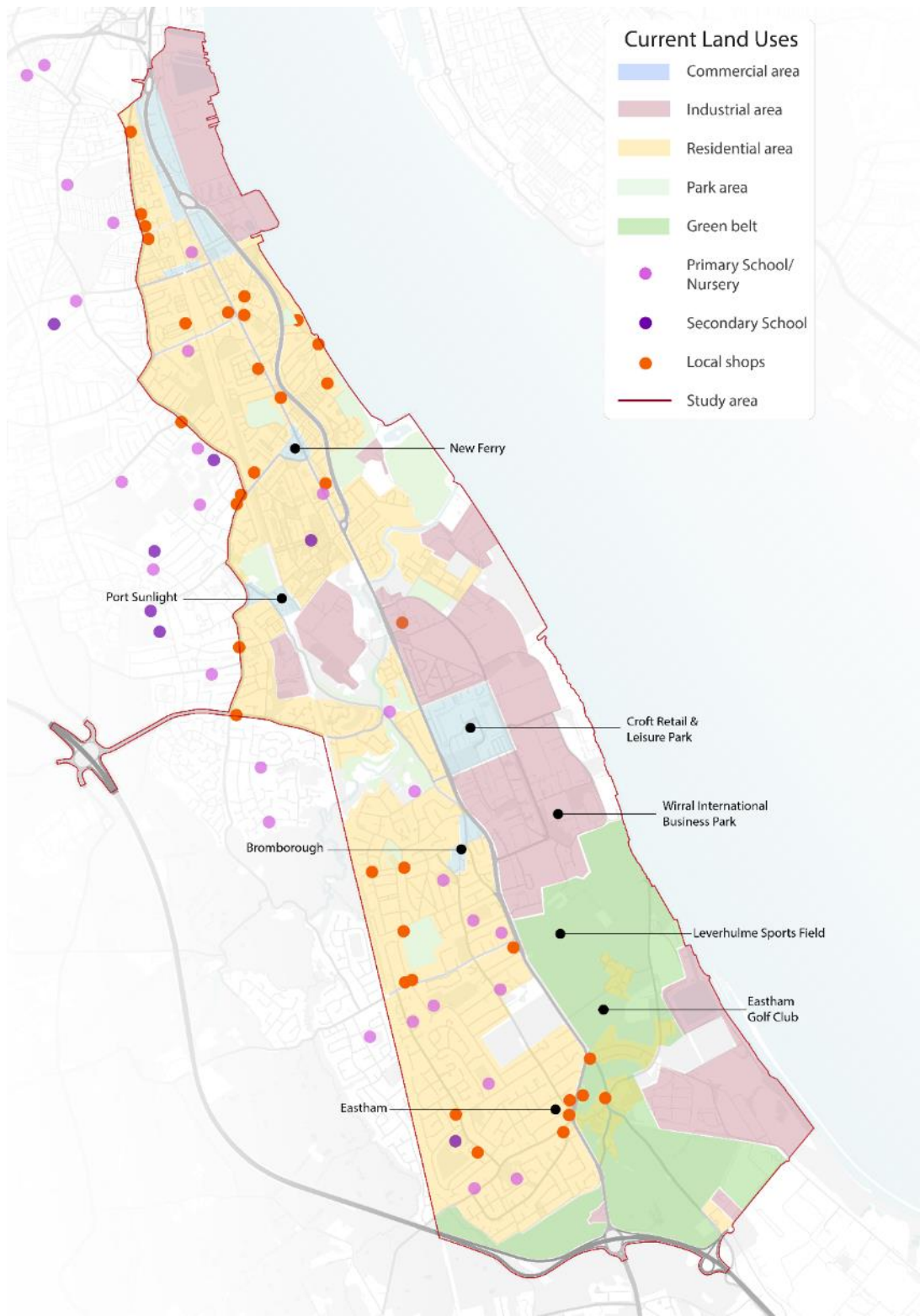
Local connectivity and shorter journeys will also be equally important to consider within this study due to the large residential areas and significant number of schools and local shops. Many of the local schools and shops are located in residential areas, providing good opportunities for walking, cycling and more sustainable forms of travel for these shorter journeys. Currently the A41 runs in-between a number of these facilities with few crossing points causing severance and reducing opportunities for active travel.

It should be noted that no schools and very few local shop facilities are located on the eastern side of the A41. With future growth likely to be focussed on this area, new residential sites to the east of the A41 will require safe and direct crossing facilities and connections to support and establish walking and cycling as the main modes for local trips to existing facilities.

The Croft Retail Park is located to the east of the A41 and does include a good range of retail and leisure uses. It also has crossing facilities to support access from the eastern side of the carriageway.

There are also a number of parcels of land within the study area which remain undeveloped / vacant creating opportunities for new development and regeneration emphasising the need to maintain and improve connectivity.

Figure 3.1: Current Land Uses



Source: Mott MacDonald © OpenStreetMap contributors

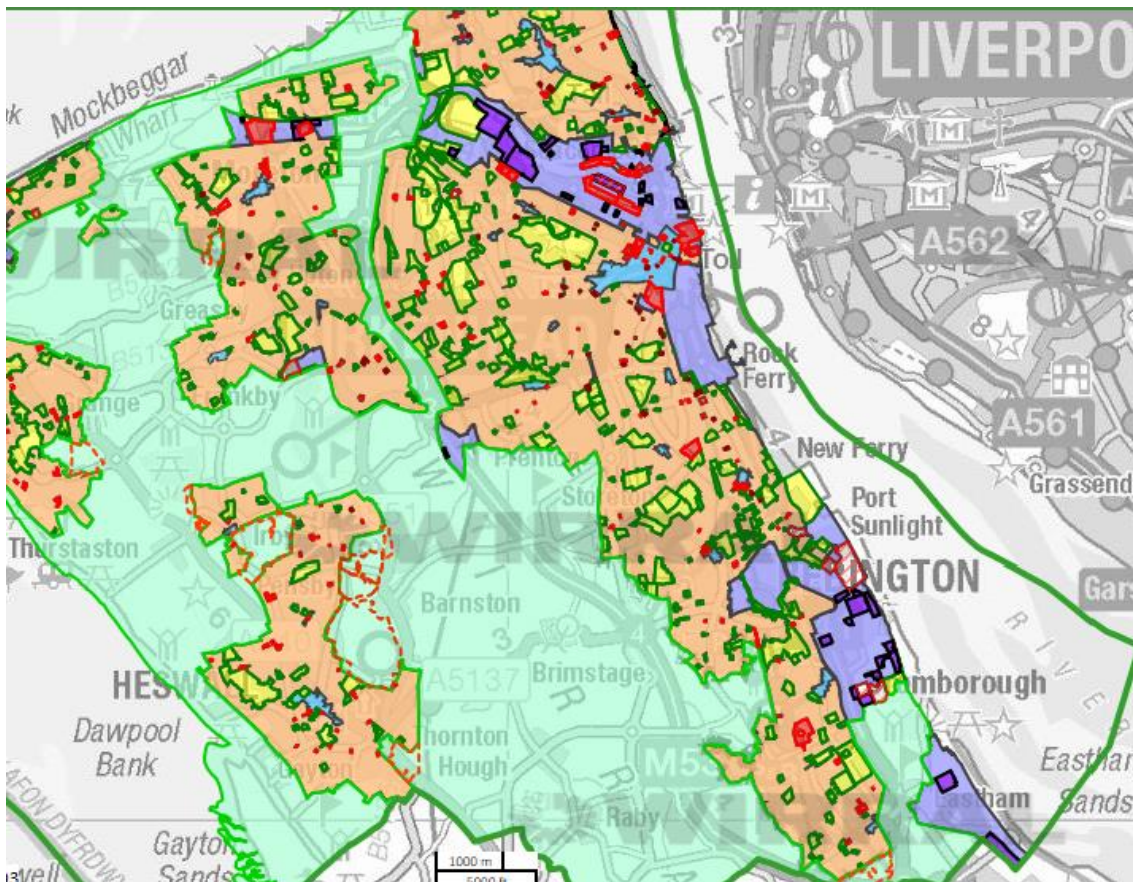
3.2 Proposed Development

As noted earlier in Section 1.2, one of the key factors driving the need for this study is the proposed development outlined within the emerging Wirral Local Plan which covers 2020 to 2035 and will change the characteristics of the study area, resulting in significant growth in this part of the borough and requiring substantial improvements and changes to the transport network to support it.

The proposed development, by type of land use, as outlined within the Local Plan is illustrated in the figure below. It should be noted that at the time of writing, the Local Plan was still consulting on three potential options, with the preferred options to be determined via future public consultation (as previously set out in Table 2.1).

Figure 3.2: Wirral Local Plan Proposed Development





© Crown copyright and database rights 2019 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.
Source: Wirral Council Local Plan 2020 - 2035

This shows how the A41 Corridor runs between a significant amount of potential residential development to the West and a number of potential large employment sites to the East.

Therefore, it is essential that the A41 does not form a severance for residents in these areas to be able to access new employment opportunities along the corridor. This proposed change in land use will also require rethinking the role of the A41 Corridor which is discussed later in Section 6.

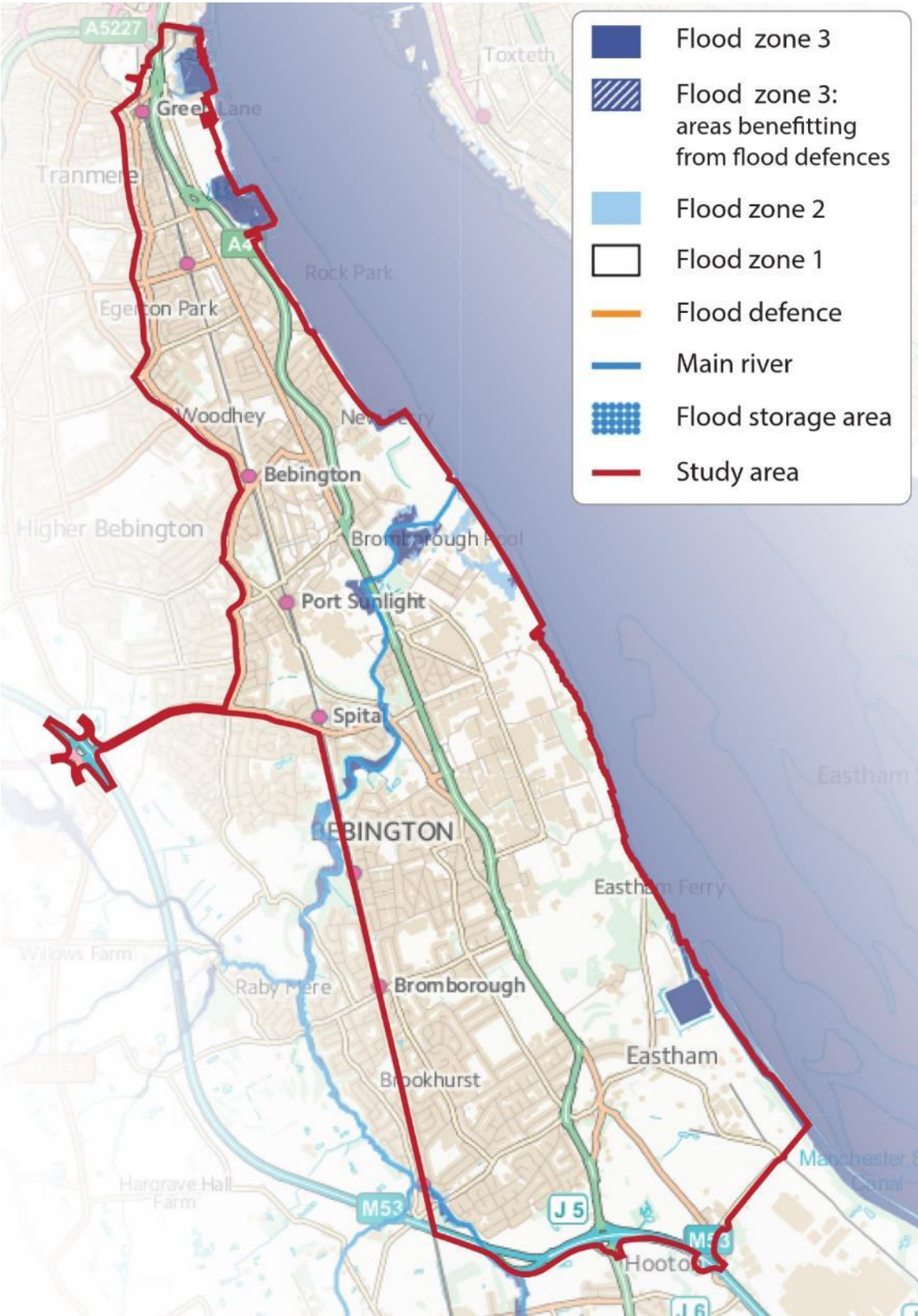
Such changes across the borough undoubtedly presents significant opportunities for Wirral. However, in tandem, development of this scale also poses future challenges for the transport network in seeking to accommodate and facilitate the planned growth. This study will be essential to ensuring the transport network in this part of the borough supports and enhances proposed development providing the greatest connectivity and sustainable opportunities.

3.3 Environmental Context

Figure 3.3 and Figure 3.4 illustrate the potential environmental constraints within the study including Flood Risk Zones and Conservation areas.

This shows a number of Flood Zones Level 3 along the coastline to the east of the study area near Green Lane, Bromborough and Eastham. Figure 3.4 also highlights a number of conservation areas located directly adjacent to the A41 Corridor including a number of large residential areas.

Figure 3.3: Flood Risk Map



Source: Mott MacDonald/ Environmental Agency © OpenStreetMap contributors

Figure 3.4: Conservation Areas



Source: Mott MacDonald/ Wirral Borough Council © OpenStreetMap contributors

Whilst some of these identified constraints may pose an increased risk to any proposed works, and should be avoided where possible, they do not necessarily prevent any works from being undertaken and the development going forward. The presence of constraints may make the design or consenting regime more complex, however mitigation measures can be examined to minimise this risk.

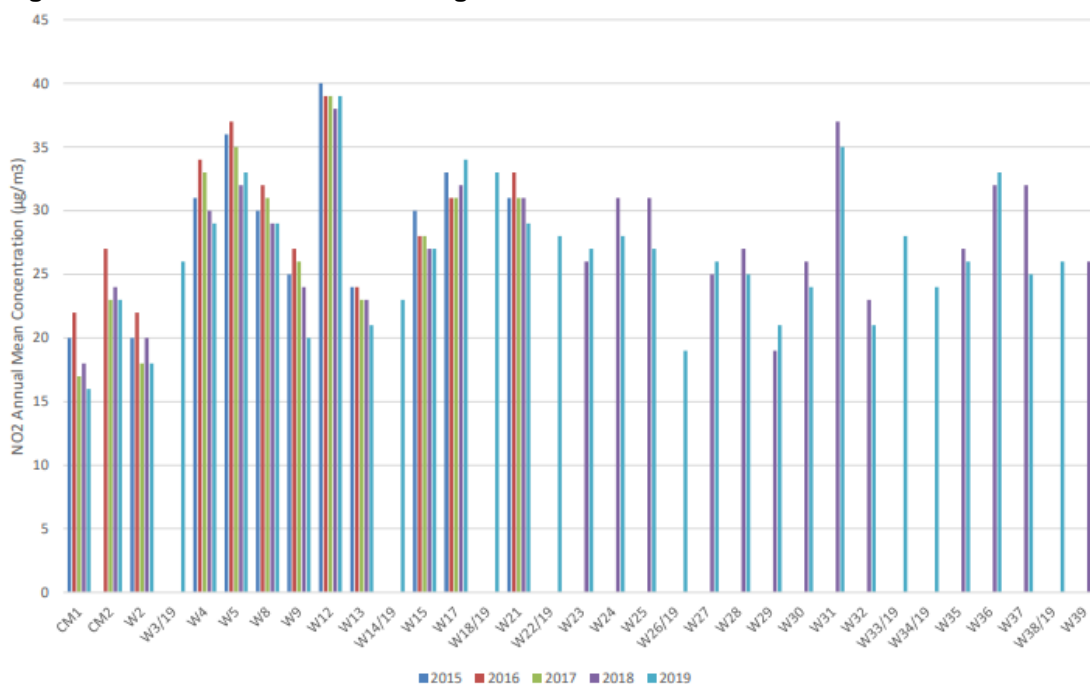
Further investigation will be required during the detailed design stage for schemes taken forward, prior to any works commencing including various risk assessments and consultation with the council's planning team, highways authorities and the Environment Agency.

3.4 Air Quality

As part of the Wirral Local Plan, the Air Quality Annual Status Report (ASR) is prepared to meet Wirral Borough Council's Local Air Quality Management (LAQM) obligations under the Environment Act 1995 Part IV to review and assess local air quality.

There are no Air Quality Management Areas (AQMA) identified within the study area or wider area of the borough and it is important to ensure that this remains the case. One of the key contributors to poor air quality and focus of the majority of monitoring undertaken in Wirral, is Nitrogen Dioxide (NO₂). A summary of NO₂ levels in Wirral between 2015 and 2019 is outlined in the figure below. Sites located within the study area include W2, W5, W12, W13, W26/19 and W27 all of which have remained below national UK Air Quality Objective levels for air pollution.

Figure 3.5: 2015-2019 Annual Average NO₂ Levels in Wirral



Source: Wirral Council- LAQM Annual Status Report 2020

Although levels of NO₂ and other pollutants remain within the nationally recommended targets across Wirral, the borough declared a climate emergency in May 2019 (see section 2.1.7). Therefore, action should be taken to help Wirral reduce its emissions and create cleaner travel across the borough which is recognised as a key factor in achieving goals outlined within the boroughs climate strategy.

3.5 Summary

This section has summarised the current and proposed land use context within the study area and any environmental constraints which may impact development proposed within the study. The key issues and opportunities associated with the A41 South transport network around are summarised in the table below:

Table 3.1: Land Use context- key issues and opportunities

Issues	Opportunities
Current Land Use	
<ul style="list-style-type: none"> There is a large amount of commercial, industrial and employment land within the study area which require an efficient and reliable transport network to support and encourage economic growth. 	<ul style="list-style-type: none"> Areas of land within the study area remain undeveloped creating opportunities for new development and regeneration emphasising the need to improve and maintain connectivity. Large number of schools and local shops within the study area in proximity to residential areas provides opportunities to encourage sustainable modes of travel for shorter journeys providing the appropriate infrastructure is available.
Proposed Development	
<ul style="list-style-type: none"> Wirral's Local Plan (2020-2035) sets out a significant amount of development around the area of the A41 South and wider borough which will increase pressure on the transport network and change the characteristics of the study area. 	<ul style="list-style-type: none"> This study provides a significant opportunity to reconsider the role of the corridor in order to support proposed development and attract further investment as the area becomes accessible and more attractive to potential businesses and residents.
Environmental Context	
<ul style="list-style-type: none"> A number of environmental constraints have been identified within the study area such as Flood Risk Zones and Conservation Areas which may restrict options for transport improvements. 	<ul style="list-style-type: none"> Further investigation will be required at the detailed design stage to assess the potential impacts of schemes.
Air Quality	
<ul style="list-style-type: none"> One of the key contributors to poor air quality is Nitrogen Dioxide (NO₂), primarily associated with road traffic and congestion. Wirral Council declared a climate emergency in May 2019. 	<ul style="list-style-type: none"> Exploring opportunities to enhance active travel and public transport opportunities will be crucial to ensuring NO₂ levels remain below national targets and help achieve objectives outlined within the boroughs Climate Strategy. Opportunities to reassign traffic away from the A41 and onto the motorway network will also contribute towards improved local air quality enhancing quality of life for residents.

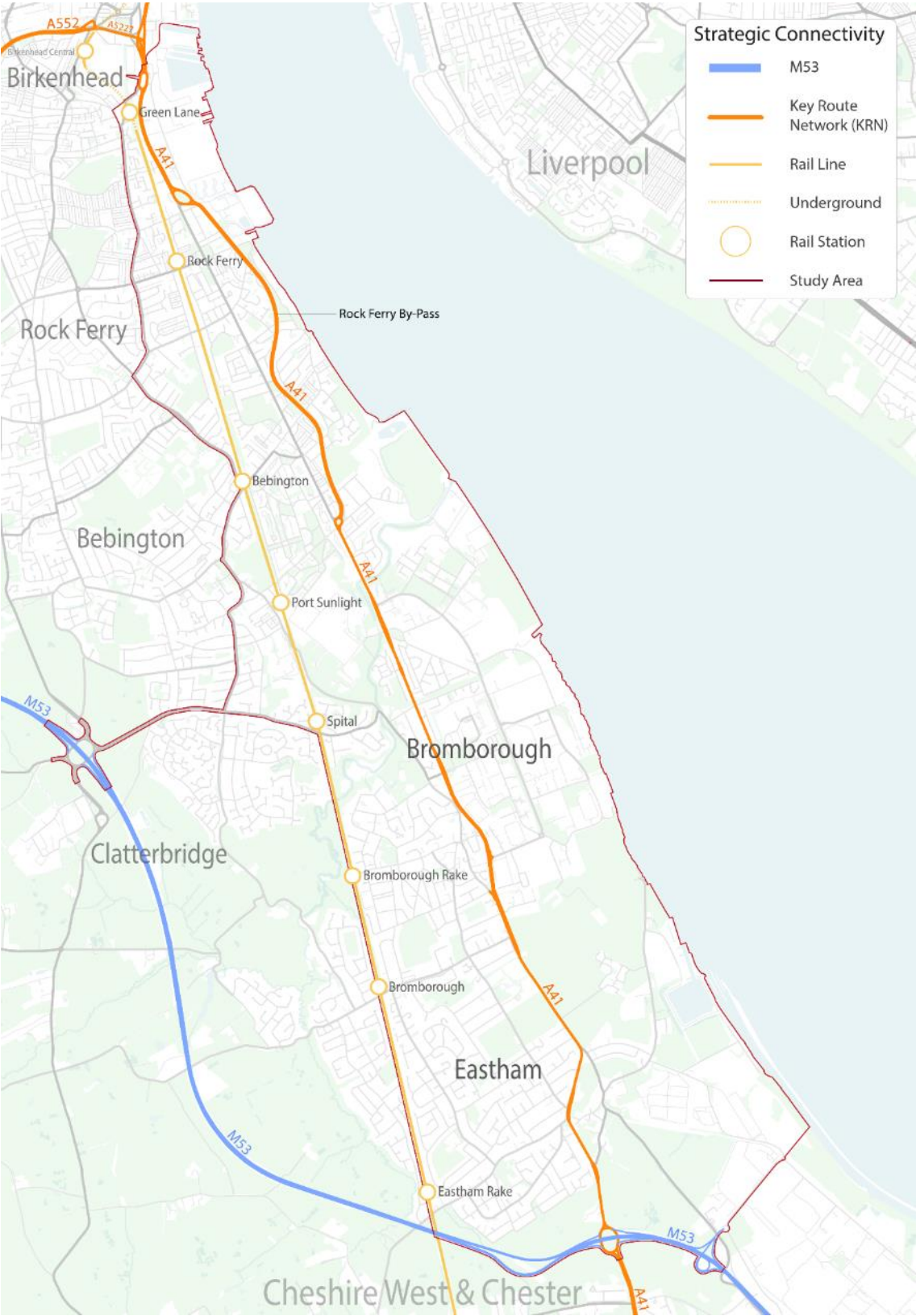
4 Transport Context

This section sets out the context of the A41 corridor within the study area, as well as identifying key supporting characteristics of the transport network away from the corridor but within the wider study area. This includes traffic flows, connectivity by different modes and road safety. This aims to identify issues for the corridor and highlight opportunities for this study to address.

Figure 4.1 sets out an overview of the transport connectivity for the A41 Corridor and the adjacent areas. The A41 is noted to form part of the city region's Key Route Network (KRN) which is made up of strategic routes defined as vital to the growth of the LCR. This demonstrates how the A41 is a key strategic route through the borough with good connectivity to the motorway network, with the Merseyrail network providing good opportunities for travel to/from Birkenhead and beyond to Liverpool City Centre. It can be noted that the majority of these links are north-south with few east-west strategic links.

This also demonstrates how the A41 is the main access corridor for the area and to the residential, employment areas and industrial area east of the M53. In addition to providing access to these areas the A41, it also provides a significant through-route from South Wirral, Cheshire and North Wales to Liverpool via the Queensway Tunnel. The strategic importance of the A41 is one of the key reasons the route is heavily trafficked despite its proximity to the motorway network. However, the existing nature of the A41 as a key access corridor and strategic through route can create higher volumes of traffic, reducing opportunities for pedestrians and cyclists and removing a sense of place within this area of the borough.

Figure 4.1: Strategic Connectivity



Source: Mott MacDonald © OpenStreetMap contributors

4.1 Highways

The A41 forms the only 'A' road through the study area, but it provides key connectivity to several 'B' roads which serve the surrounding residential cluster and connect out westwards to the M53 and settlements to the west of the motorway. Figure 4.2 demonstrates the network of key roads and junctions within the study area.

The majority of the A41 is two lanes in each direction with a speed limit varying between 30mph and 40mph. The Rock Ferry By-pass is restricted to 50mph with average speed cameras in place for this section. The adjoining residential streets are typically 30mph with some 20mph zones.

Figure 4.2 also shows the proximity to the motorway network and the two motorway junctions within the study area which are central to wider strategic connectivity. Despite proximity to the motorway network, the A41 is often used a 'through route' creating additional traffic through the study area which does not contribute to the borough economically and has a detrimental impact on air quality, sense of place and pedestrian/cyclist safety. More information on the use of the route is provided at 4.7.

It can also be seen from Figure 4.2 that there are a significant number of signalised junctions or crossing points along the A41. This offers opportunities to review junctions along the corridor and explore options for changes to junctions which may restrict or remove turning movements, to encourage use of alternative routes and discourage through movements.

An audit of the condition of the highway network or its supporting infrastructure (such as signals) was not part of the scope of this project, however from a site visit it was clear that the main routes within the study area, including the A41 itself are generally of a good state of repair. It is noted however from reviewing comments on the Wirral Liveable Streets²⁵ website from the public that there are localised issues on sections of carriageway within the wider study area where maintenance is required, for example to address localised potholes or highway drainage issues.

4.1.1 Parking

There are no public (Wirral Borough Council operated) pay and display car parks located within the study area. Private car parks exist to serve retail and leisure uses, such as the Croft Retail Park. There are also varying provisions for parking at the rail stations within the study area (see section 4.3 for more information).

Within the study area, not all residential properties have off-street parking facilities. Whilst many have on-street provision outside their properties, this is restricted in some instances, meaning residential parking is displaced into neighbouring streets or causes obstructions to traffic flow and safety concerns. This may be exacerbated further by households having multiple vehicles.

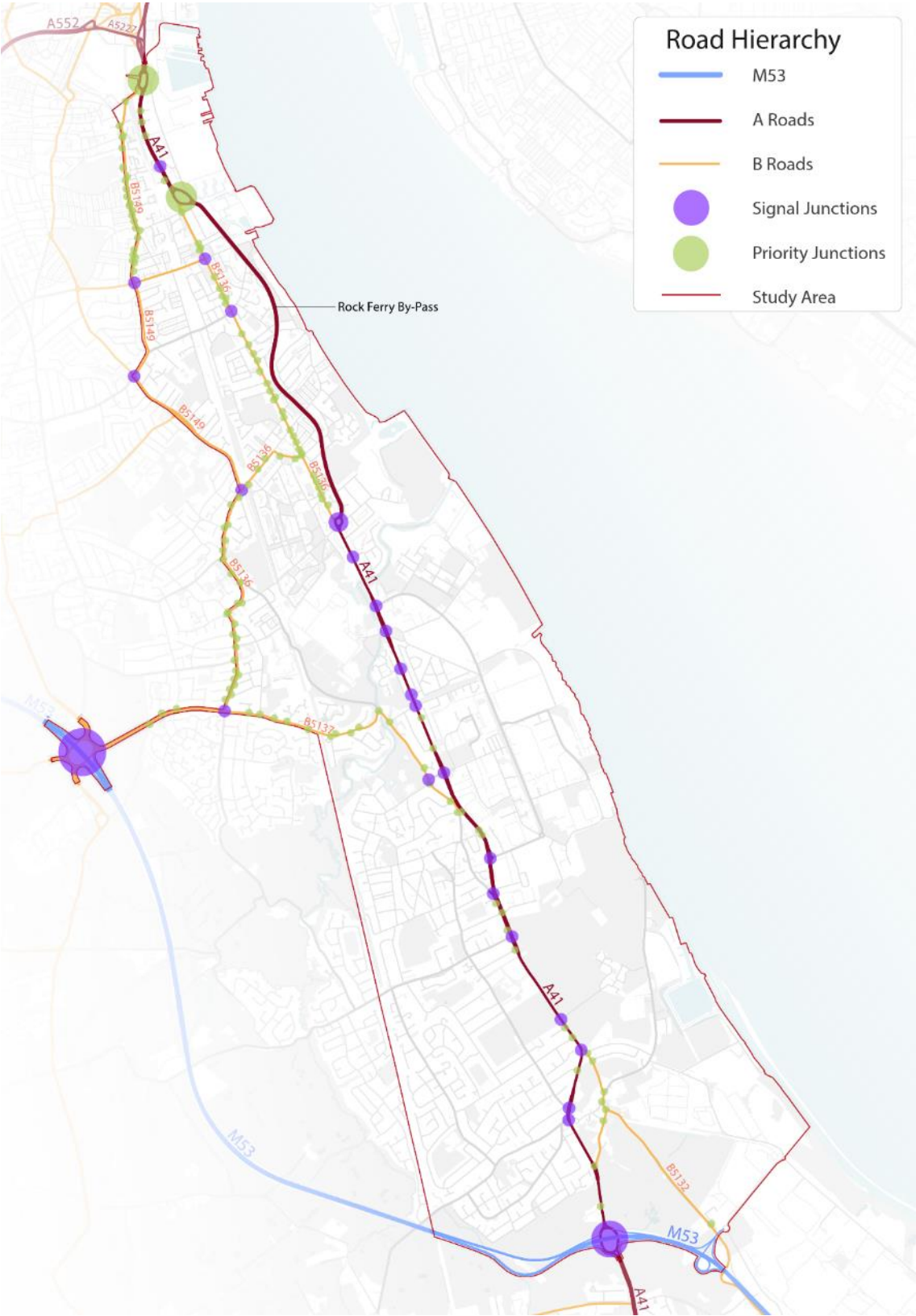
4.1.2 EV Charging

From available information, currently there does not appear to be any publicly accessible electric vehicle charging points available in the study area. Later stages of this study should therefore seek to identify locations where this can be provided, such as the Croft Retail Park and local and district centres where off-street parking is available.

²⁵ <https://wirralliveablestreets.commonplace.is/comments>

Where no suitable off-street car parks exist, or in residential streets which do not have driveway parking, opportunities for EV charging from street lighting columns should be explored.

Figure 4.2: Road Hierarchy



Source: Mott MacDonald © OpenStreetMap contributors

4.2 Bus Network

The following table summarises the full list of services serving the study area and their weekday frequency per hour in each direction. The frequency and route of each service within the study area is also illustrated in Figure 4.3 to Figure 4.6.

Table 4.1: Summary of Bus Services Serving the Study Area

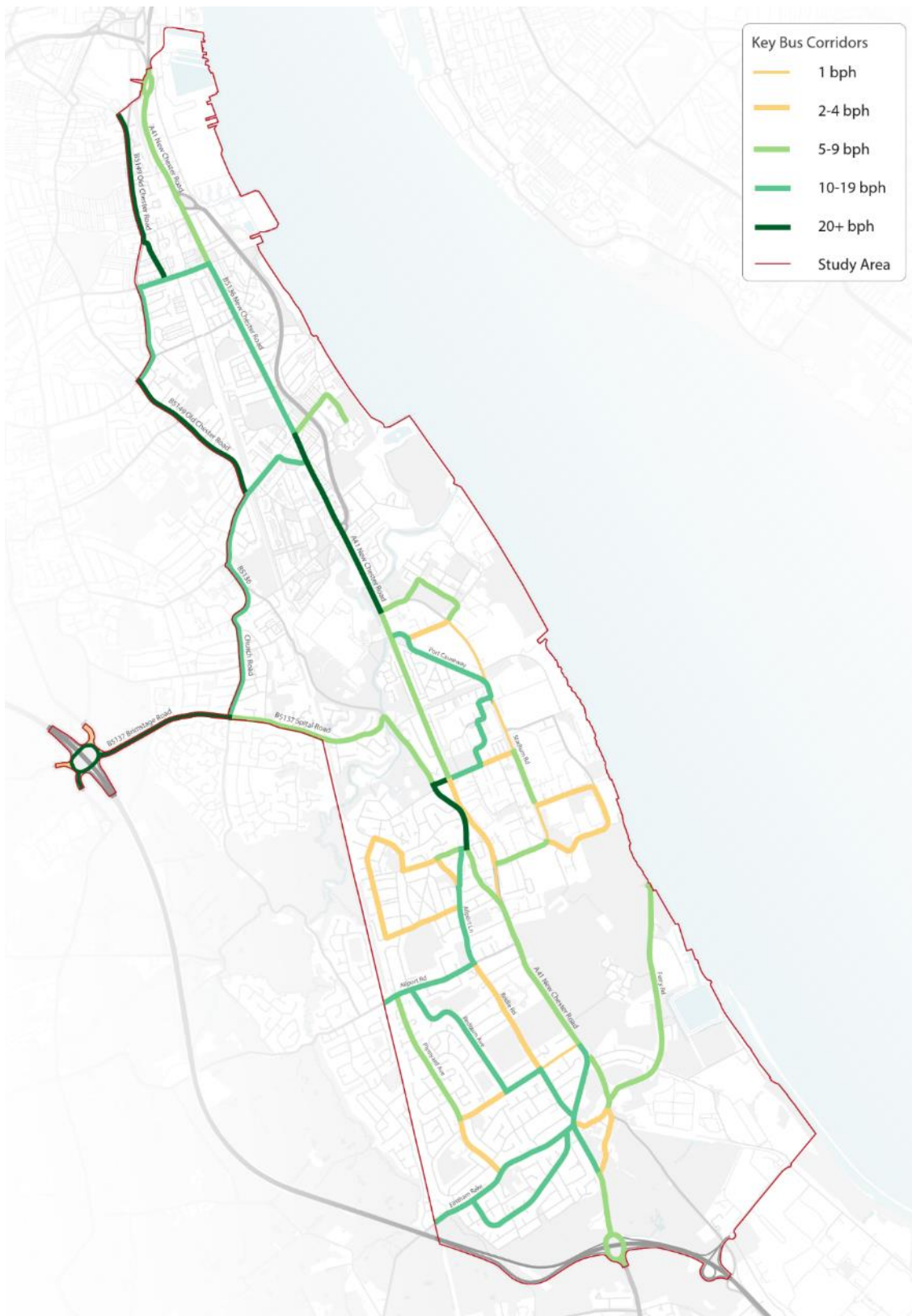
Route No.	Route	Weekday Frequency*	Operator
1/X1	Chester – Liverpool	8	Stagecoach
16,16A	Moreton Cross – Eastham Rake	2	Stagecoach
17	Moreton Cross – Eastham Rake	2	Stagecoach
38,38A,38B	New Ferry, Bromborough, Mill Park or Eastham Ferry – West Kirby	4	Stagecoach
41,42	Eastham – Woodchurch	10	Stagecoach
73	Heswall – Poulton Lancelyn (circular)	1	Eazibus
358	Eastham Rake – Neston High School	2 (per day – school)	Aintree Coachline
410	New Brighton – Clatterbridge Hospital	12	Arriva Merseyside
418	Birkenhead – New Ferry (circular)	1	Arriva Merseyside
464	Liverpool – New Ferry	4	Arriva Merseyside
487	Liverpool – Little Neston, Ness Gardens or Parkgate	4	Arriva Merseyside
601	Eastham – Bebington High Sports College	2 (per day – school)	Als Coaches Ltd
601	Eastham Village – Wirral Grammar Schools	2 (per day – school)	Selwyns/ Als Coaches Ltd
605	St John Plessington – Eastham	2 (per day – school)	Selwyns/ Als Coaches Ltd
653	Wirral Grammar Schools – Thingwall Corner	2 (per day – school)	Selwyns/ Als Coaches Ltd
659	Woodchurch – St John Plessington	2 (per day – school)	Als Coaches Ltd
811	Leasowe or Moreton Cross – Bromborough Shopping Park	1 (peak only)	A2B Travel

Source: Merseytravel *Two-way buses per hour

The provision of bus stops within the study area, generally linked to the demand at each stops. Stop provisions vary between simple posts, to shelters with seating for waiting undercover, with some to also including information on the real time operation of services.

A number of the bus services (bus routes 418, 16, 16A, 17) which operate in the study area also call at Arroe Park Hospital providing an important public transport connection to support access to strategic healthcare facilities.

Figure 4.3: Key Bus Corridors – Full study area



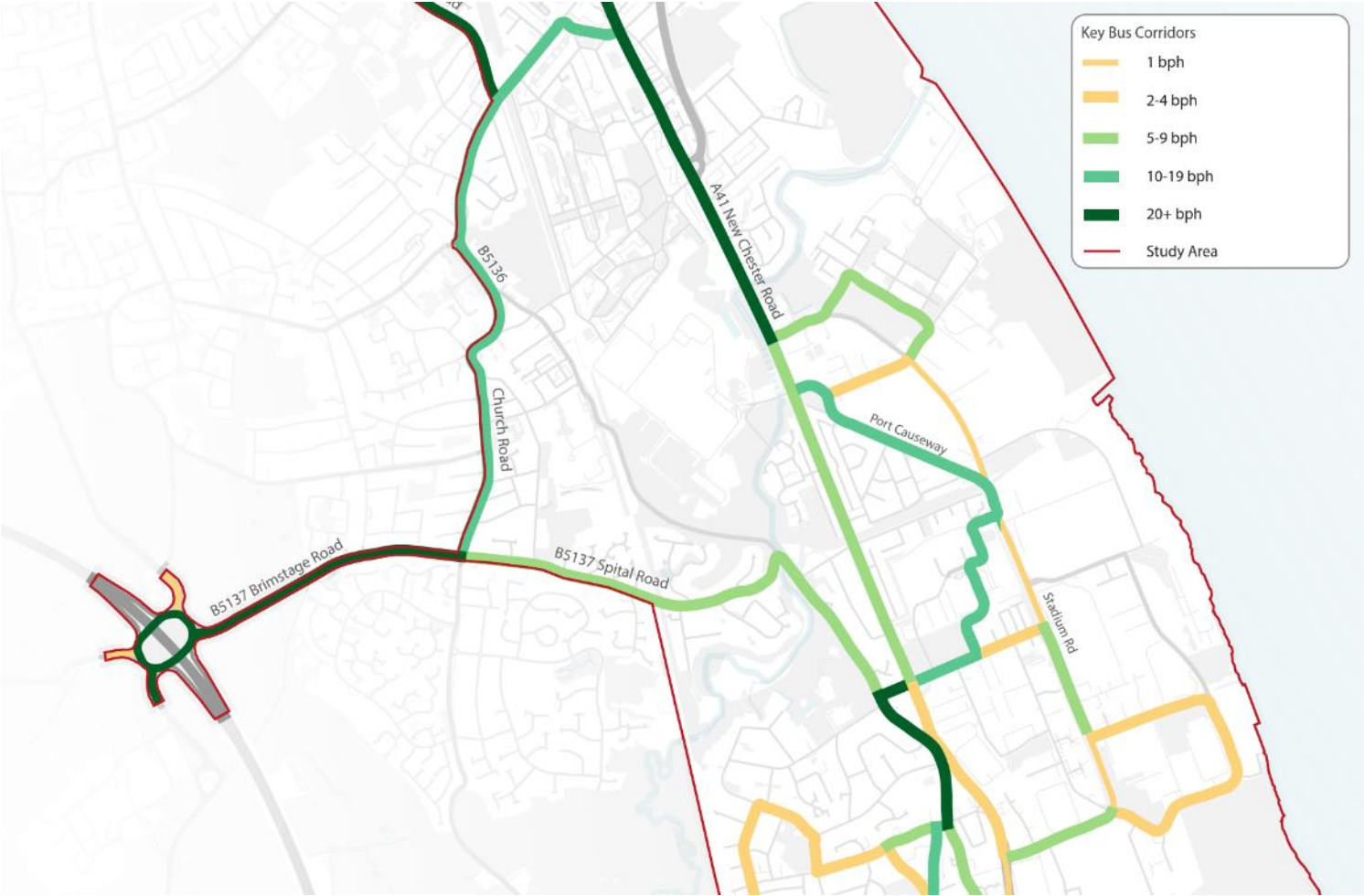
Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.4: Key Bus Corridors – Northern focus



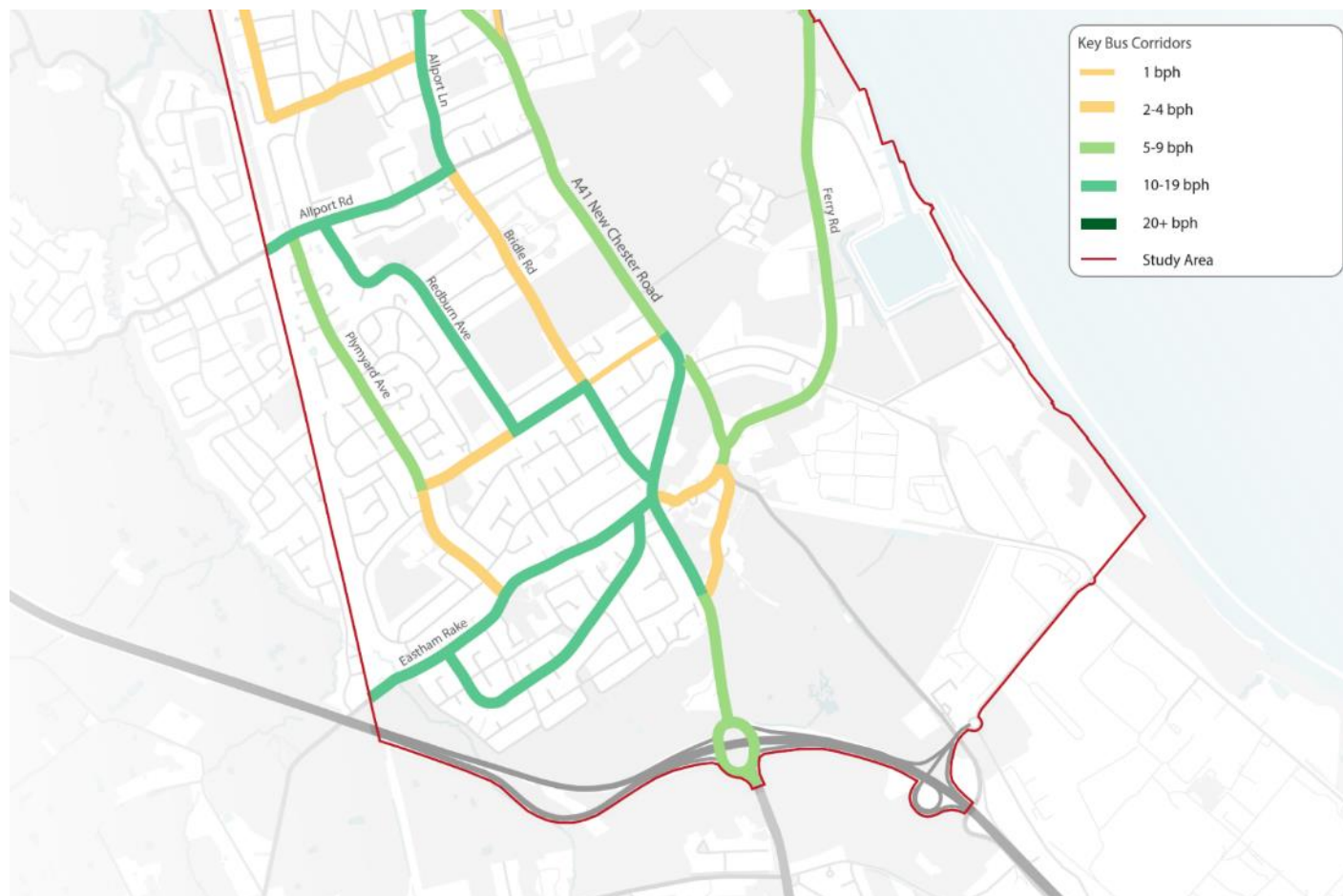
Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.5: Key Bus Corridors – Central focus



Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.6: Key Bus Corridors – Southern focus



Source: Mott MacDonald © OpenStreetMap contributors

The above figures demonstrate a good level of bus connectivity within the study area with high frequencies along the A41 corridor itself and the residential areas to the south being served by the lower frequency services.

As the A41 is served by some of the highest frequency services within the study area it will be important to ensure that traffic along the corridor does not increase the journey times and reduce the journey reliability of buses and therefore the attractiveness of the service, which may limit opportunities to enhance public transport mode share.

4.3 Rail Connectivity

There are eight rail stations in the A41 South study area, all on branches of the Merseyrail Wirral Line connecting to Birkenhead and on to Liverpool City Centre as well as key destinations in Wirral and Cheshire West. A summary of services calling at stations within the study area are summarised in the table below.

Table 4.2: Rail service specification

Route (Operator)	Rail Station	Frequency (trains per hour)		
		Peak (in peak direction)	Weekday	Evening and Sunday
Liverpool to Chester (Merseyrail)	Green Lane	4	4	2
	Rock Ferry	4	4	2
	Bebington	4	4	2
	Port Sunlight	4	4	2
	Spital	4	4	2
	Bromborough Rake	4	4	2
	Bromborough	4	4	2
	Eastham Rake	4	4	2
Liverpool to Ellesmere Port (Merseyrail)	Green Lane	4	2	2
	Rock Ferry	4	2	2
	Bebington	4	2	2
	Port Sunlight	4	2	2
	Spital	4	2	2
	Bromborough Rake	4	2	2
	Bromborough	4	2	2
	Eastham Rake	4	2	2

Source: Merseyrail

This shows a large number of stations within the study area which each provide a good level of service creating good opportunities for sustainable travel amongst existing and potential future residents, visitors and employees. It is also noted that Merseyrail have ordered new rolling stock which will be capable of carrying 50% more passengers with further upgrades such as space for bikes.

The following table provides a summary of facilities at each of the stations in the study area:

Table 4.3: Station accessibility overview

Station	Wheelchair accessible	Pram accessible	Blue Badge parking	Accessible Toilet	Connectivity with buses
Green Lane	No	No	Yes	Yes	41, 42, 410
Rock Ferry	No	Yes	Yes	Yes	38B, 41, 42, 627
Bebington	Yes	Yes	Yes	Yes	38, 38B, 410, 418,
Port Sunlight	No	No	No	Yes	73, 410, 487, 612, 704
Spital	No	No	Yes	Yes	16, 16A, 17, 358, 601, 602, 605, 609, 610, 612, 704
Bromborough Rake	Yes	Yes	No	No	38 38A, 38B, 610, 623
Bromborough	No	No	Yes	Yes	38, 38A, 38B, 41, 42
Eastham Rake	No	Yes	Yes	No	16, 16A, 17, 41, 42, 358, 601, 602, 704

Source: Merseytravel website, November 2020

Table 4.4 summarises the total entries and exits to each of the stations for 2019-2020 and how this has changed since the previous year, as well as presenting the number of car and cycle parking spaces at each. These are then summarised geographically on Figure 4.7 to Figure 4.10.

Table 4.4: Station utilisation and parking

Rail Station	2019-2020 Entries & Exits	% change from 2018/19 to 2019/20	Car Parking	Cycle Parking
Green Lane	539,980	+10.2%	60 spaces	18 spaces
Rock Ferry	790,252	+13.6%	25 spaces	24 spaces
Bebington	1,002,982	+10.0%	24 spaces	25 spaces
Port Sunlight	859,480	+15.8%	-	66 spaces
Spital	482,708	+7.0%	141 spaces	32 spaces
Bromborough Rake	355,030	+14.0%	-	20 spaces
Bromborough	709,022	+11.6%	87 spaces	76 spaces
Eastham Rake	484,648	+13.3%	101 spaces	5 spaces

Source: Table 1410 Office of Rail and Road²⁶

It can be seen that there is a general trend of increased patronage at stations within the study area from 2018/19 to 2019/20. Whilst this trend is not likely to be sustained through to 2020/21 due to the impact of COVID-19 and travel restrictions in place for periods of the year in 2020, post COVID-19, it is anticipated that this trend will continue, especially as the Local Plan development begins being delivered

Note, although cycle parking is available at all of the stations in the study, none of the approach roads to any of the stations have dedicated cycle infrastructure to encourage usage from surrounding residential areas. This is an issue which will need to be considered through the development and delivery of schemes linked to building upon the cycle network in the area.

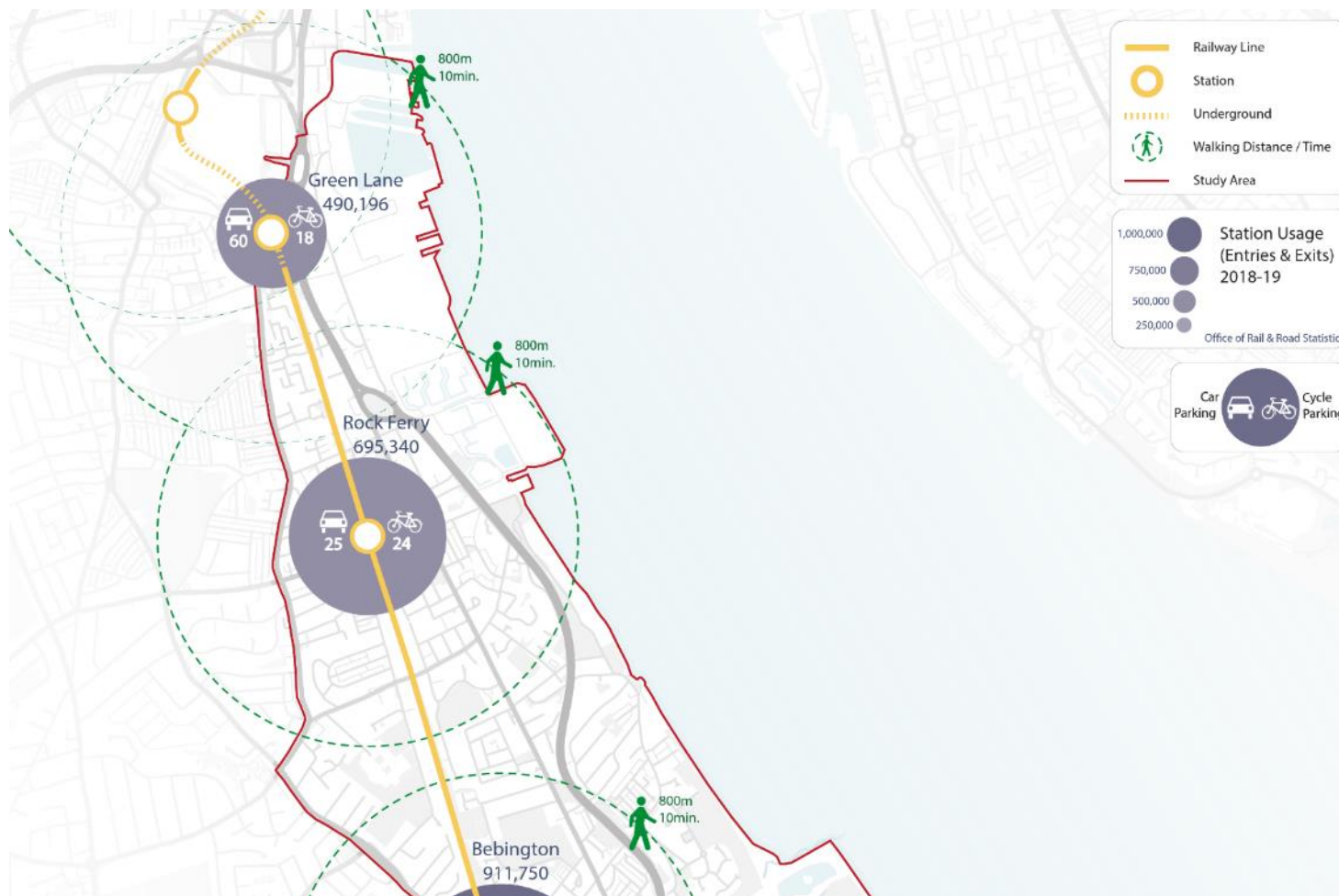
²⁶ [Estimates of station usage | ORR Data Portal](#)

Figure 4.7: Rail Connectivity, Patronage and Station Provision – Full study area



Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.8: Rail Connectivity, Patronage and Station Provision – Northern Focus



Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.9: Rail Connectivity, Patronage and Station Provision – Central Focus



Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.10: Rail Connectivity, Patronage and Station Provision – Southern Focus

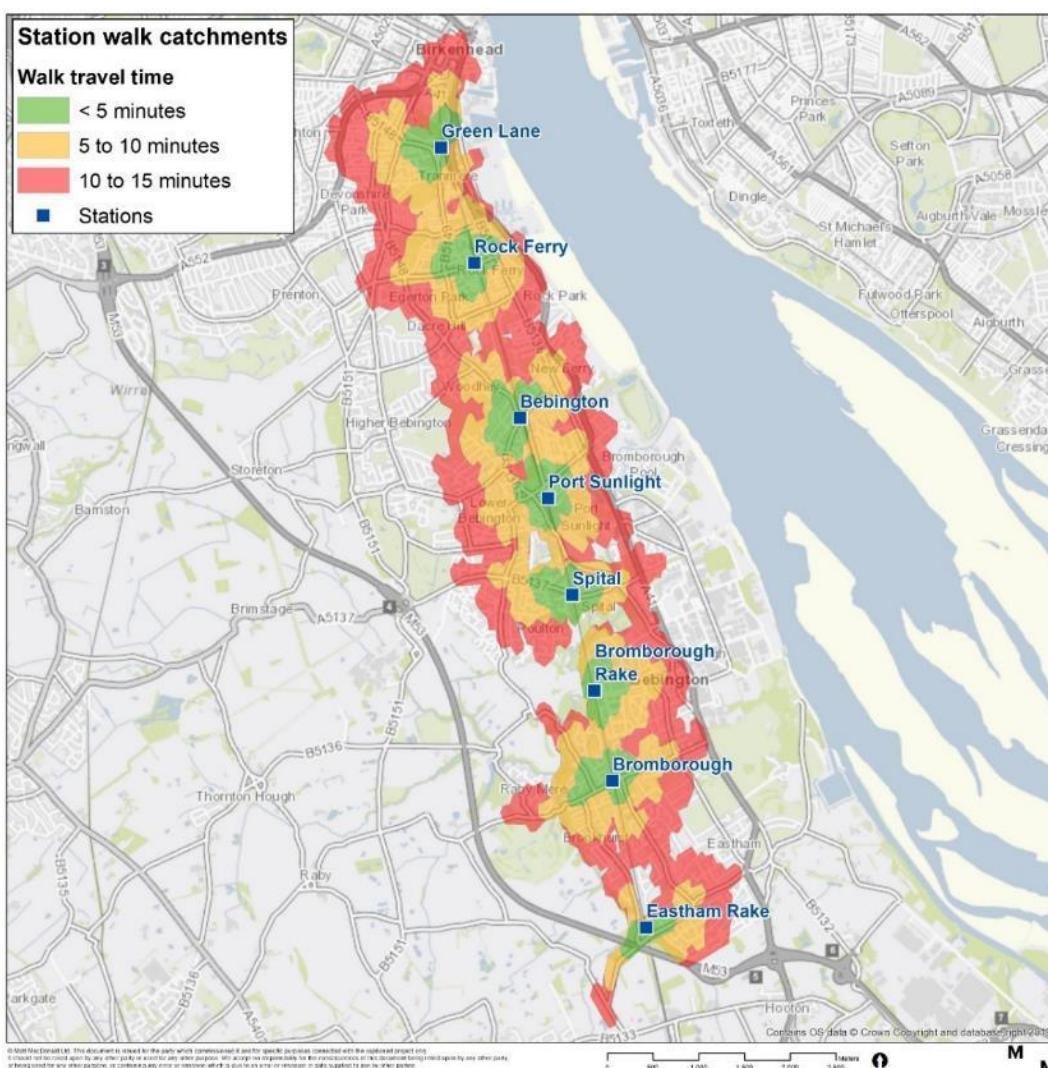


Source: Mott MacDonald © OpenStreetMap contributors

The above figures show that the busiest stations are to the north of the study area, namely Port Sunlight, Bebington and Rock Ferry which are each subject to around c.790,000 to c.1,000,000 entries and exits in a single year²⁷. Stations along the Wirral Line in this part of the borough are popular park and ride sites for trips into Liverpool City Centre. It is interesting to note that the stations with the highest levels of parking within the study area (Spital and Eastham Rake) have the lowest entry and exit figures.

Figure 4.11 below demonstrates the walking isochrones of each station within the study broken down by various walk travel times between 5 and 15 minutes, with 15 minutes considered as the maximum walking travel time which is attractive as a means of access to the station. Further detail on station level walking isochrone diagrams is provided in Appendix A.

Figure 4.11: Rail Station Walking Isochrones – Full study area



Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

This shows that despite the significant number of rail stations within the study area, there are a number of residential areas which currently lie outside of the 15-minute walking travel time

²⁷ Office of Road and Rail statistics Station Usage 2018-2019

therefore reducing pedestrian connectivity to the station. This is particularly apparent around Eastham Rake and Bromborough Rake to the south of the study area.

It can also be seen that the majority of the area to the east of the A41 is poorly connected to the rail network in terms of pedestrian connectivity. With a large amount of industrial and commercial land uses to the east of the A41, this reduces opportunities for employees to travel to work by sustainable modes i.e. last mile journeys. It also means that Local Plan sites being brought forward for residential use will not be as well connected to the rail network as areas to the west of the A41. Improving east-west connectivity across the A41 may help to improve walking times and therefore make use of the stations more attractive for these areas.

4.4 Walking

Figure 4.12 to Figure 4.15 summarise the pedestrian connectivity in terms of crossing points for the A41 and railway as the main barriers to pedestrian movement in the area, as well as pedestrian routes on public rights of way such as along coast/estuary.

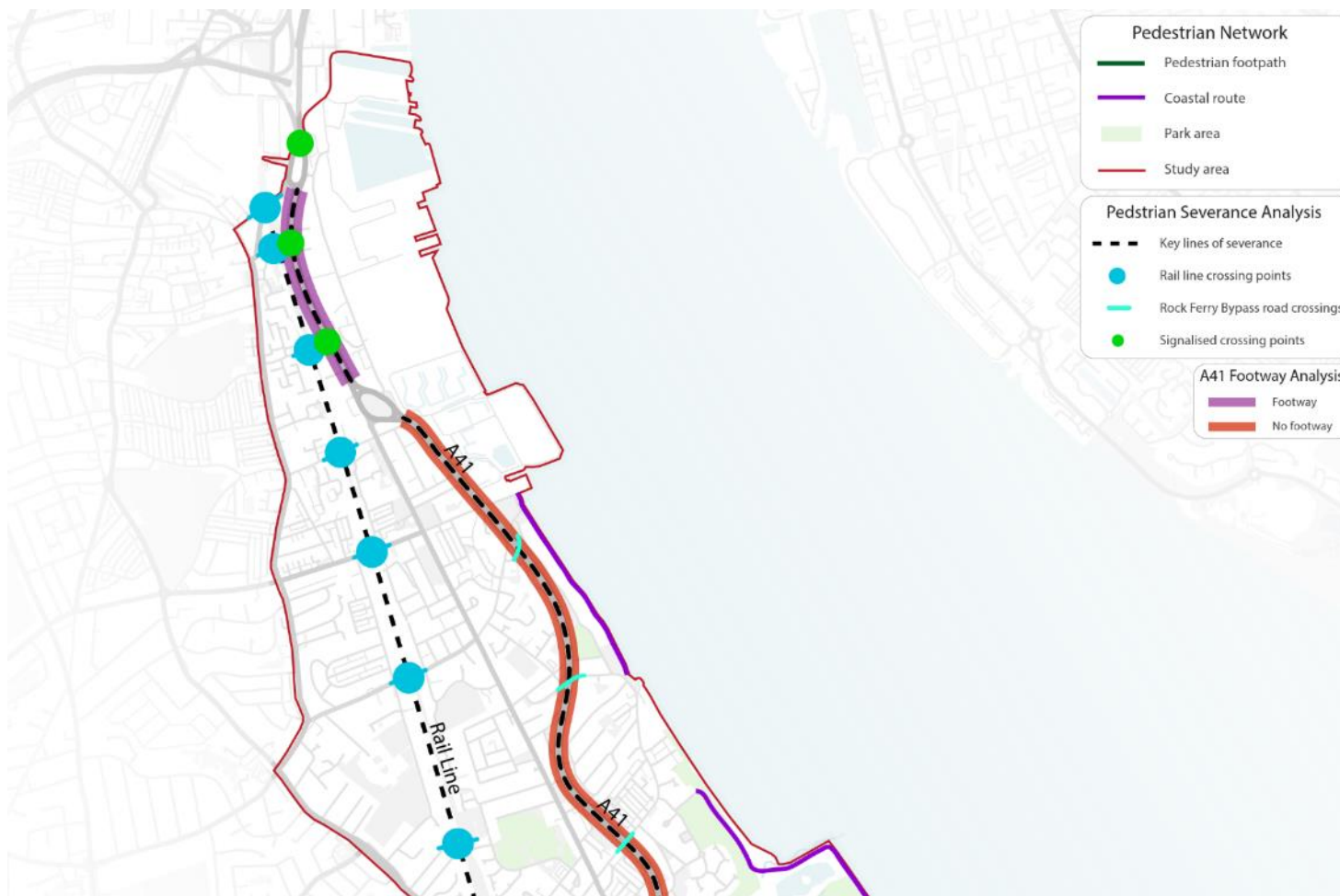
Given the built-up nature of the majority of the study area there is quite a strong pedestrian network, however key lines of severance to pedestrian movement exist within the study such as the rail line and the A41 itself. This is caused by these corridors running between residential areas and key facilities such as schools and shops. The role of the A41 in supporting pedestrian movements should therefore be considered within this study to explore opportunities to reduce severance and encourage walking between residential areas, shops and schools. There are numerous crossing points over the railway but there should be an action as part of the next steps of the project to review these to ensure they adequately cater for pedestrian desire lines (see long list option 94).

Figure 4.12: Pedestrian Connectivity – Full study area



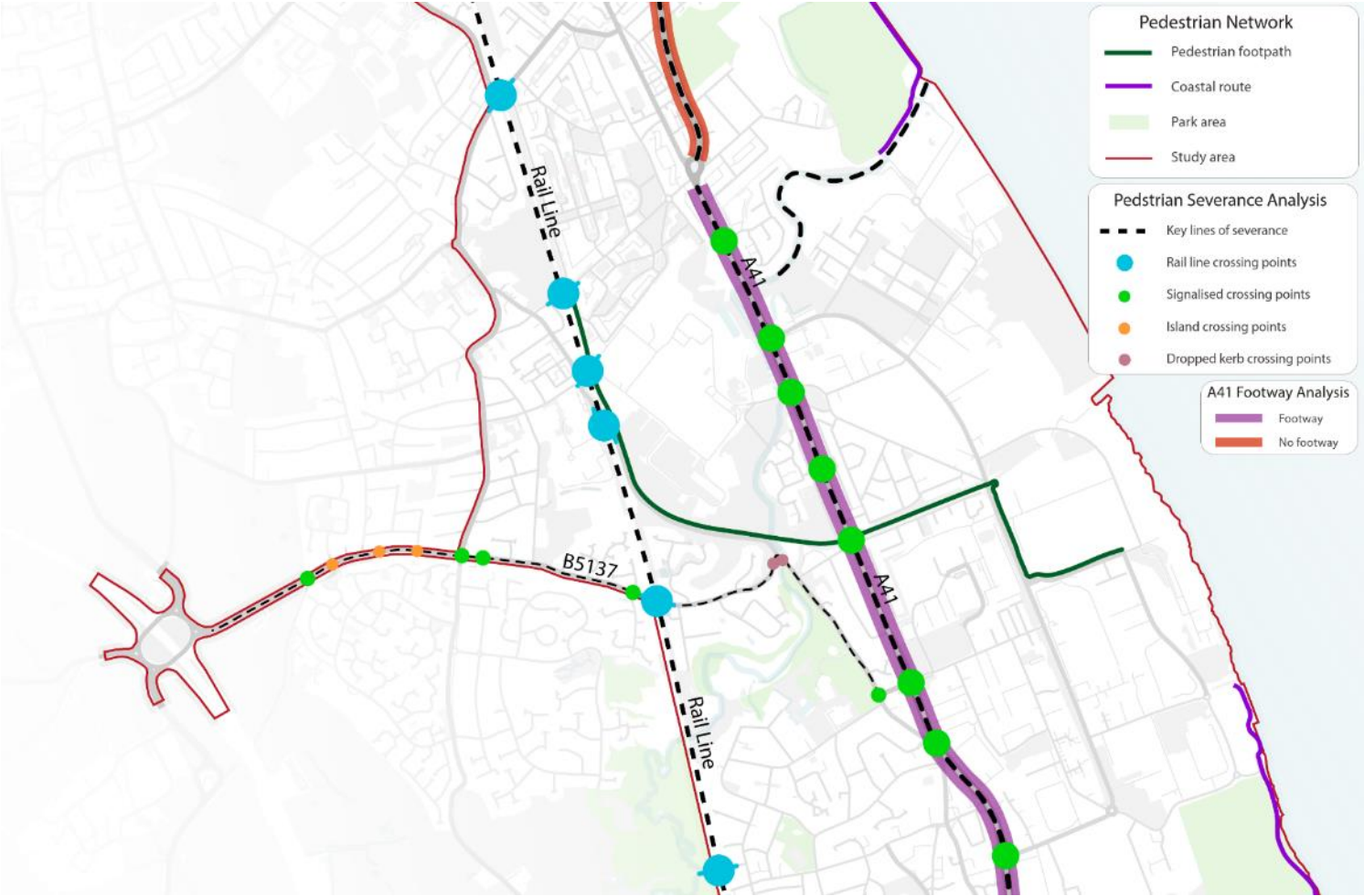
Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.13: Pedestrian Connectivity – Northern Focus



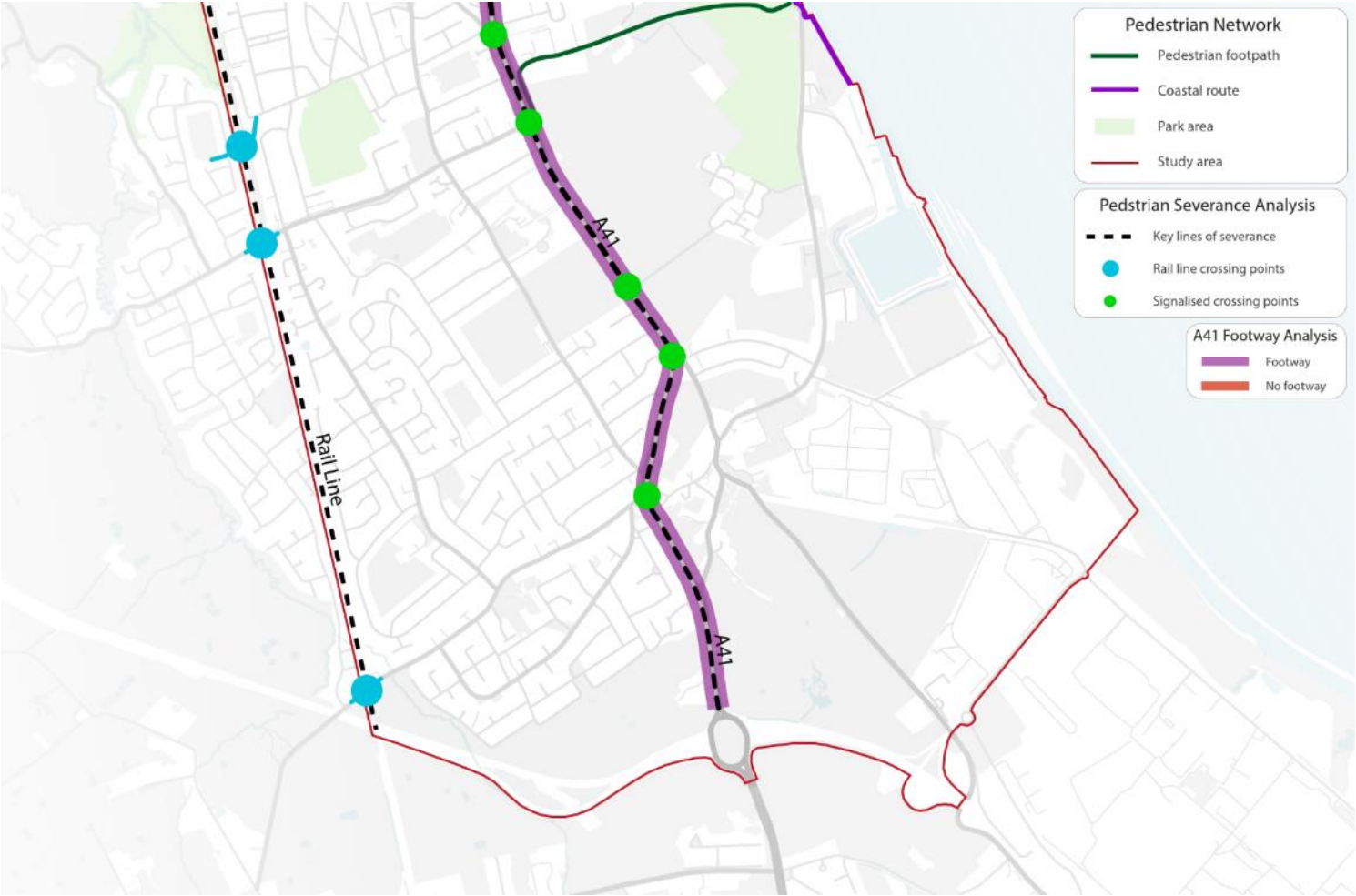
Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.14: Pedestrian Connectivity – Central Focus



Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.15: Pedestrian Connectivity – Southern Focus



Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.16 demonstrates the areas along the east coastline within the study which are and are not accessible by pedestrians. This shows significant disconnect along the coastal route which offers both a tourist attraction and leisure and recreational facility.

Figure 4.16: Pedestrian Coastal Accessibility



Source: Mott MacDonald © OpenStreetMap contributors



Some areas of the accessible coastline locations are also in a poor condition, creating difficult terrain for both pedestrians and cyclists. This is particularly an issue in the area around Rock Ferry as illustrated in the Figure below.

Figure 4.17: Poor surface quality along pedestrian / cyclist coastal route in Rock Ferry



Source: Mott MacDonald

4.5 Cycling

Figure 4.19 to Figure 4.22 illustrate the level of cycling connectivity across the study area.

Along the A41 itself there are a number segments towards the middle of the study which comprise shared use facilities. However, along the majority of the corridor the only provision for cyclists is the footway or within the footprint of the highway which is unlikely to be unattractive particularly to less experienced cyclists.

The well-known Wirral Circular Trail is also displayed in the figure below which continues around the boundary of the borough and predominantly along the coast.

Figure 4.19 also demonstrates a lack of off-road cycle routes within the study area which are often the most safe and attractive and therefore offer the greatest opportunity to encourage modal shift to more sustainable modes.

The disconnect of cycle infrastructure provision across the study area fails to offer connectivity between key locations such as employment and industrial sites, rail stations and residential developments. Although a number of cycle lanes are provided throughout the study area, their quality could be improved in order to encourage greater use for all cyclists. For example, a number of cycle lanes within the study area are narrow, contain obstacles such as signage or lighting and are not segregated reducing the perception of safety. The image below illustrates a cycle path adjacent to Wirral International Business Park with narrow widths unlikely to encourage cycling.

Figure 4.18: Narrow Cycle Lane on A41 adjacent to Wirral Business Park (looking north)



Source: Mott MacDonald

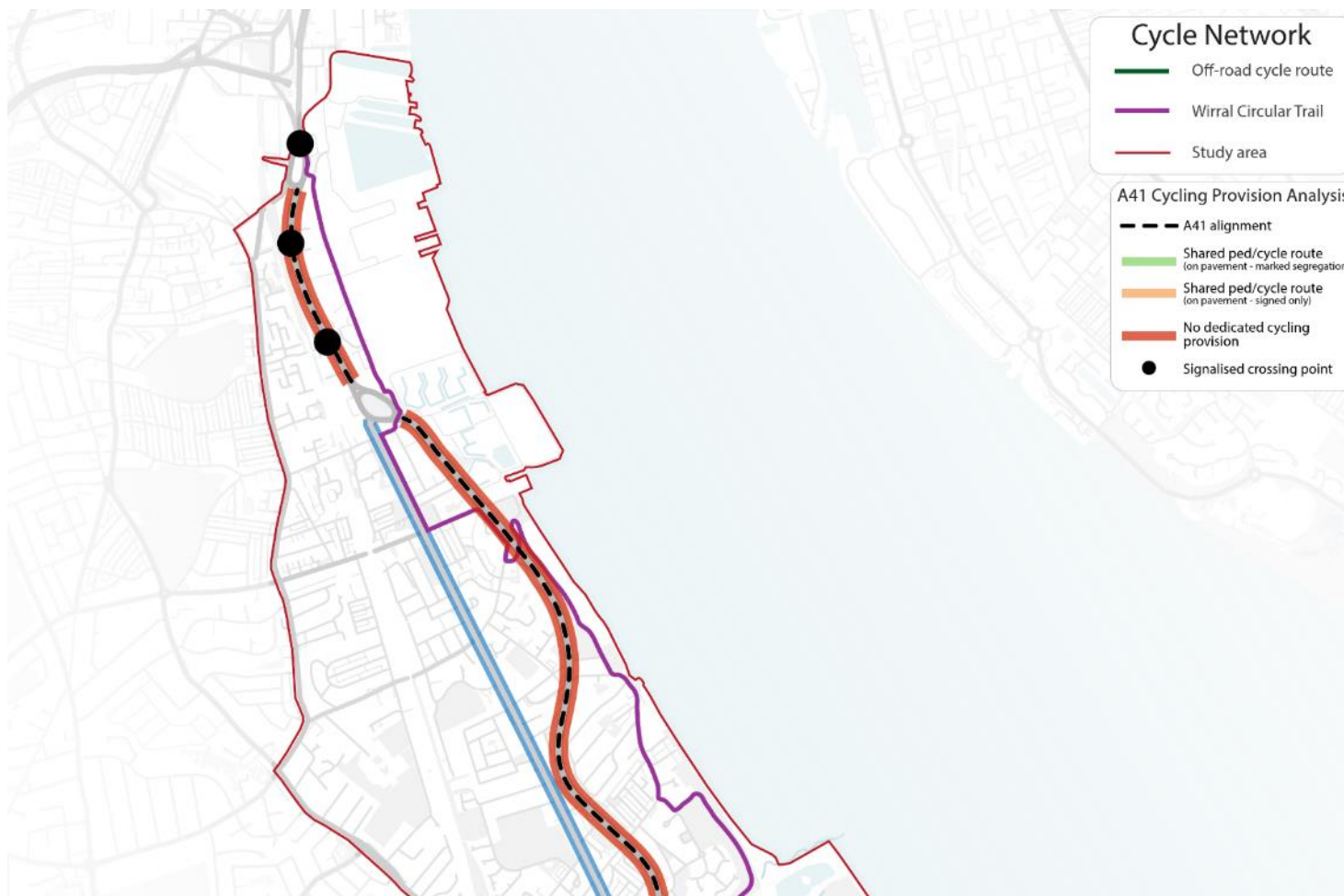
This study offers the opportunity to review the quality and provision of cycle infrastructure across the study in order to enhance connectivity and the attractiveness of the mode to encourage use as a main mode of travel.

Figure 4.19: Cycling Network – Full study area



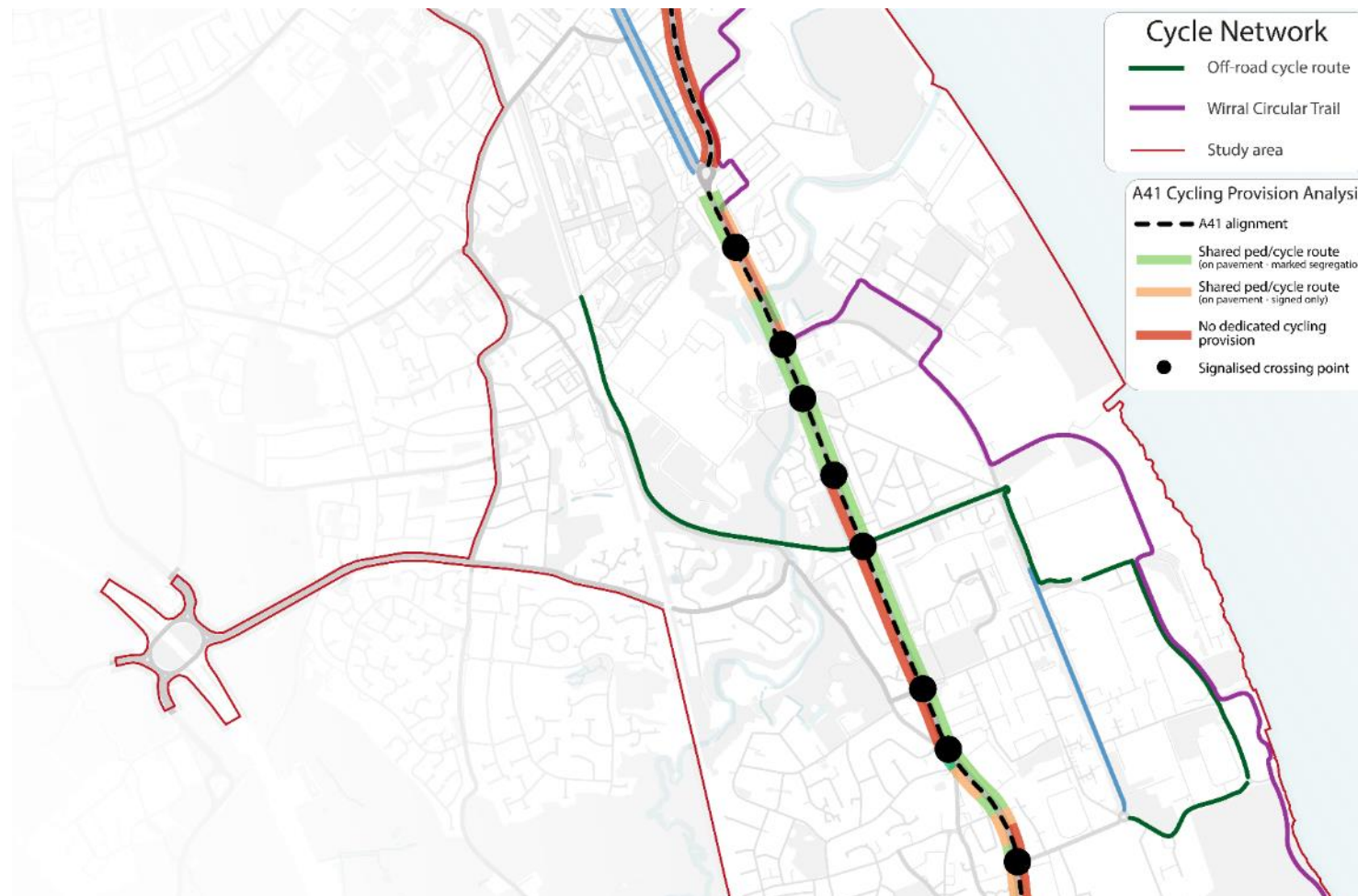
Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.20: Cycling Network – Northern Focus



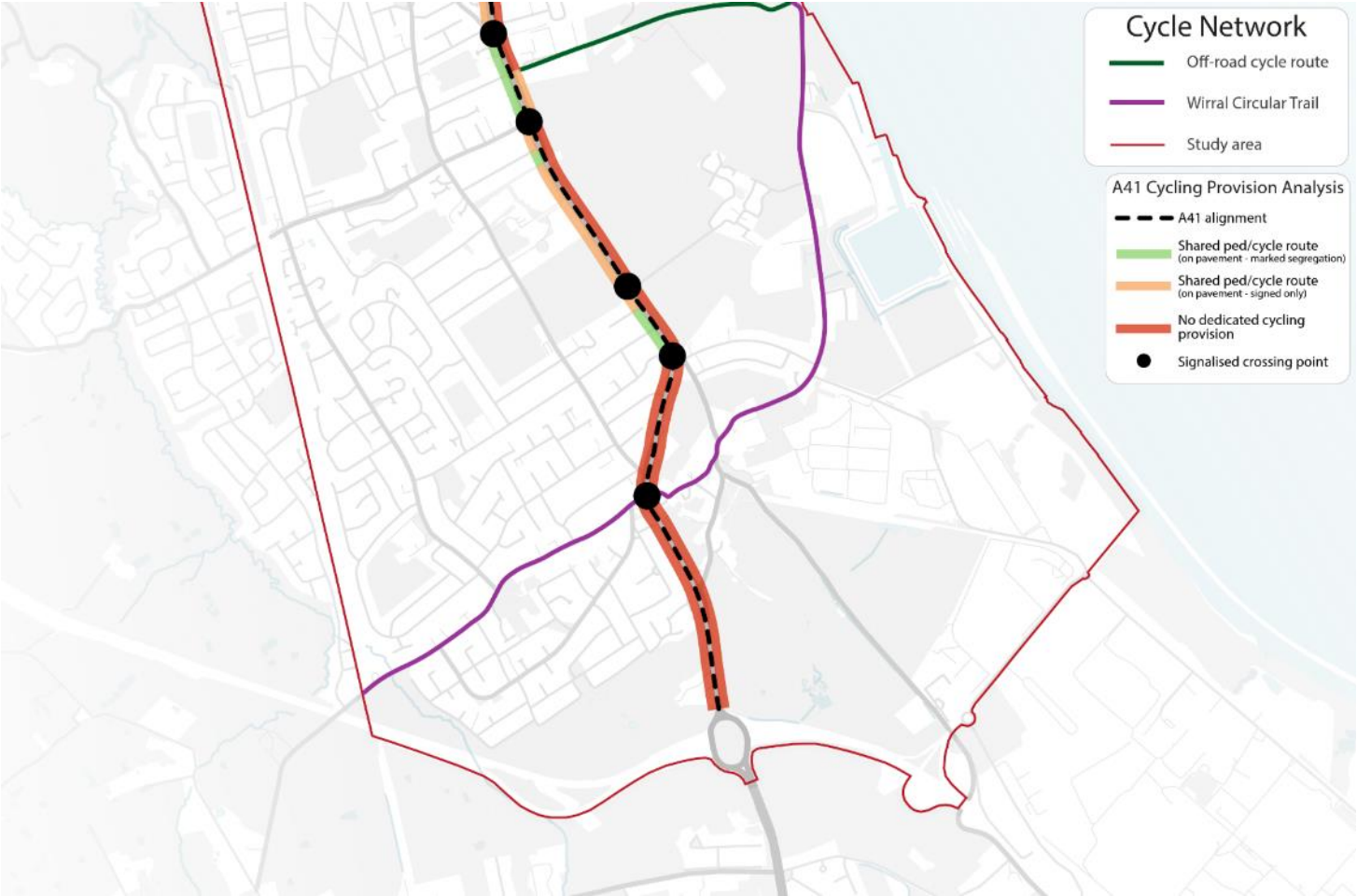
Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.21: Cycling Network – Central Focus



Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.22: Cycling Network – Southern Focus



Source: Mott MacDonald © OpenStreetMap contributors

As noted earlier in Section 2.2.7, the impact of COVID-19 has increased the importance of walking and cycling for both commuting and recreational purposes in all areas across the UK. This study offers a good opportunity to explore how the transport network within the study area can be reconsidered to accommodate active travel and to give more space to cyclists and pedestrians. Such changes will help embed altered behaviours and demonstrate the positive effects of active travel.

4.6 Road Safety

Analysis of STATS19 data for the most recent 5 years has allowed identification of the following Personal Injury Collision (PIC) cluster locations within the study area (with clusters being defined as 5 or more incidents with a concentrated area). Details of these incidents are summarised in the table below and illustrated in Figure 4.23.

Table 4.5: Personal Injury Collision Clusters

Cluster ref.	Location	Severity	Trend
1	A41 (northern end)	3 serious; 8 slight	No clear trend
2	Old Chester Road (northern end)	4 serious; 4 slight	Majority of accidents involving pedestrians
3	Bedford Road/ New Chester Road	2 serious; 5 slight	Both serious incidents involved pedestrian crossings
4	New Chester Road/Rock Lane Junction	1 serious; 7 slight	No clear trend
5	B5136 adjacent to New Ferry Park	4 serious; 8 slight	Majority of accidents involving pedestrians and cyclists Number of vehicles failed to stop at junction and signals
6	A41/ New Chester Road	1 serious; 5 slight	No clear trend
7	New Chester Road/ A41	0 serious; 8 slight	Rear shunt accidents
8	Wirral Circular Trail	1 serious; 2 slight	No clear trend
9	B5137/ B5136	2 serious; 2 slight	No clear trend
10	M53 Junction 4	1 fatal; 2 serious; 11 slight	No clear trend
11	A41/ Mill Road/ Magazine Road	1 serious; 11 slight	Rear shunt accidents
12	A41/B5132	2 serious; 8 slight	No clear trend
13	Wirral Circular Trail/A41	1 serious; 10 slight	Rear shunt accidents 1 pedestrian and 1 cyclist collision
14	A41/M53 Junction	1 fatal, 2 serious; 5 slight	Rear shunt accidents

Source: Wirral Borough Council

This analysis has found a number of incident clusters within the study area which involve pedestrians and cyclists. These include the following locations:

- The northern end of Old Chester Road on the edge of the study area (cluster ref 2)
- The Bedford Road/ New Chester Road junction (cluster ref 3)
- B5136 adjacent to New Ferry Park (cluster ref 5)
- Wirral Circular Trail/A41 junction (cluster ref 15)

Reviewing the location of these incidents, particularly those involving pedestrians will help to determine if measures to improve safety would be feasible and appropriate. This will be essential to ensure severance is reduced between communities and key locations and so active travel can be encouraged and remain safe and attractive through improved facilities.

Rear end shunting incidents were also common at key junctions along the corridor including:

- A41/M53 Junction
- A41/ Mill Road/ Magazine Road
- New Chester Road/ A41

Shunt related incidents are often associated with the stop-start nature caused by congestion. Therefore, improving the flow of traffic through junctions along the A41 corridor and exploring opportunities to reduce the overall level of traffic along the route will assist with reductions of the number of these type of collisions and improve overall road safety for both vehicles, pedestrians and cyclists.

Figure 4.23: Personal Injury Collision (PIC) Cluster Map



Source: Mott MacDonald © OpenStreetMap contributors

4.7 Traffic Modelling

Extractions from the Wirral SATURN Model have been used to baseline existing road traffic volumes and characteristics along key roads within the study area. No new modelling work has been undertaken as part of this commission.

The analysis undertaken considers both the 08:00-09:00 and 17:00-18:00 AM and PM peak hours while the 2015 base year model has been used to describe likely existing demand. Extractions from the 2035 future year model calibrated using growth assumptions as per the 2035 Wirral Local Plan core scenario have also been assessed to consider likely changes in demand over the next 15 years.

The resultant 12 plots provided in Figure 4.24- Figure 4.35 are set out as follows:

- For both 2015 base year and 2035 future year
 - Actual flow
 - AM peak
 - PM peak
 - Link volume-over-capacity
 - AM peak
 - PM peak
 - Junction volume-over-capacity
 - AM peak
 - PM peak

4.7.1 Actual flows

Modelled typical hourly traffic flows along key link roads within the study area have been presented in Passenger Car Units (PCU). PCU is a metric used in transport modelling to assess traffic flow rate in which a private car is represented by 1 PCU while larger vehicle such as HGVs are equate to 2+ PCUs.

As expected, the A41 is highlighted as the primary road through the study area in terms of traffic levels on all actual flow plots (see Section 4.7.3 for variation in flow along the A41). The B5136 New Chester Road, B5137 Spital Road/Brimstage Road and the B5149 are also seen to surpass hourly flows of 500 PCU (around 8 PCUs per minute). High traffic volumes are also noted into the Wirral Business Park area via Old Hall Road in the AM peak and egressing via Caldbeck Road in the PM peak. Hourly flows are not seen to surpass 500 PCU along any other links in the baseline model.

The 2035 model modelling outputs generally indicated a blanket increasing throughout the network, assumed largely due to planned development inducing additional traffic.

Volume-over-capacity analysis

Volume-over-capacity is considered one of the main indicators of the performance of a junction or link in the transport modelling industry. Described as a percentage, a value of 85% indicates a junction or link is approaching its design capacity and will begin to experience delay and queueing. Above 100%, it is assumed that the junction cannot accommodate the traffic levels, resulting in a cumulative build-up of queueing until traffic levels reduce, while a link will experience congestion.

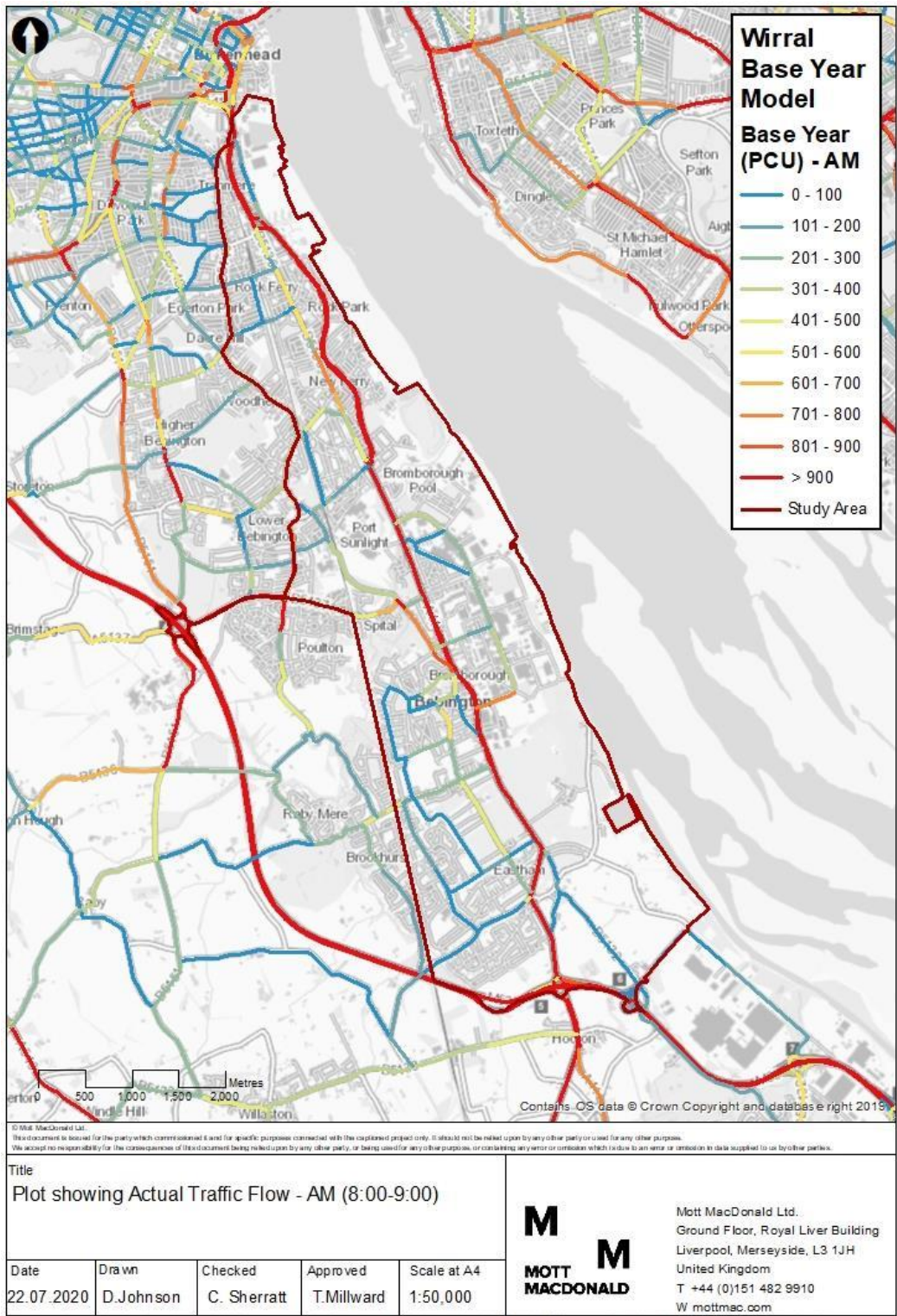
The 2015 baseline model extractions indicate the road network operates largely within capacity during both peaks with no links noted to surpass 115% of respective operating capacities. Potential congestion issues are noted along the A41 on both approaches to the southern Rock Ferry By-Pass roundabout in the AM peak, with southbound approach exceeding capacity. Slight issues are also noted around Bromborough Village on the B5137 and on some approaches to the M53 Junction 4 in both peaks. The northbound approach on the A41 to the A41/Green Lane junction also surpasses 85% capacity.

In terms of junctions, 15 and 9 junctions are shown to exceed capacity in the AM and PM peaks respectively (9 and 6 of these on the A41 corridor), however, no junction surpasses 115%. The highlighted junctions do align with the previously described highlighted links while otherwise noting issues along the A41 at Eastham as well as the B5137, B5136 and B5149 where flows are known to be high.

The increase in traffic volumes in the 2035 scenario sees an increasing number of links exceeding capacity around key identified areas including the A41/Green Lane junction, the Rock Ferry By-Pass southern roundabout, the M53 Junction 4 and Bebington Village. New issues around the M53 Junction 5 are noted while potential for congestion along Bridle Road and Plymyard Avenue through the Eastham residential area are also highlighted in the AM peak. However, it remains that no link surpasses 115% capacity within the study area.

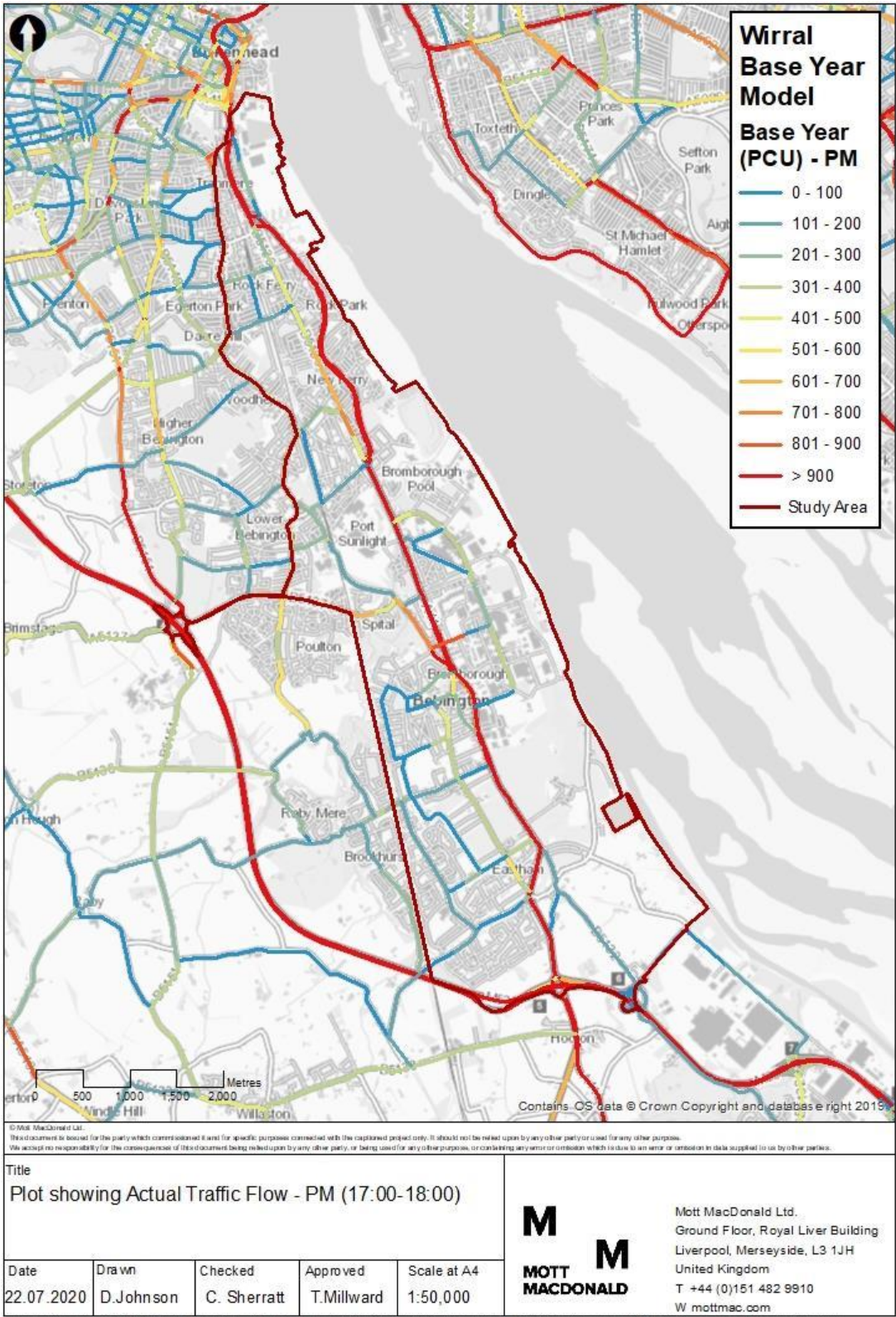
Junctions likely to surpass 100% capacity increase to 30 and 21 for respective AM and PM peaks (14 and 7 along the A41 corridor). The A41/Old Hall Road junction into the Wirral International Business Park is also anticipated to exceed 115% capacity. Of particular note in comparison with the 2015 scenario is the increase in issues around the M53 Junction 5.

Figure 4.24: 2015 AM Actual Flow Plot



Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Figure 4.25: 2015 PM Actual Flow Plot



Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Wirral Base Year Model

Link V/C AM Plot

- 85% to 100%
- 100% to 115%
- Over 115%
- Study Area

0 500 1000 1500 2000 Metres

Contains OS data © Crown Copyright and database right 2019

© Mott MacDonald Ltd.
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.
We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purposes, or containing any error or omission which results in an error or omission in data supplied to us by other parties.

Title
Link Volume/Capacity (v/c) Plots for Wirral Base Year Model 2015 AM (8:00-9:00)

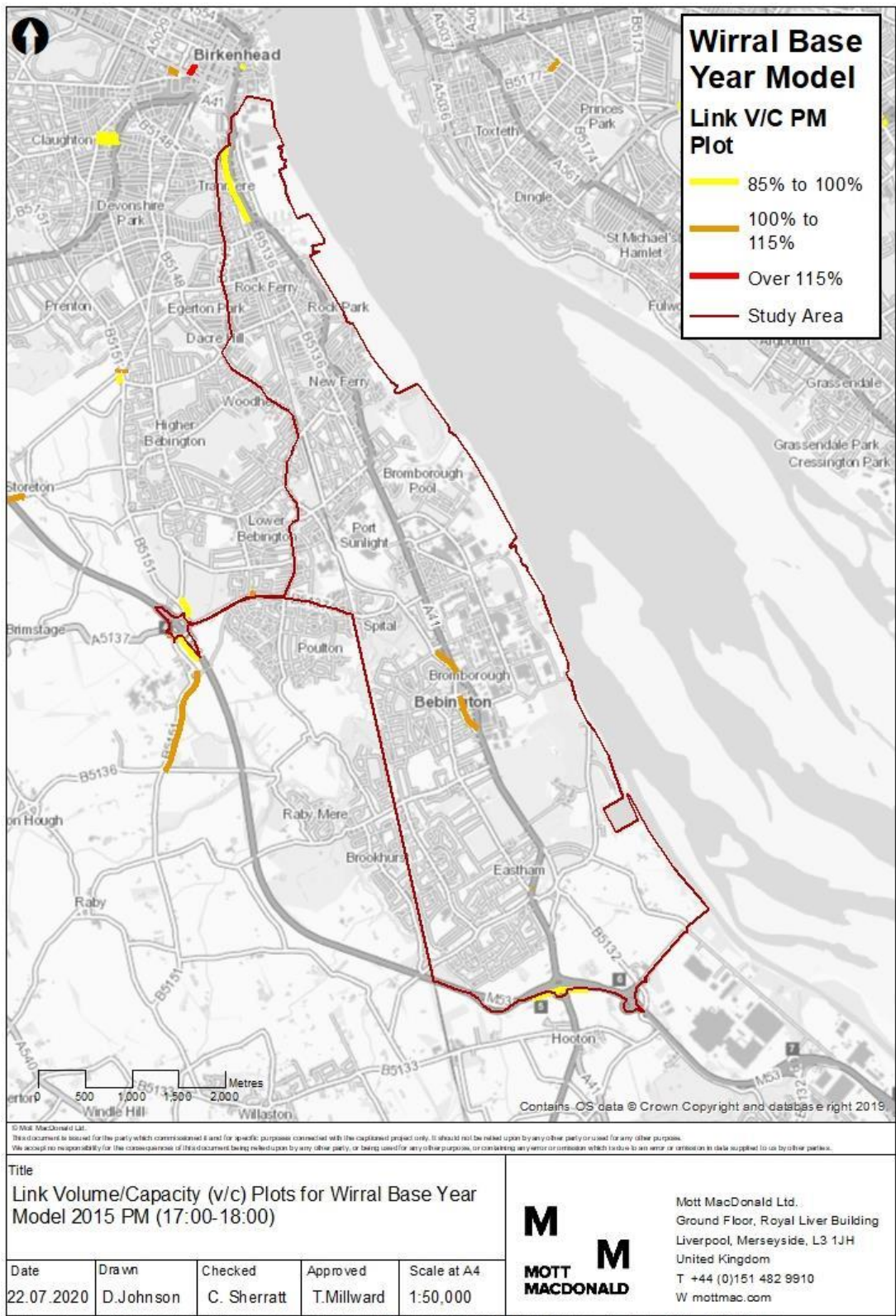
Date	Drawn	Checked	Approved	Scale at A4
22.07.2020	D.Johnson	C. Sherratt	T.Millard	1:50,000

MOTT MACDONALD

Mott MacDonald Ltd.
Ground Floor, Royal Liver Building
Liverpool, Merseyside, L3 1JH
United Kingdom
T +44 (0)151 482 9910
W mottmac.com

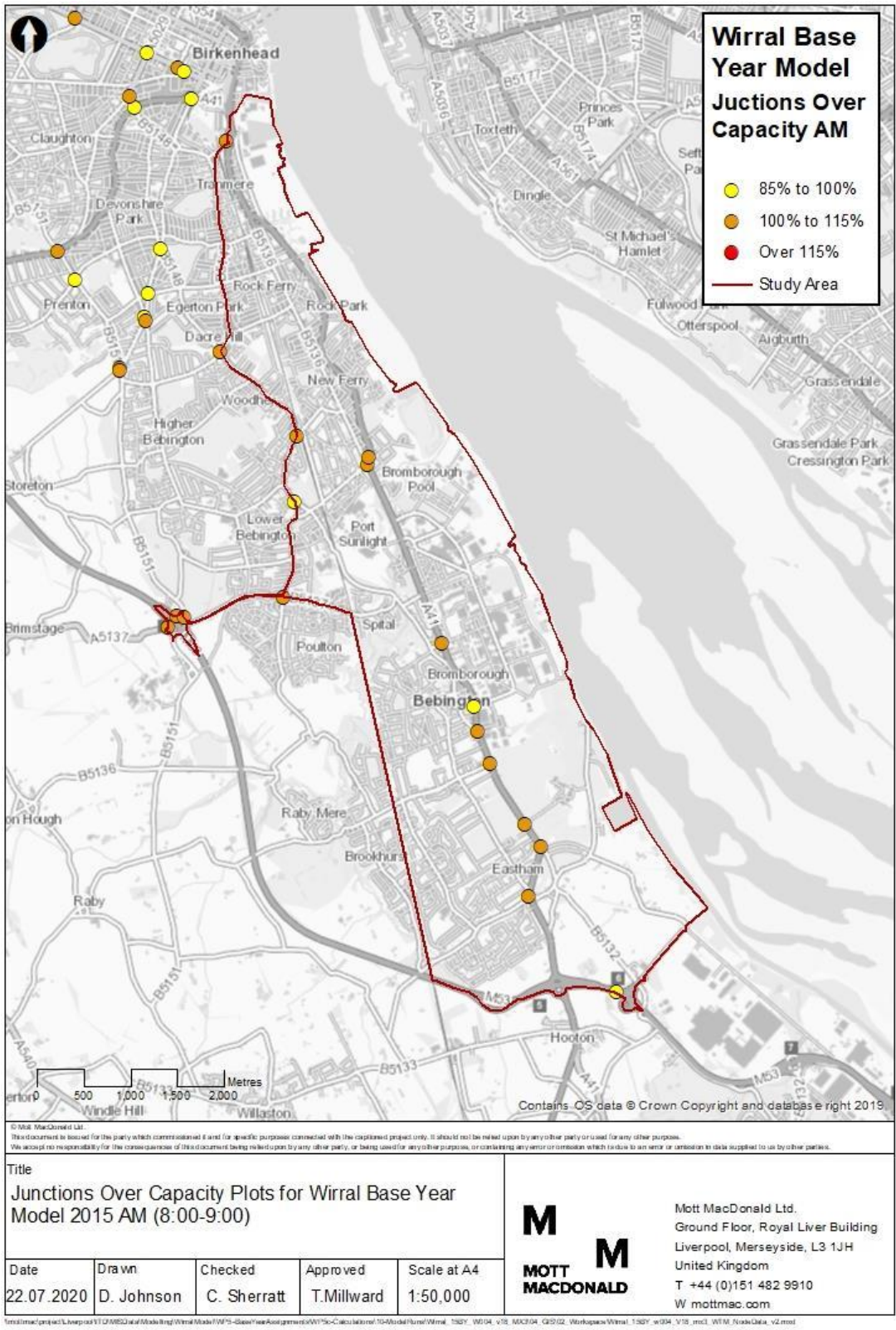
419653 | 1 | B | | December 2020

Figure 4.27: 2015 PM Link Volume-Over-Capacity Plot



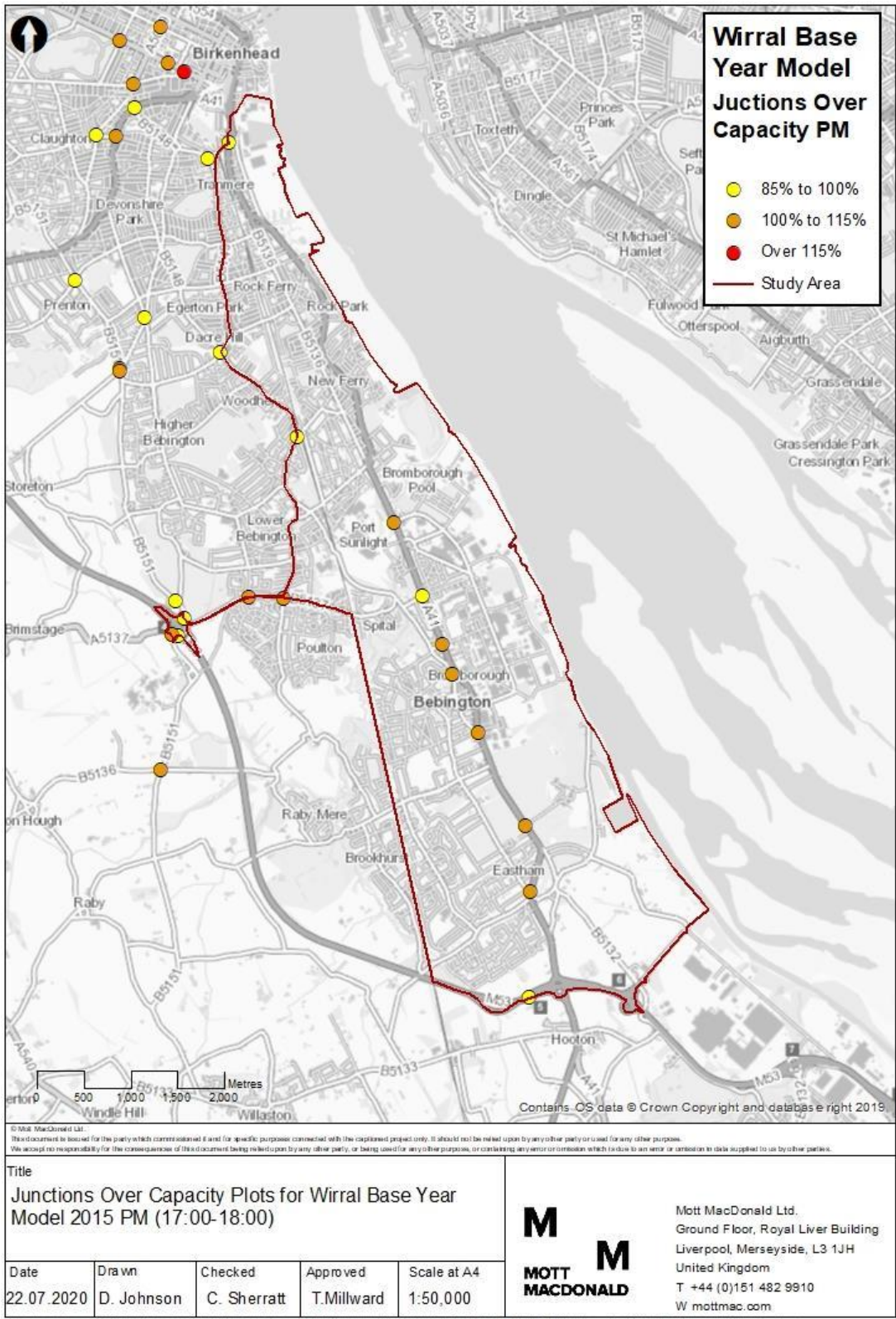
Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Figure 4.28: 2015 AM Junction Volume-Over-Capacity Plot



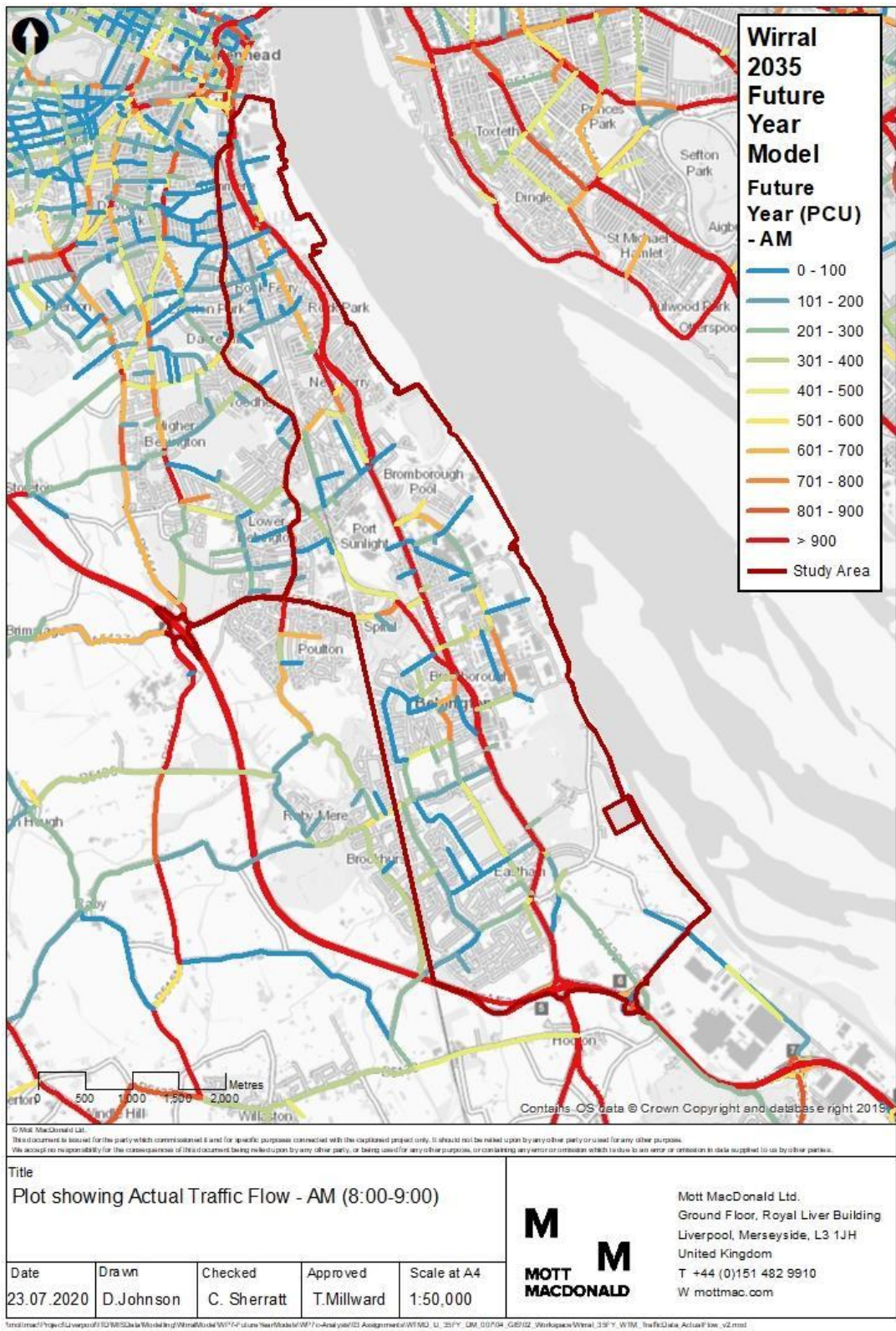
Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Figure 4.29: 2015 PM Junction Volume-Over-Capacity Plot



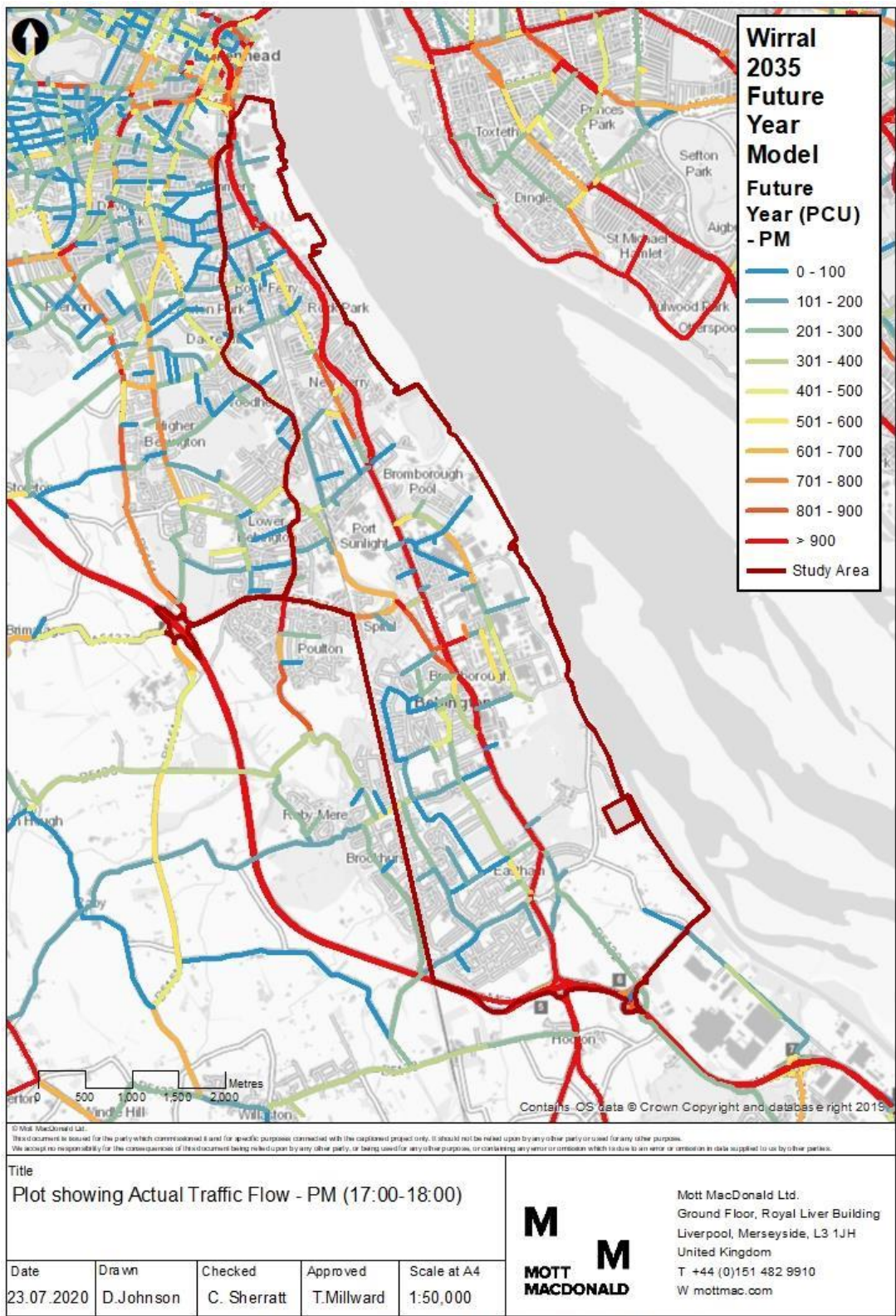
Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Figure 4.30: 2035 AM Actual Flow Plot



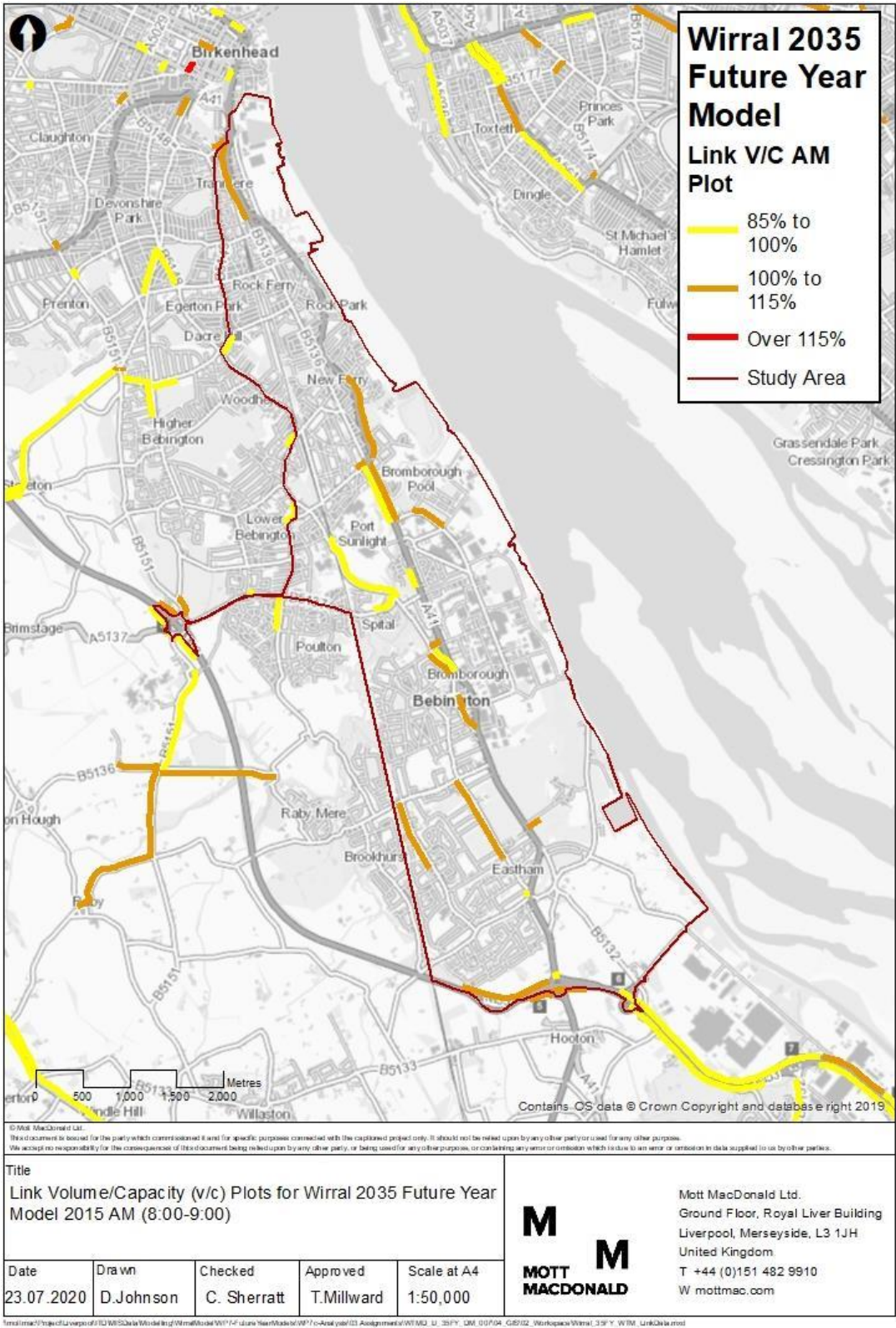
Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Figure 4.31: 2035 PM Actual Flow Plot



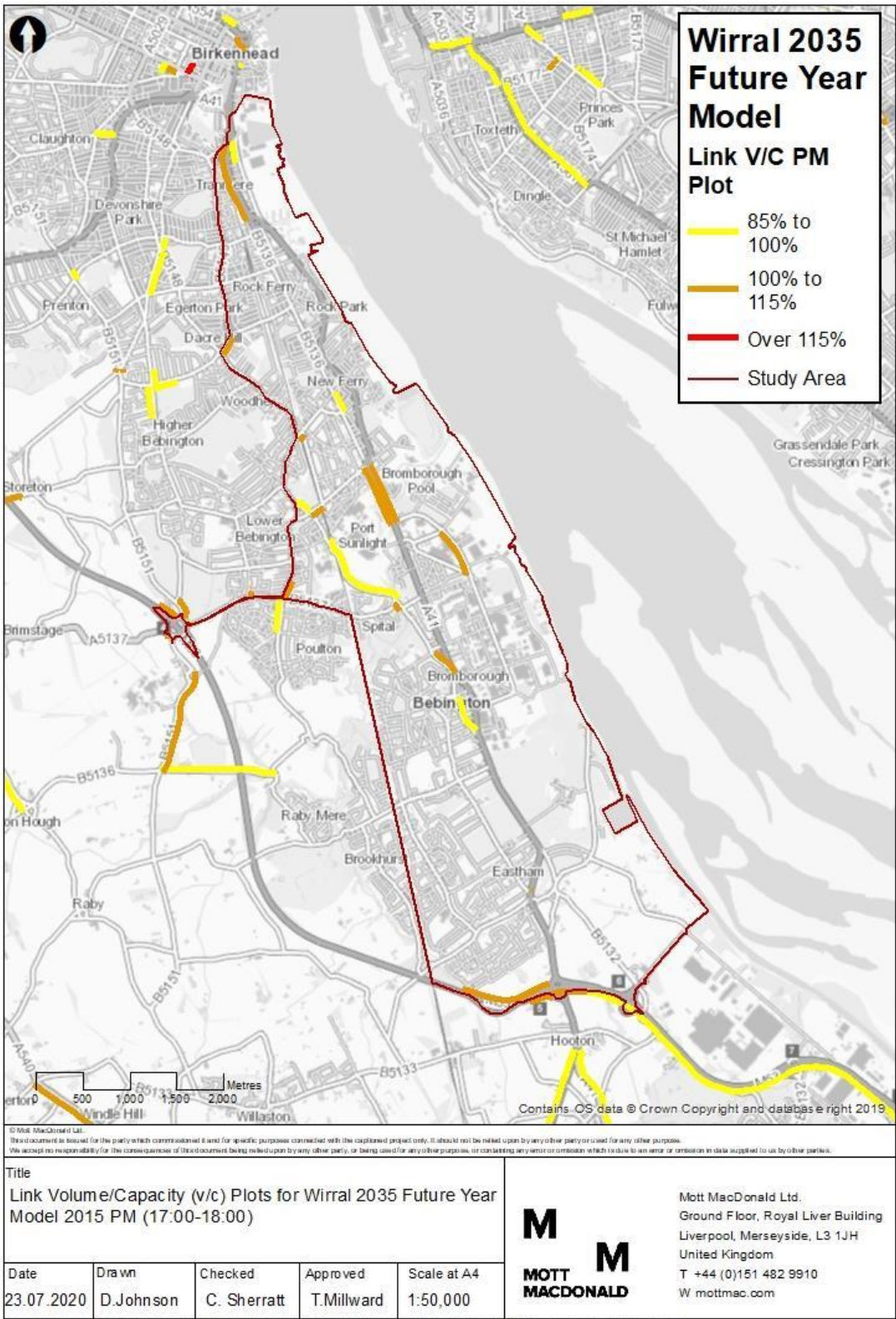
Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Figure 4.32: 2035 AM Link Volume-Over-Capacity Plot



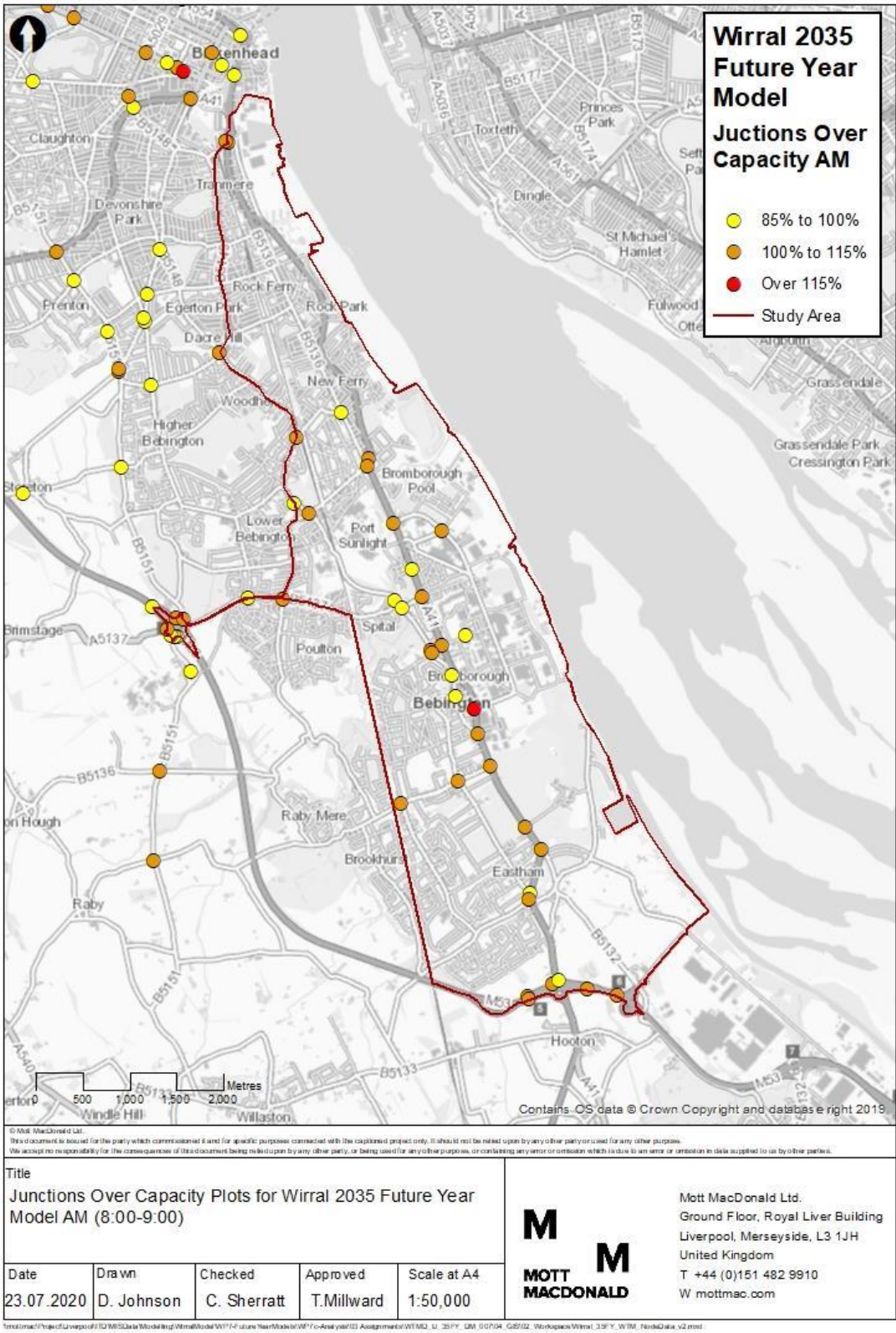
Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Figure 4.33: 2035 PM Link Volume-Over-Capacity Plot



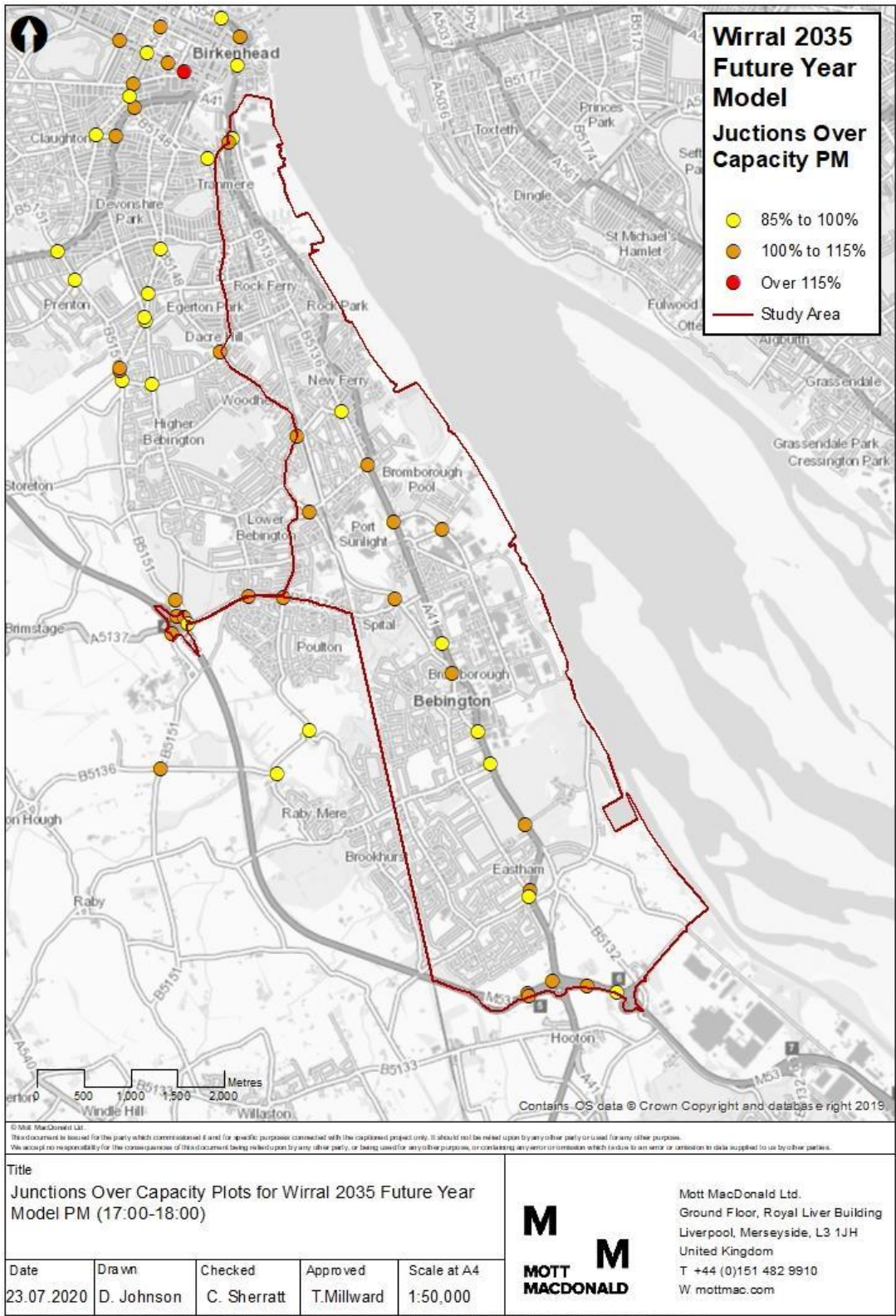
Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Figure 4.34: 2035 AM Junction Volume-Over-Capacity Plot



Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Figure 4.35: 2035 PM Junction Volume-Over-Capacity Plot

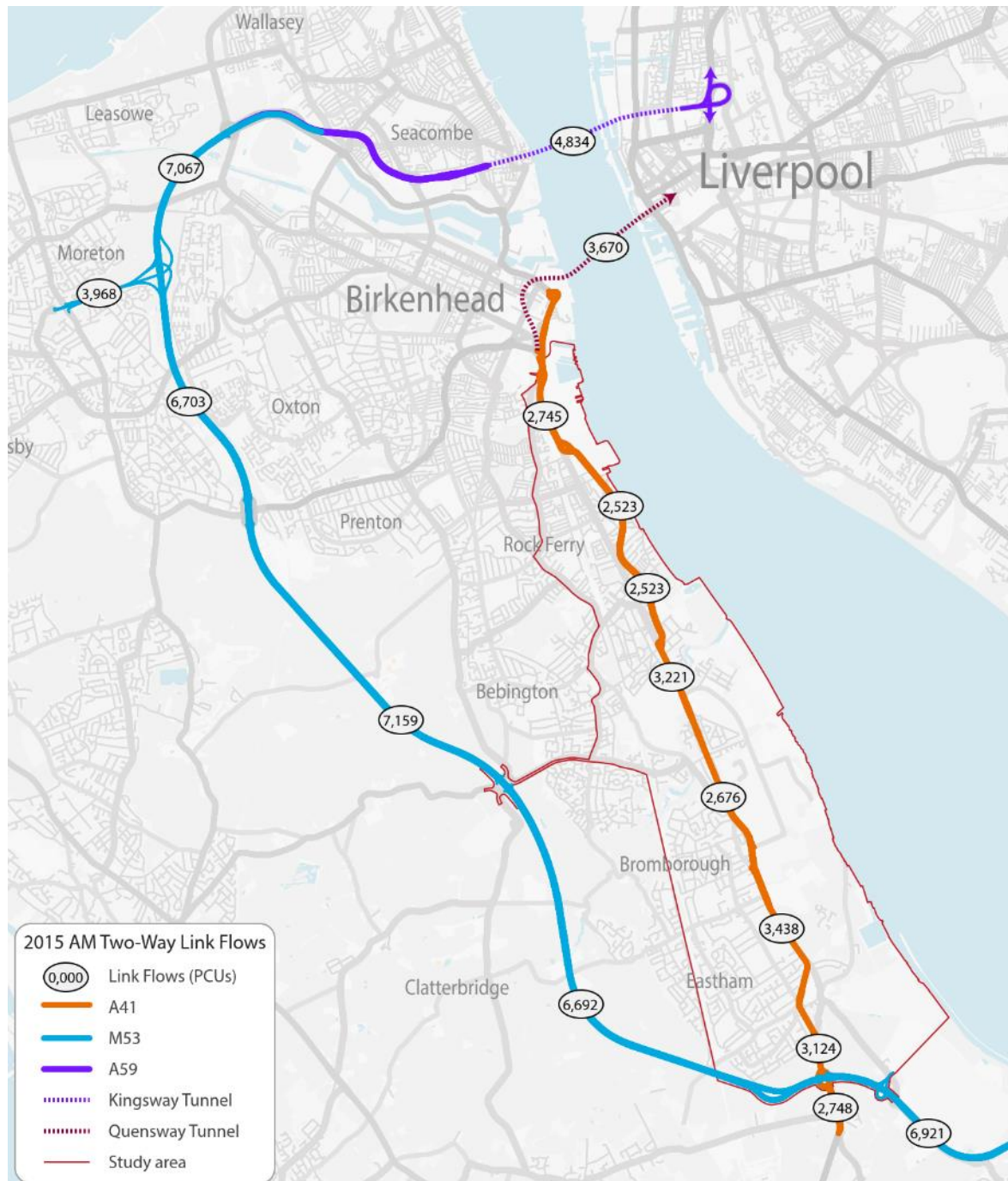


Source: Mott MacDonald © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

4.7.2 A41 vs M53

The below diagram provides a comparison in 2015 AM peak two-way link flows between the A41 and parallel strategic road network (M53), as extracted from the Wirral SATURN Model. As can be seen in absolute volumes, the A41 carries approximately half the volume of traffic compared the M53. But, the even so, the volumes show that the A41 is still a busy urban distributor road with a two-way flow of approximately 50 PCU's per minute during the AM peak.

Figure 4.36: 2015 AM A41, M53 Link Flow Comparison



Source: Mott MacDonald © OpenStreetMap contributors

4.7.3 Select Link Analysis

The following diagrams describe further analysis undertaken within the Wirral SATURN Model with respect to existing vehicle movement characteristics through and around the study area.

Figure 4.37 provides some insight as to how the A41 corridor is likely currently used during the AM peak. This had been achieved through a 'select link analysis' which assesses the onward dispersion of all traffic passing through a single point on the network – in this case the northbound traffic leaving the M53 Junction 5 onto the A41. The analysis has been presented to highlight key locations where this traffic leaves the A41 to the north and the percentage continuing along it. This figure indicates where stepped changes in the use of the A41 occur and therefore where potential downgrades could be considered.

Key exit points noted include the Eastham/Eastham Village area (21% of traffic), the Wirral International Business Park via A41/Old Hall Road junction (45% of traffic) and the Birkenhead Port area via the Rock Ferry By-Pass northern Terminal (10% of traffic)

Other headlines include that 11% of all traffic at the point of analysis run all the way through the study area and on into Liverpool via the Queensway Tunnel. This traffic can effectively be described as strategic traffic, preferring to use the A41 over the M53 strategic route for connectivity into Liverpool.

The significance of this 11% is indicated within Figure 4.38 which provides the same 'select link analysis' for northbound M53 traffic leaving Junction 5. Here 26% of traffic is seen to follow through into Liverpool via the Kingsway Tunnel during the 2015 AM peak. Key exit points from the M53 include Junctions 1, 2, 3 and 4 as shown.

Finally, Figure 4.39 and Figure 4.40 highlight the key origin routes for AM peak traffic entering the Kingsway and Queensway Tunnels toward Liverpool. It is noted that negligible A41 traffic uses the route for access to the Kingsway Tunnel but forms one of the primary routes for access into the Queensway Tunnel.

The Kingsway Tunnel is intended to accommodate long-distance, strategic routes, compared to the Queensway Tunnel which caters for much more local traffic. The Queensway Tunnel as such has a maximum permitted gross vehicle weight of 3.5 tonnes, except for local bus services and emergency vehicles, compared to 38 tonnes for the Kingsway Tunnel.

Figure 4.37: 2015 AM A41 Select Link Analysis – Northbound



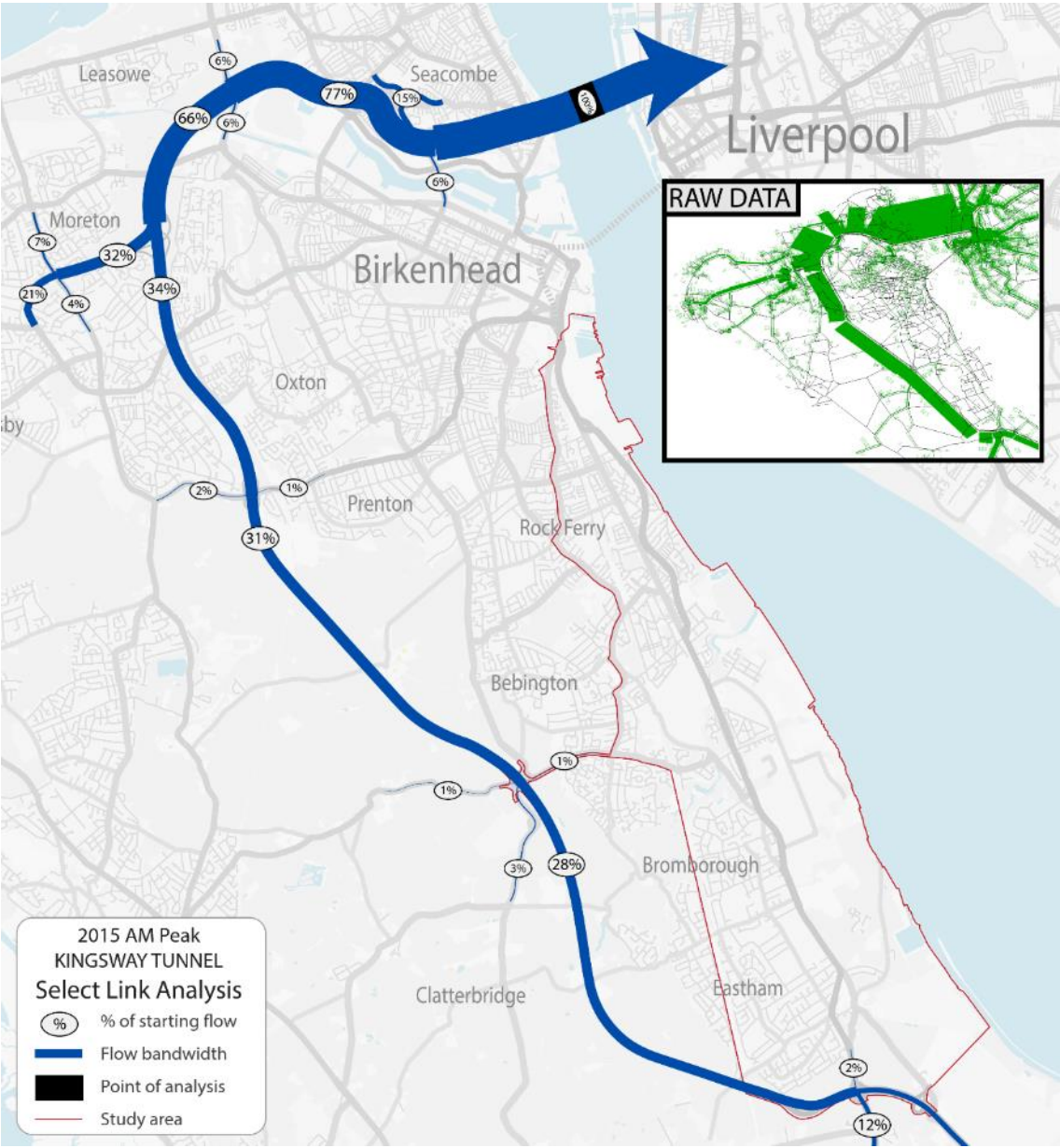
Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.38: 2015 AM M53 Select Link Analysis – Northbound



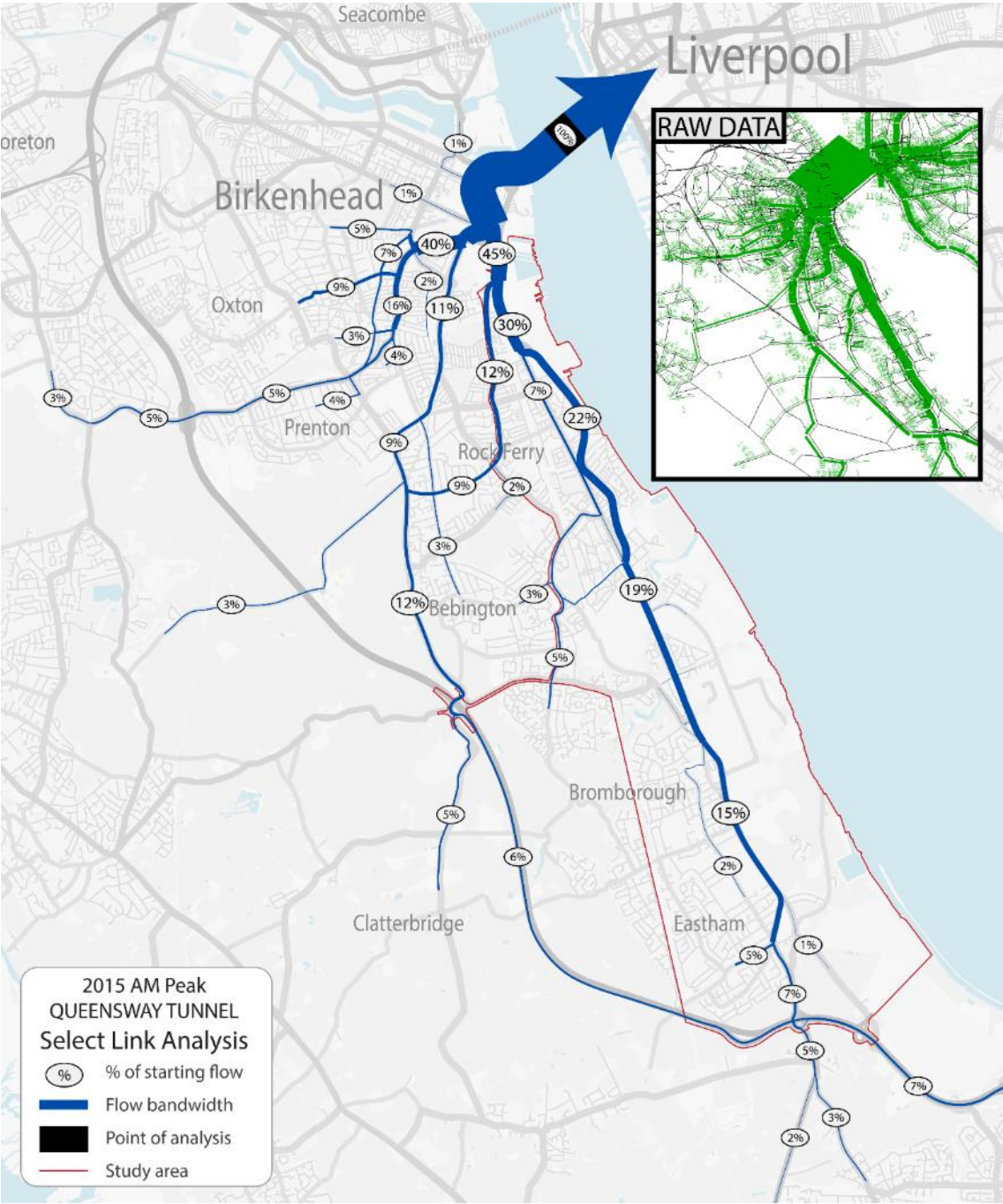
Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.39: 2015 AM Kingsway Tunnel Select Link Analysis – Eastbound



Source: Mott MacDonald © OpenStreetMap contributors

Figure 4.40: 2015 AM Queensway Tunnel Select Link Analysis – Eastbound



Source: Mott MacDonald © OpenStreetMap contributors

The above sub sections have summarised the key transport characteristics within the study area and highlighted key issues and opportunities for this study to address. These are summarised in the table below:

Table 4.6: Transport context- key issues and opportunities

Issues	Opportunities
Highways	
<ul style="list-style-type: none"> The A41 is often used as a through route creating additional traffic within the study area which does not contribute to the borough economically and has a detrimental impact on air quality, sense of place and pedestrian/cyclist safety There are a significant number of signalised junctions or crossing points along the A41 which may not be consistent with the volume of traffic using it 	<ul style="list-style-type: none"> The study area is well connected to the wider strategic transport network with close proximity to the M53 via several junctions. Opportunities to review junctions along the corridor and explore options for changes to junctions which may restrict or remove turning movements, to encourage use of alternative routes and discourage through movements.
Bus Network	
<ul style="list-style-type: none"> Traffic and congestion along the A41 may impact the speed and reliability of bus services - this may be particularly an issue along the corridor where the highest frequency of services is present. 	<ul style="list-style-type: none"> There is a good level of bus connectivity within the study area with high frequencies along the A41 corridor and the residential areas to the south being directly served by the lower frequency services. The A41 itself is served by some of the highest frequency services
Rail Connectivity	
<ul style="list-style-type: none"> Despite the notable number of rail stations within the study area, there are a number of residential areas which lie outside of reasonable walking travel time (15 minutes) The majority of the area to the east of the A41 is poorly connected to the rail network in terms of pedestrian connectivity reducing opportunities for sustainable travel and support for last mile journeys The busiest stations are to the north of the study area which may mean vehicles are more likely to travel further along the A41 from the south, particularly those using the station as a park and ride facility 	<ul style="list-style-type: none"> The number of rail stations within the study area creates good opportunities for the uptake of sustainable travel amongst existing and potential future residents, visitors and employees. If east-west connectivity across the A41 for pedestrians can be improved, this would make the stations more accessible for new development sites on the eastern side of the A41.
Walking and Cycling	
<ul style="list-style-type: none"> Key lines of severance to pedestrian movement exist within the study such as the rail line and the A41 itself which limit connectivity to local facilities and reduce the safety and attractiveness of walking and cycling within the local area. There is a disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations. There is a lack of off-road cycle routes within the study area which are often the most safe and attractive and therefore offer the greatest opportunity to increase active travel uptake. Poor quality of walking and cycling infrastructure in some areas fails to promote greater use and encourage modal shift 	<ul style="list-style-type: none"> This study offers the opportunity to consider the role of the A41 in supporting pedestrian movements and to explore opportunities to reduce severance and encourage walking between residential areas, shops and schools. This study offers a good opportunity to explore how the transport network within the borough can be reconsidered to accommodate active travel and to give more space to cyclists and pedestrians, ensuring people feel safe in relation to COVID-19. Such changes will help embed altered behaviours resulting from COVID-19 and demonstrate the positive effects of active travel. This study provides an opportunity to connect walkable riverside sections including diverting a section of the Wirral Circular Trail
Road Safety	
<ul style="list-style-type: none"> A number accident hotspots along the corridor involving pedestrians and cyclists. Rear end shunting incidents are common at key junctions along the corridor. 	<ul style="list-style-type: none"> Opportunities to mitigate collisions at these locations and improve the level of safety particularly for pedestrians and cyclists. Improved safety for pedestrians and cyclists will enhance and encourage active travel along the corridor ensuring it remains attractive to all users.

Issues

Opportunities

Traffic Modelling

- The A41 currently accommodates high peak traffic volumes, which are considered inconsistent of its classification.
 - A significant proportion of traffic is noted to use the A41 as a strategic through route into Liverpool via the Queensway Tunnel.
 - Volume-over-capacity analysis indicates existing congestion issues around the Rock Ferry By-Pass southern terminal, Bromborough Village and out toward the M53 Junction 4.
 - 2035 traffic volume projections, as informed by the Local Plan, indicate that the number of key junctions surpassing capacity within the study area will double to 30 and 21 in the AM and PM peak, with 14 and 7 on the A41 itself. In particular, the A41/Old Hall Road junction into the Wirral Business Park is anticipated to exceed 115% capacity.
- Exploring opportunities for reduced vehicle flows and or congestion will help reduce the number of rear end shunt accidents associated with stop start traffic.
 - The study area is well connected to the M53 strategic network which provides a fit-for-purpose alternative for existing/projected through traffic. This provides opportunities to explore options to encourage this rerouting and measure to limit the appeal of the A41 as a strategic route.
 - Opportunity to reconfigure local road networks and specific junctions to provide resilience at key issue areas.

5 Socio-Economic Context

This section provides an overview of socio-economic trends across Wirral and within the A41 South study area. Primarily it identifies issues and opportunities regarding population growth, employment levels, deprivation and car ownership which this study could look to address.

5.1 Population

The most recent population count for the borough stood at 323,200²⁸ and is forecast to increase to 328,500 by 2039, a percentage increase of 1.6%. Table 5.1 illustrates the mid-year population estimates for Wirral and the North West to demonstrate population growth across the borough compared to trends at the regional scale.

Table 5.1: Mid-year population estimates

Area	Population			
	2015	2025	2035	% increase (2015-2035)
Wirral	321,700	326,000	328,000	2%
North West	7,175,178	7,446,500	7,613,600	6.1%

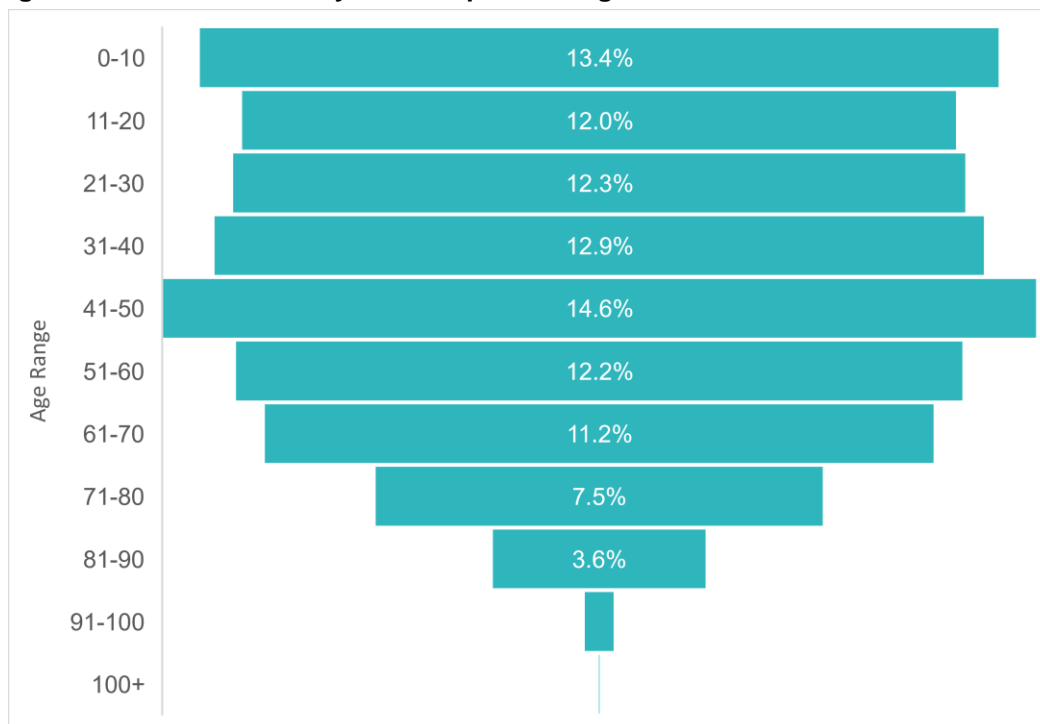
Source: ONS

This shows that the population in Wirral is growing steadily and therefore the transport network must evolve alongside growth to ensure demand continues to be accommodated. The population within the study area is around 36,400²⁹. The age breakdown of the population within the study area is illustrated in Figure 5.1. This shows that largest age band in terms of population is age 41-50. Just over half of the population in this area of Wirral (50.5%) are under the age of 41.

²⁸<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland>

²⁹ The study area is defined by the following LSOAs (21D, 27B, 27C, 27D, 31B, 31C, 31D, 31E, 36A, 36B, 36C, 39A, 39B, 39C, 39D, 41C, 41D, 41E, 42A, 42B, 42C, 42D and 42E)

Figure 5.1: A41 South Study Area- Population Age breakdown



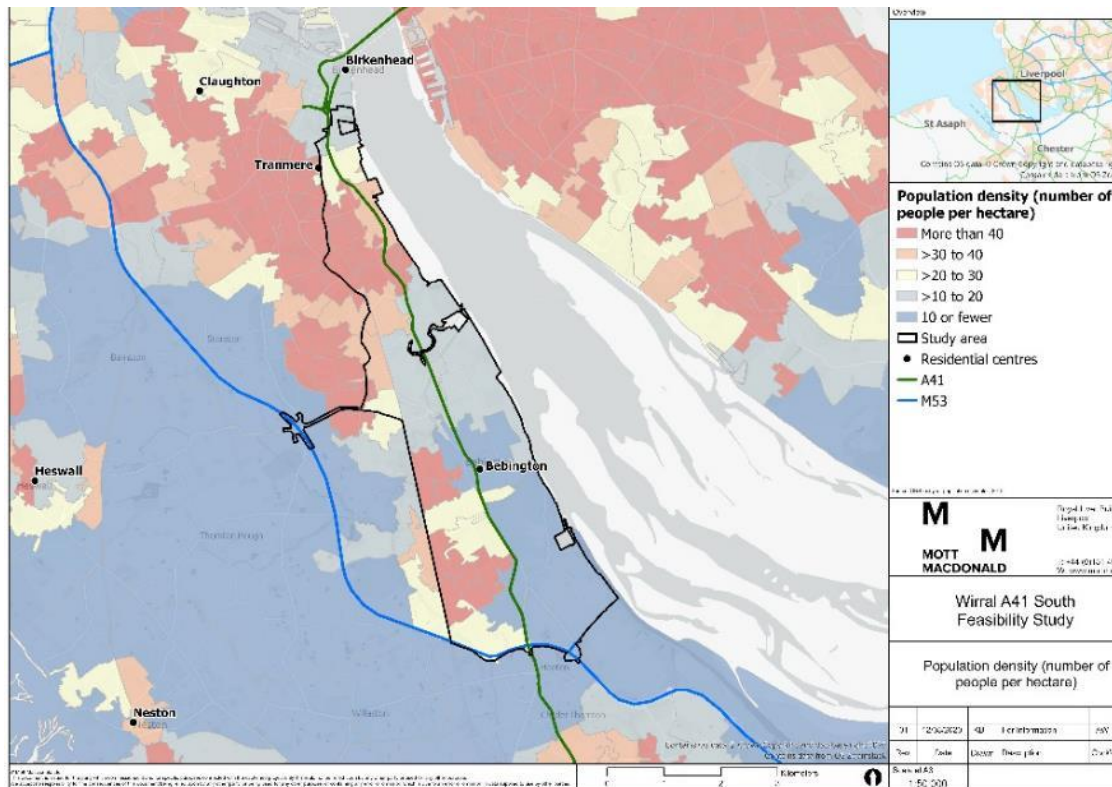
Source: ONS

The slightly younger age profile of the study area lends itself to public transport and active travel provision as it can be argued that younger populations are more likely to travel by public transport and active travel due to the affordability of driving and this being limited to those over 17. Improvements to the networks could increase the proportion of this population who travel by sustainable modes creating a sustainable travel environment across the study area. The age profile of the study also emphasises the need to ensure residents within this area are able to efficiently access to jobs and opportunities via a range of modes.

Transport improvements along the A41 will need to provide an improved transport network for Wirral's existing population whilst also accommodating growing demand associated with population growth ensuring efficient access to jobs and opportunity is maintained and enhanced.

Figure 5.2 shows a north-south disparity in terms of population density. In the north of the study area, the outskirts of Tranmere are densely populated, due to the closer proximity to Birkenhead as a key urban centre on the Wirral. The outskirts of Bebington are also densely populated, but the majority of the south of the study area is sparsely populated (with 10 or fewer people per hectare). In general, the most densely populated areas coincide with the most deprived areas.

Figure 5.2: Population density, 2018



Source: Population estimates, ONS, 2018 © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Connectivity will be particularly important in these densely populated areas to ensure residents are well connected by a variety of modes with sufficient capacity to provide access to jobs, training opportunities and key services and facilities.

5.2 Economic Activity

Table 5.2 presents the most recent data available on employment and economic activity across Wirral, the North-West and Great Britain as a whole. This shows a significant reduction (around 5%) in unemployment from the levels present within 2011 Census Data. This is presumably a reflection of major investment across Wirral as a whole within this time period.

Wirral has a slightly lower number of economically active persons (72.9%) than the North-West (77.1%). These figures are also slightly lower than that of Great Britain, where comparatively 78.9% are economically active and 75.6% are in employment.

Table 5.2: Employment and Unemployment (Jul 2018-Jun 2019)

	Wirral Numbers	Wirral (%)	North West (%)	Great Britain (%)
Economically active	155, 300	72.9%	77.1%	78.9%
In employment	150, 800	76.9%	73.9%	75.6%
Employees	130, 000	67%	64.3%	64.6%
Self-employed	20, 300	9.8%	9.4%	10.7%
Unemployed	4, 800	3.1%	4%	4.1%

Source: NOMIS

As 2019 data is only available at the borough level the exact change in unemployment and economic activity for the A41 South study area is unknown. It can be assumed that growth in the number of people economically active and a reduction in the level of unemployment will have occurred to some degree across all areas of Wirral, however it is likely that there will still be a variation between wards. This is reflected in the varying levels of deprivation and development across the borough, which is discussed below.

As there may be a slightly higher level of unemployment within the A41 study area than Wirral and the North West, schemes considered within this study will need to ensure connectivity to jobs and training opportunities across the borough and wider LCR is enhanced by facilitating access to a range of accessible modes.

5.2.1 Wirral's Employment Sectors

Approximately 101,000 individuals were employed in jobs across Wirral in 2018, indicating the boroughs role as a source of employment within the wider region. The five largest employment sectors within the Wirral are listed in the table below, alongside details of the growth of these sectors between 2015 and 2018 are provided in Table 5.3.

Table 5.3: Number of Employees in Wirral's Top Employment Sectors

Employment Sector	2015	2016	2017	2018
Human Health and Social Work Activities	23,000	22,000	25,000	23,000
Wholesale and Retail Trade	15,000	14,000	15,000	16,000
Education	11,000	11,000	11,000	10,000
Manufacturing	8,000	8,000	8,000	8,000
Professional, Scientific and Technical Activities	7,000	8,000	7,000	8,000

Source: Business Register and Employment Survey

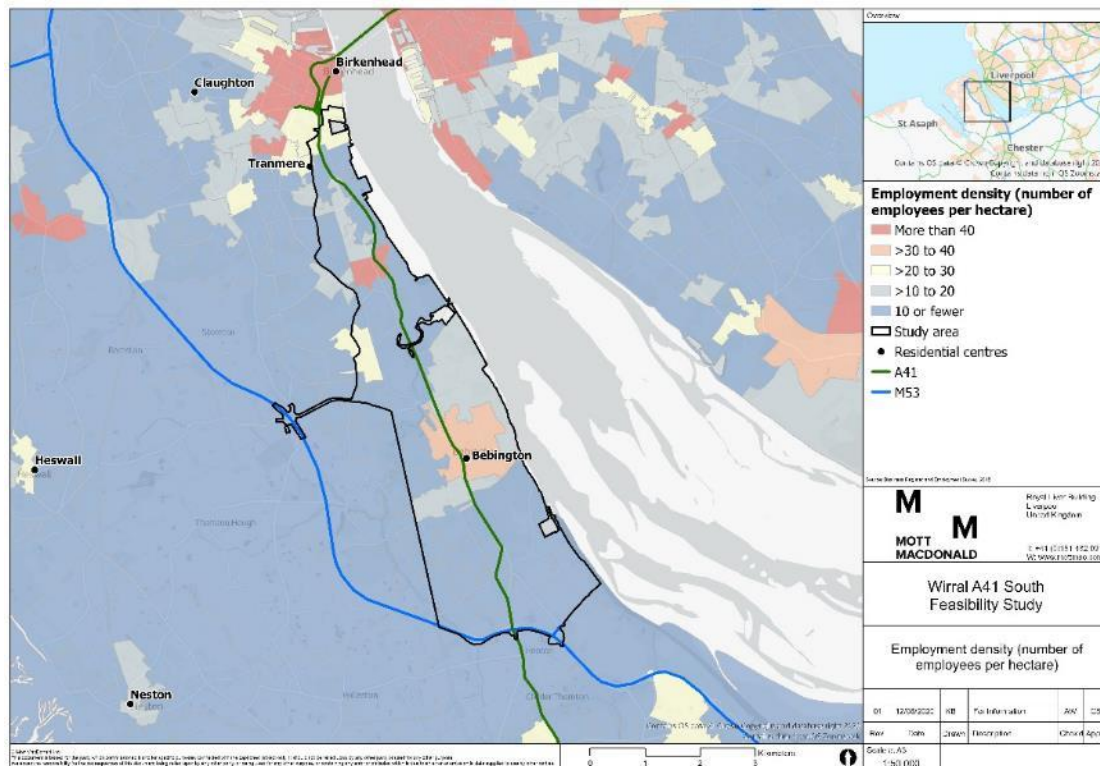
Whilst Wirral continues to employ a significant number of individuals it should also be noted that the number of jobs across the borough has remained fairly consistent since 2015. Data indicates that there has been a minimal increase in the number of jobs opportunities across Wirral. It is therefore important schemes support access to new employment development and that the transport network remains efficient and attractive in order to attract investment.

As part of the development of the Local Plan, a Wirral Employment Land Use study is being undertaken which will provide additional data on employment within the study area, and more information on potential employment sites for future development.

5.2.2 Employment density

Employment density is relatively low across the study area, averaging around 10 employees or fewer per hectare, as shown in Figure 5.3. There are pockets of higher employment in the urban areas of Bebington and south of Tranmere. Outside of the study area, Birkenhead's employment base is very densely populated, given its status as a base for local services. This suggests most residents will commute outside the study area to access economic opportunities.

Figure 5.3: Employment density (employees per hectare), 2018



Source: BRES, ONS, 2018 © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

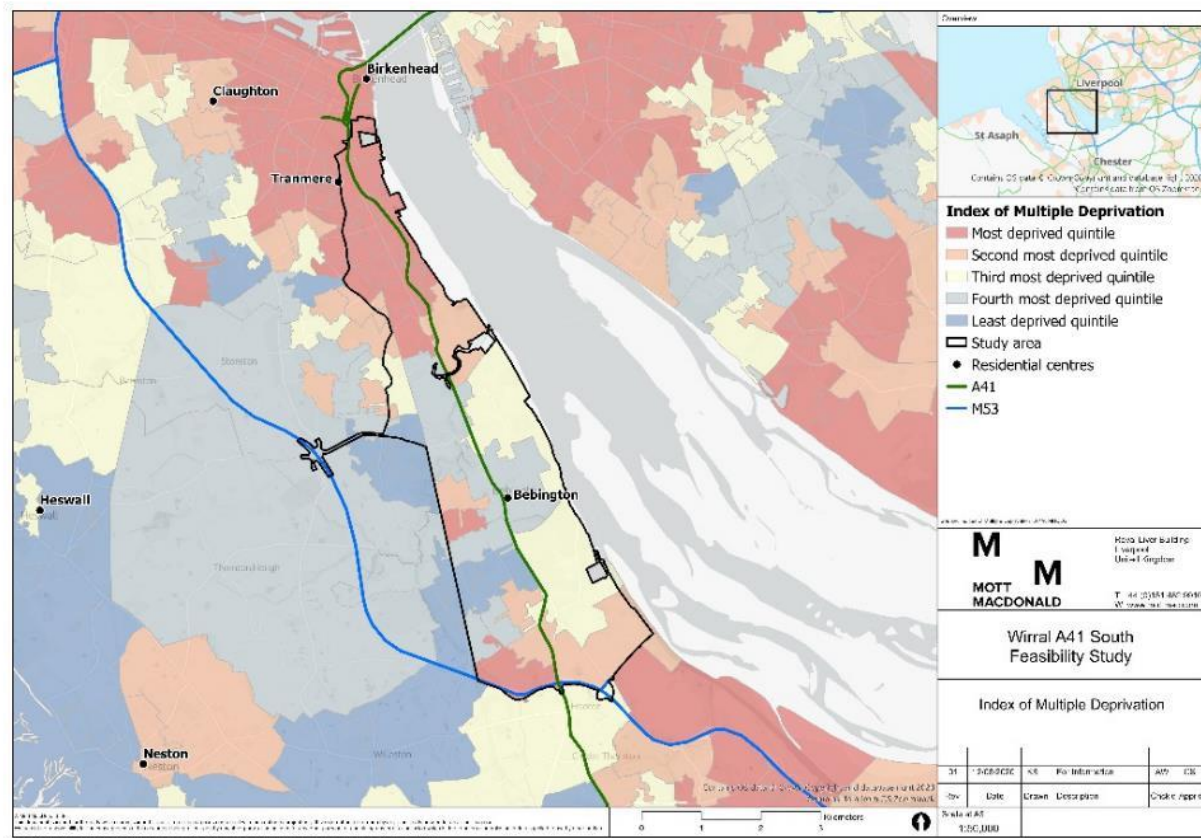
This is also reflected within Section 3.1 which illustrates the large amount of residential development within the study area. The low employment density may also support opportunities to reconsider the role of the corridor as less of a strategic route which provides access to jobs for a large number of employees.

5.3 Deprivation

Just over 35% of the Wirral population (around 115,500 people) now live in areas classified as being in the most deprived 20% of areas in England. This has increased since the last Index of Multiple Deprivation (IMD) in 2015, when 32% of the Wirral population were classed as living in deprivation.

Figure 5.4 below illustrates deprivation by LSOA in Wirral according to the latest data from the IMD in 2019. This shows there are varying levels of deprivation across the study area. The northern area surrounding Tranmere is almost exclusively in the most deprived quintile, but there are also pockets of deprivation to the west and south-west of Bebington. Bebington itself is located in the fourth most deprived quintile. There is one least deprived quintile area to the south of Bebington.

Figure 5.4: Wirral according to the overall Index of Multiple Deprivation (IMD), 2019



Source: Index of Multiple Deprivation (IMD), MHCLG, 2019 © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

The Indices of Multiple Deprivation combines information from various domains including health, barriers to housing, living environment and access to employment and training opportunities.

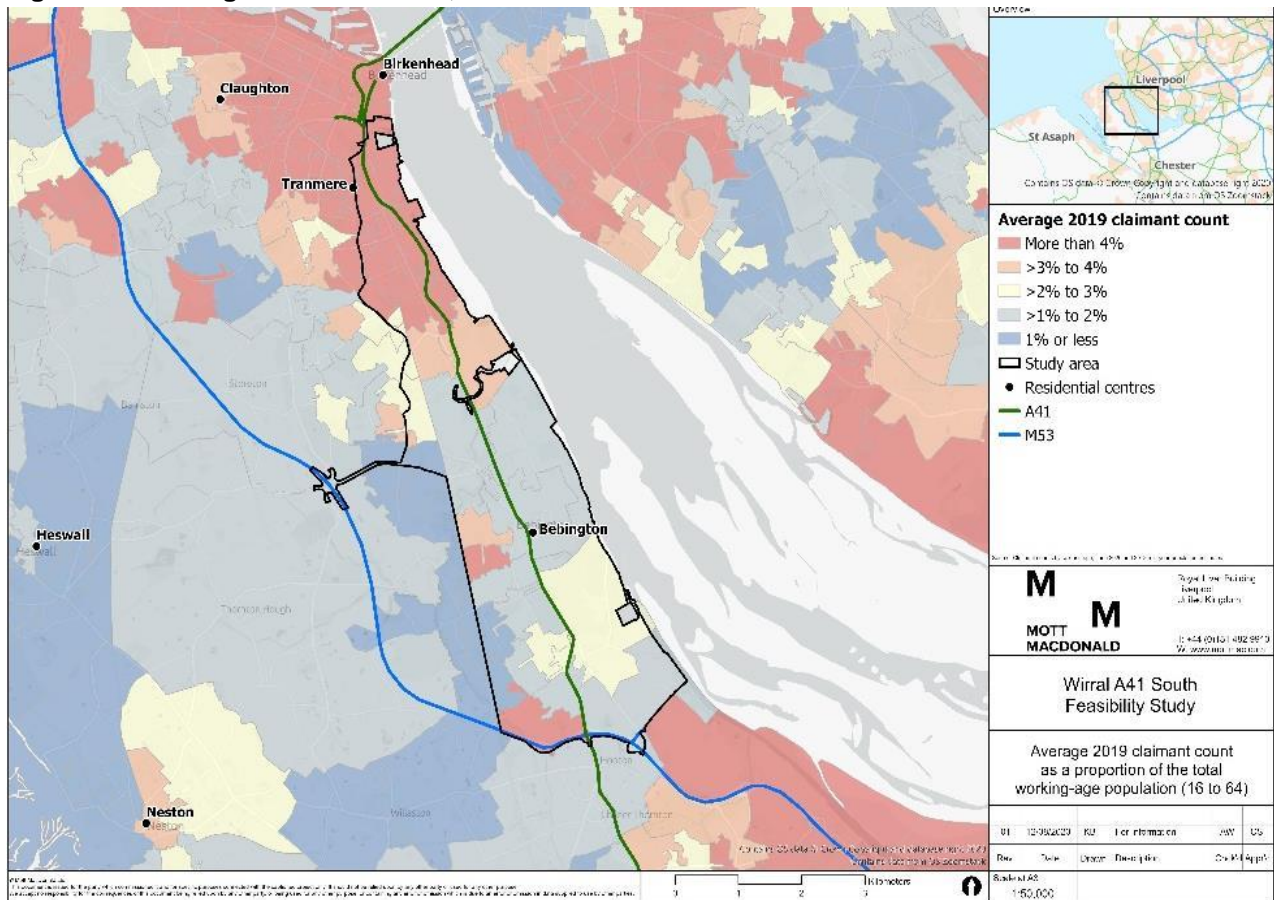
It is therefore essential that this study looks at ways in which the infrastructure within the study area can better connect people and places in this part of the borough to ensure job opportunities, training and health services are available for residents and that they are accessible for all in order to help reduce levels of deprivation.

5.3.1 Claimant count before and after COVID-19

Figure 5.5 and Figure 5.6 show the average claimant counts in 2019 and 2020. These maps provide insight into the previous trends in unemployment seen pre-COVID and the impacts of COVID-19 on unemployment in the study area.

Figure 5.5 shows that in 2019, there was a north-south divide in claimant count in the study area, with the bulk of claimant count recipients based in the north of the study area, near Tranmere and Birkenhead. There were pockets of high proportions of claimant counts to the west and south of Bebington. In general, Bebington is more reflective of the west of the Wirral, with relatively low claimant count proportions.

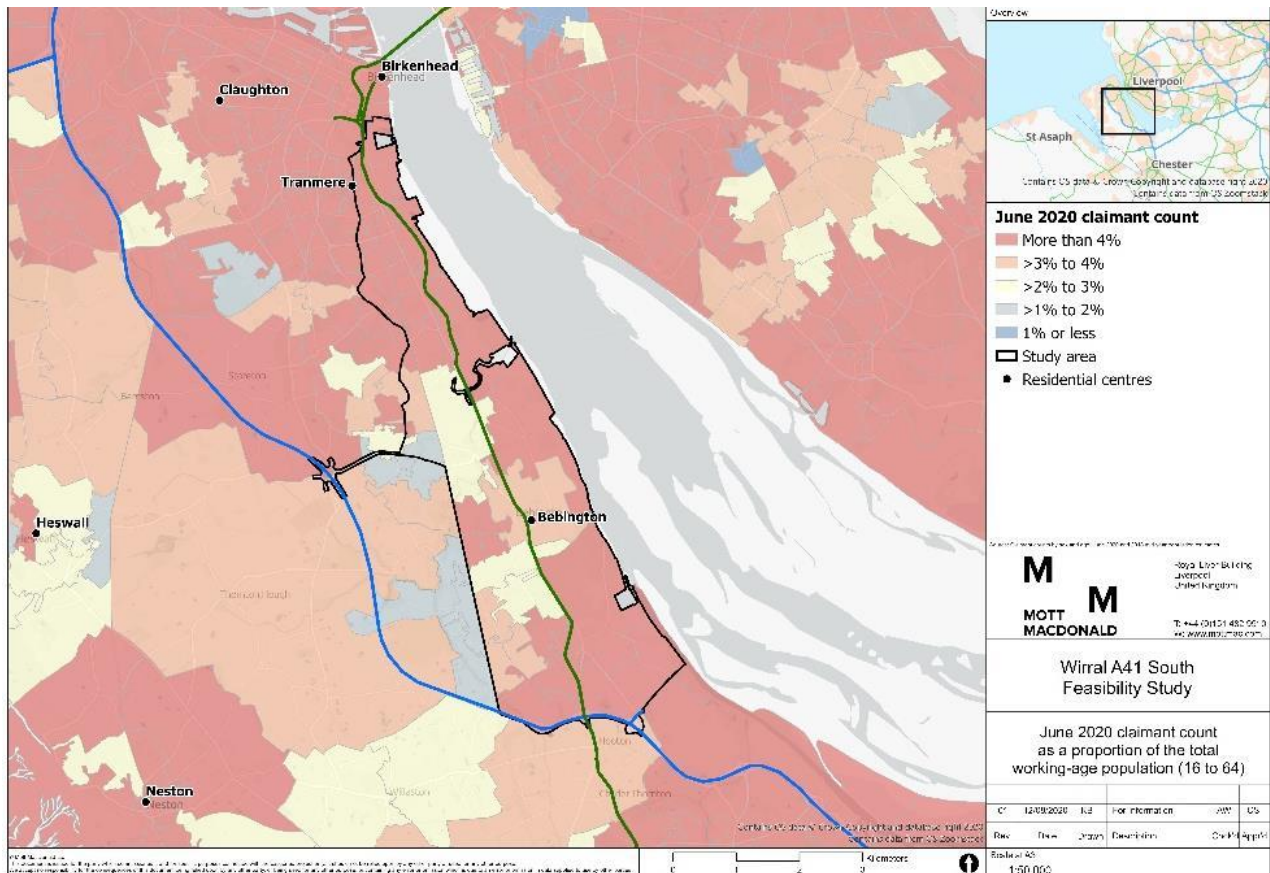
Figure 5.5: Average claimant count, 2019



Source: Claimant count, ONS, 2019 © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

The year-on-year change in Figure 5.6 shows a steep rise in claimant count proportions from 2019. A high proportion of the study area now has an average claimant count of 4% or above, compared with 2019's average when this level was concentrated in a few areas. This can be explained in part by the economic recession resulting from Covid-19.

Figure 5.6: Average claimant count, June 2020



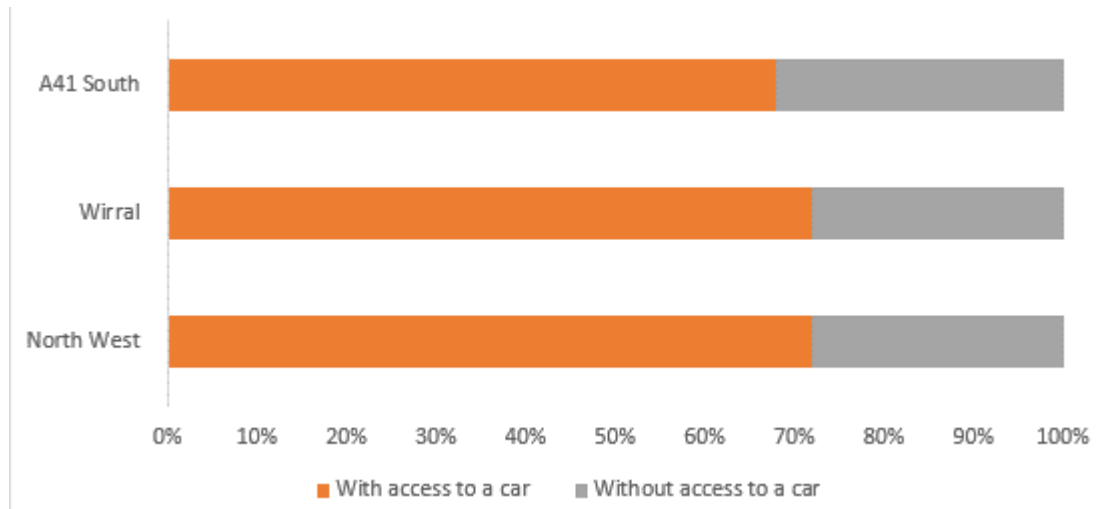
Source: Claimant count, ONS 2020 © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

This further emphasises the need to ensure people are well connected to jobs and training opportunities and that the boroughs transport network is able to support growth within the recovery period after COVID-19 and provide new opportunities for residents.

5.4 Car Ownership

Figure 5.7 illustrates the level of car ownership within the study area, across the borough and in comparison to regional level.

Figure 5.7: Percentage of Households with and without access to a car

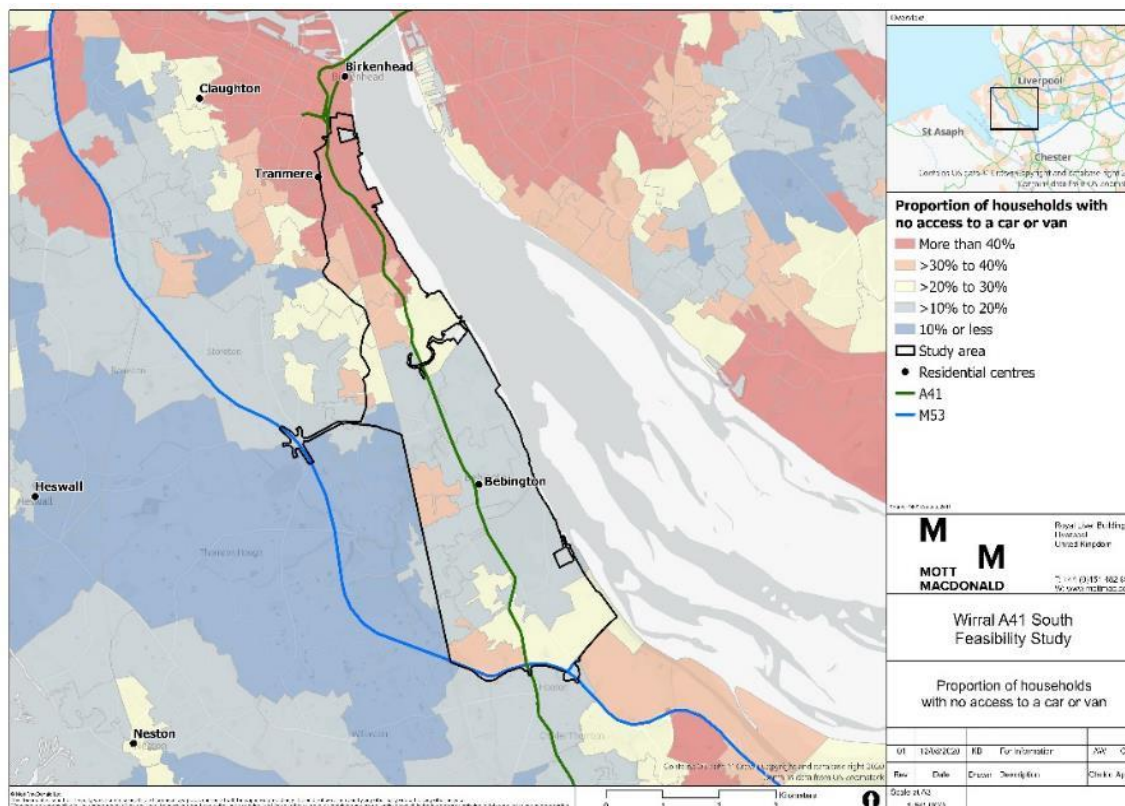


Source: Nomis

This demonstrates slightly lower levels of car ownership within the study area compared to the rest of the borough and the North West. Walking, cycling and access to public transport will therefore be particularly important to ensure residents within this area are able to access jobs and opportunities.

Figure 5.8 illustrates how the levels of car ownership vary across the study area. To the south of the study area, around Bebington, access to a private car or a van is relatively high, with the majority of households (80-90%) having access to a car or a van. There are some pockets of low accessibility, to the west and south-west of Bebington. In the north of the study area, in some areas around Tranmere, more than 40% of residents do not have access to cars. This suggests that residents in the north of the study will be more reliant on public transport, due to a lack of private vehicle access.

Figure 5.8: Map of proportion of households with no access to a car or van



Source: Census 2011, ONS. © Crown copyright and database rights 2020 Ordnance Survey 100019803. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

Schemes considered within this study will therefore need to address severance for pedestrians and cyclists and ensure public transport services remain efficient, reliable and accessible despite increasing pressures on the network as a result of development.

Low levels of car ownership within the area also provides opportunities for active travel and public transport as there is a well-established market, with a significant proportion of the population already willing to travel by means other than a private vehicle.

5.5 Summary

The above sub sections have summarised the socio-economic trends within the study area and across the borough as a whole. The key issues and opportunities associated with these trends and what this means for the study is summarised in the table below:

Table 5.4: Socio-economic context- key issues and opportunities

Issues	Opportunities
Population	
<ul style="list-style-type: none"> The population of the Wirral is growing steadily and therefore the transport network must evolve alongside growth to ensure demand continues to be accommodated. 	<ul style="list-style-type: none"> The slightly younger age profile of the study area lends itself to public transport and active travel provision. Improvements to these networks could increase the

Issues

- The north of the study area is more densely populated than the south.
- In general, the most densely populated areas coincide with the most deprived areas.

Opportunities

- proportion of this population who travel by sustainable modes.
- The age profile of the study emphasises the need to ensure residents within this area are able to efficiently access to jobs and opportunities via a range of modes.
- Connectivity will be particularly important in densely populated areas to ensure residents are well connected by a variety of modes with sufficient capacity to access jobs, training opportunities and key services and facilities.

Economic Activity

- The A41 South has a slightly higher rate of unemployment than the rest of the borough
- Wirral has a slightly lower number of economically active people than the average for the North West and Great Britain.
- There is little evidence of growth in the number of job opportunities across Wirral.
- Employment density is relatively low across the study area, averaging around 10 employees or fewer per hectare, suggesting most residents will commute outside the study area to access economic opportunities.
- This study offers the opportunity to open up land for new employment development and ensure transport network remains efficient and attractive in order to attract investment.
- Low employment density within the study area may support opportunities to reconsider the role of the corridor as less of a strategic route which provides access to jobs for a large number of employees.

Deprivation

- Just over 35% of the Wirral population (around 115,500 people) now live in areas classified as being in the most deprived 20% of areas in England.
- There are varying levels of deprivation across the study area. The northern section of the study area exhibits greater deprivation relative to the south. However, there are pockets of high deprivation to the west and south west of the study area.
- Prior to COVID-19, there was a north-south divide in claimant count in the study area, with the bulk of claimant count recipients based in the north of the study area.
- This year, following the COVID-19 lockdown, the proportion of claimant counts has increased across the study area.
- Improving the transport network in this area of the borough will better connect people to jobs, opportunities and services contributing to a reduction in the level of deprivation.
- Opportunities for enhancing active travel facilities should be explored within this study to contribute towards improving the wellbeing of residents through improved air quality and increased uptake in walking and cycling.

Car Ownership

- A high proportion of residents within the A41 South Study area do not have access to a car which is often associated with higher levels of deprivation.
- Lower levels of car ownership around within pockets of the study area implies that car travel is not embedded as a dominant mode, offering opportunities to

Issues

- Without adequate public transport and active travel infrastructure, residents risk being isolated and unable to access opportunities.
- Private vehicle access is more limited in the north of the study area, residents in this area are therefore more likely to be reliant on public transport and active modes.

Opportunities

- reduce the capacity of the highway network in this area to make better use of space.
- There is demand for public transport and active travel networks within and around the study area as a significant proportion of the population do not have access to a car.
- Improved public transport and active travel infrastructure could open up opportunities for residents which are currently considered unviable due to a restricted ability to access them.

6 Stakeholder Engagement

As part of this study, we have engaged with a number of key stakeholders to both capture their comments on the current situation within the study area, as well as their feedback on potential schemes. This section briefly outlines details of the engagement undertaken with the key stakeholders carried out to date.

6.1 Cheshire West and Chester Council (CW&C) and Highways England

During the early stages of this study a meeting was held on the 4th August 2020 with representatives from CW&C and Highways England to understand any proposed schemes or developments which they are developing in proximity to the study area which may have an impact on the transport network or influence any schemes proposed within this study.

Although both authorities highlighted a number of schemes planned or underway within their networks, nothing was identified which would directly impact the A41 South study area or schemes proposed within the study.

There was however discussion about the merit of some cross-boundary schemes and tie-in to schemes already being considered, particularly at the motorway junctions on the M53 and connectivity to cycling and walking provisions south of the study area in CW&C.

6.2 Active Travel Forum

A meeting was held with members of the Active Travel Forum on 28th August 2020 to discuss with them the issues and opportunities from an active travel perspective, and to identify any schemes which they would like to see considered further as part of this study. The study was attended by several local councillors as well as walking and cycling enthusiasts representing a variety of users, including representatives for those with mobility or visual impairments.

6.3 Wirral Borough Council Officers

As well as engagement at the two sessions noted above, we also engaged with a wide range of officers at Wirral Borough Council, undertaking two workshops:

- **Workshop 1: Defining the role of the corridor.** More information on this is provided in Chapter 7 but the purpose of this session was to try to define future aspirations for the corridor in terms of its functionality and sense of place.
- **Workshop 2: Optioneering (a review of the emerging long list).** At this session, we shared with officers the emerging long list and asked for their feedback on this, to include any amendments or additions to ensure the list was as comprehensive as possible.

The conclusions and outputs from these sessions are discussed in the next chapter.

7 Defining the character of the corridor

This chapter provides an overview of the discussions held with the Wirral team to discuss, identify and agree the future vision for the corridor, and presents the guiding aims and objectives which will be used to guide the long list option development.

7.1 Developing the Study Vision

As noted in the previous chapter, a workshop was held with a variety of Wirral Officers to discuss the role of the corridor and to begin to define its character to enable the identification of schemes appropriate to supporting achievement of this vision. At the meeting, the following key points were discussed:

- Quality of existing infrastructure especially walking and cycling provisions is key, not just the type of provision.
- The Local Plan is looking to increase residential capacity at former industrial areas including Wirral International Business Park (WIBP). The study will need to consider the impact of this and new connectivity to facilitate it.
- Baseline work demonstrates open space is predominantly to the east of the A41 with schools and local/community facilities to the west, demonstrating the need for those living on either side to cross the corridor.
- The Wirral Circular Trail needs to be of a high quality and attractive right along its length to encourage better use.
- Consensus over poor coastal accessibility with opportunities to be explored here
- The A41 has been identified as a future LCWIP corridor to link to the Birkenhead to New Brighton corridor in the North and potentially with CWACs LCWIP in the south
- School access is particularly key in light of Local Plan housing being located on the eastern side of the A41, with schools on the west, and the desire to not encourage/require car-based commuting to schools because of a lack of safe or direct walking and cycling routes.
- Schemes need to be ambitious in nature and discussion about how ambitious Wirral are willing to be with this. Agreement that level of ambition likely to require phasing and need to get local elected members and councillors on side with radical change.
- The A41 provides resilience in the event of incident on the M53 as well as keeping through or longer-distance traffic out of adjacent residential roads.
- Tendency for people to drive to a station further north than their local station to use rail services through to Birkenhead or across the Mersey to Liverpool. Better rolling stock, train capacity and station access may encourage people to instead use their local station and remove these trips from the network. It is, however, noted that Merseyrail are implementing new rolling stock which is capable of carrying 50% more passengers with further upgrades such as space for bikes. Services are expecting to run with the new trains from 2021.
- Disconnect between rail stations and active travel routes- particularly needs to be considered from the east if residential development will increase
- Capacity improvements will be required at some junctions but rather than full-scale junction improvements these could be limited to changes to approach arms.
- Particular queuing issues noted on northern approach to Rock Ferry By-Pass while A41/ Old Hall Road junction into Wirral Business Park area noted as a key junction for movement off the A41 and resultant capacity issues – particularly looking to 2035 LP modelling.

- Likewise, some junctions may be able to be changed to restrict or remove turning movements, to encourage use of alternative routes and discourage through movements.
- Need to consider where traffic would re-route/ rerun if traffic is encouraged away from the A41
- A major capacity increase for the corridor could be provided for by the proposed Mass Transit system – this is a key mechanism for generating sustainable capacity -albeit the Merseyrail network could provide this through upgrade.
- Vision and validate is the required approach for schemes in this study area, rather than the traditional predict and provide. This is especially important in light of the declared climate emergency, driving a need to be ambitious.
- The Local Plan work has produced an Air Quality Study which can be fed into the process.
- A balance will need to be struck between making the A41 south more permeable and providing new amenities on the same side of the corridor as residential locations.
- Messaging will be key, with a stress on not supporting developments which are over accommodating for private vehicles, compared to active and public transport access.
- From the ongoing regeneration work in New Ferry, the bypass is blamed by many for the decline in the town's fortunes. Schemes have been suggested to link the bypass back into the local road network at its midpoint (current underpass), and to improve accessibility and linkage to the waterfront.

In summary, the future visions of the A41 should include:

- Stopping through traffic and encouraging better use of the M53 for these trips
- Encouraging local trips to be undertaken by foot or bicycle by facilitating safe and coherent routes
- Addressing existing barriers and pinch points to movements, particularly for walking and cycling
- Supporting Local Plan development to come forwards not relying on use of private cars
- Supporting access to local employment sites (present and proposed) in a sustainable manner
- Creating a better sense of place for the corridor to reduce the effect of severance
- Enhance the quality of existing facilities to encourage better use
- Be ambitious in the type of schemes suggested to support a reduction in car trips, and sustainable growth in the area.

7.2 Study Aims and Objectives

Following this discussion, and upon reviewing the baseline information provided earlier in this report, a set of aims and objectives for the study have been developed, which are set out below:

1. To enhance east-west connectivity

- a. For pedestrians and cyclists across the A41
- b. For proposed development sites on the eastern side of the A41 to support safe and easy access between local facilities and schools on the western side, as well as facilitating access from the west to employment opportunities in the east

2. Supporting Local Plan Delivery

- a. To ensure Local Plan developments within the study area are well connected and accessible particularly by active modes.
- b. This includes identifying measures recommended to support the sustainable delivery of sites.

3. Addressing existing barriers to movements

- a. To support active travel and public transport trips over facilitating the private car to encourage greater use of these modes.
- b. To provide a comprehensive and coherent high-quality walking and cycling network within the study area to accommodate journeys to key attractors

4. Reimagining the A41

- a. As a local access route rather than a strategic distributor, enhancing the sense of place and removing through traffic
- b. Road space reallocation north of Wirral International Business Park. Exploring the possibility of reducing the number of traffic lanes; particularly between junctions and reallocating the space for other uses – such as segregated cycle lanes and better pedestrian crossing facilities.
- c. 30 mph also north of Wirral International Business Park, and reconfiguring the highway to reflect the lower speed limit
- d. District and Local centre public realm schemes

5. Making the most of the asset

- a. Waterfront access through improved and continuous riverside path adjacent to the Mersey and connections onto this from surrounding areas to promote the route for leisure.
- b. Improved access and connectivity to the Merseyrail network
- c. Improved access and connectivity to the local bus network (improved journey times)
- d. Enhanced (public transport) connectivity to the A41 North area and the associated regeneration and re development proposals
- e. Maintenance of assets. The A41 corridor is fortunate that it is mainly at-grade, but there are elevated structures, such as the bridge crossing of Dibbinsdale Brook, which will need to be adequately maintained to protect the integrity of the corridor. There are also other assets which will need to be improved to maximise their benefit and then maintained moving forwards.
- f. Upgrading technology. Such as optimising the Urban Traffic Control system for signalised junctions along the A41 corridor to better manage traffic flows, minimise wait times for pedestrian road crossings, and prioritising public transport vehicles. Further detailed discussions are required with Wirral Council UTC to understand scope of opportunities.

8 Long List Schemes

This chapter presents the long list of schemes developed to address issues and opportunities across the study area, and was compiled through a combination of literature and policy review, understanding from the baseline work, stakeholder feedback, public comments from the Liveable Streets database, site visits and input from Wirral Council Officers.

The long listing stage of the project first took into consideration the baseline work which identified the issues and opportunities in the study area and combined this knowledge with that gleaned through the stakeholder engagement. The consultant team developed a 'long list' of schemes which address issues raised, capitalise upon opportunities coming forwards and pick up on schemes and points raised by key stakeholders. This was shared with and reviewed by the Wirral Council stakeholder group to agree the final long list.

The long list has been developed to address the aims and objectives of the study as introduced in the preceding chapter, with schemes categorised by mode and location. To aid presentation, the following tables present the long list of schemes for the study area broken down by mode as follows with accompanying plans to detail the geographic location of schemes where they are able to be mapped:

- | | | |
|-----------------|------------------------------|-----------------|
| ● Active Travel | ● Multi Modal | ● Public Realm |
| ● Bus | ● Park & Ride and
Parking | ● Rail |
| ● Highway | | ● Rapid Transit |

The locations of the schemes (where able to be mapped) are shown on the suite of plans in Appendix B.

8.1 Active Travel

Scheme ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
1	Active Travel Routes across the M53	Deliver new crossings over and under the M53, along with improved cycling routes in urban areas.	Poor connectivity for pedestrians and cyclists over the M53, creating a severance to movement	Interface with Highways England, Schemes 4, 5	0-5	£3m-£10m	Multiple
2	Wirral Circular Trail Improvements - Rock Ferry Bypass Crossing	This scheme would deliver safety improvements to Wirral Circular Trail crossing of the A41 Rock Ferry By-Pass at its northern end	Key lines of severance to pedestrian/cyclist movement exist within the study area such as the rail line and the A41 itself which limit connectivity Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Links to schemes 7, 8	0-5	<£1m	Tranmere
3	Port Sunlight Path cycling improvements	This scheme would deliver improvements to the cycle path running adjacent to Magazine Road and running beneath the A41. Proposals include signage, drainage and lighting improvements	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	7	0-5	<£1m	Bromborough
4	M53 Junction 4 cycling improvements	This scheme would deliver improved crossing of the M53 at Junction 4 by using Old Clatterbridge Road including lighting. Additional works include improvements to the Brackenwood link by converting the existing footpath into dual use	Poor connectivity for pedestrians and cyclists over the M53, creating a severance to movement	Interface with Highways England	0-5	<£1m	B5137 Corridor
5	A41/M53 J5 cycling improvements	This scheme would deliver signalised crossing points across slip roads (filter lane from the southern section of the New Chester Rd requires further consideration)	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift Safety concerns for pedestrians and cyclists	Interface with scheme 1, 32, 68	0-5	<£1m	Eastham

Scheme ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
6	New Chester Road cycling improvements	This scheme proposes formalised separation for cyclists along the Green Lane to Rock Ferry By-Pass section of the A41 New Chester Road	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Links with scheme 22, 29, 40, 42	0-5	<£1m	Tranmere
7	Wirral Circular Trail Improvements - Port Sunlight River Park cycling improvements	This scheme proposes the diversion of the Wirral Circular Trail via Bolton Road East, Dock Road North, Sunlight River Park and Dock Road South to avoid busy section of A41 (requires access over locked bridge across Dibbinsdale Brook	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift Disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations.	Links with schemes 2, 3, 8 Link to delivery of DB Oils site	0-5	<£1m	Port Sunlight
8	Wirral Circular Trail Improvements - Campbeltown Road	This scheme would deliver separated cycle lane provision along Campbeltown Road and a signalised crossing point across the northern end of the Rock Ferry By-Pass	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Links with schemes 2, 7	0-5	<£1m	Tranmere
9	LCR LCWIP Phase 3 route Birkenhead to Eastham	Development of walking and cycling corridor from Birkenhead to Eastham as identified as priority route in LCR LCWIP which will provide strategic corridors with separated routes away from the traffic	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift Disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations Provision for safe and attractive walking and cycling needs to be extended to support upcoming developments	Will need to interface with the Birkenhead Regeneration Framework work	0-5	£3m-£10m	Birkenhead to Eastham

Scheme ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
10	Connectivity to LCWIP Phase 2 route New Brighton-Birkenhead	Ensure the provision for walking and cycling infrastructure is well connected to the LCWIP Phase 2 route New Brighton-Birkenhead which will provide strategic corridors with segregated routes away from the traffic	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift Disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations Provision for safe and attractive walking and cycling needs to be extended to support upcoming developments	Will need to interface with the Birkenhead Regeneration Framework work	0-5	£3m - £10m	New Brighton to Birkenhead
11	Green Corridor Southern Extension-Birkenhead Central to Green Lane / Cammell Laids via disused railway	Extend Green corridor south through Hind Street site and then at high level using historic corridor over Waterloo Place and Mollington Road. The corridor would extend south to interchange with Green Lane and could terminate at Rock Ferry or divert to the east into Cammell Laird via Turbine Road	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Interfaces with A41 N work	5-10	£3m-10m	Tranmere
12	Clatterbridge - Mersey Waterfront Corridor Improvements	Improved walking and cycling route along B5137 Brimstage Road / Spital Road and on Mill Road and Magazine Road to create an improved route between Clatterbridge and the waterfront.	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift Disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations Provision for safe and attractive walking and cycling needs to be extended to support upcoming developments	Supports Local Plan development sites at Clatterbridge Hospital (122 dwellings proposed and current concerns	5-10	£3m-£10m	B5137 Corridor
13	Wirral Circular Trail Improvements - Coastal Cycle Strategy	Improved access to coastal areas for pedestrians and cyclists and greater connectivity without resorting to convoluted on-street routeing	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift Disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations Lack of off- road cycle routes within the study	Interfaces with schemes 2, 7 and 8	0-5	£3m-£10m	Multiple

Scheme ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
			area which are often the most safe and attractive and therefore offer the greatest opportunity to increase active travel uptake.				
14	Improved crossing facilities at A41 / Croft Avenue East junction	Enhanced super crossing facilities at this junction to reduce the wait time and allow one movement crossing for pedestrians and cyclists at this busy junction	Key lines of severance to pedestrian/cyclist movement exist within the study area such as the A41 itself which limit east west connectivity		0-5	£1m-£3m	Bromborough
15	Creation of Coastal Route from Port Sunlight River Park to Eastham Country Park	Opening of bridge facilities and provision of access along the coast between PS River Park and Eastham Country Park, removing the need to walk / cycle via the heavily industrial Wirral International Business Park	Disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations		5-10	£10m-£20m	Bromborough
16	Cycling facilities on B5136 Boundary Road	Creation of cycling facilities on Boundary Road to tie in with the proposed New Ferry Masterplan and reduce severance between Port Sunlight and New Ferry Town Centre	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	New Ferry Masterplan	0-5	£3m-£10m	Port Sunlight
17	Improved access to disused rail walk / cycle route between Croft Retail Park and Port Sunlight	Opening up of access, surface and lighting improvements	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift Disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations		0-5	£1m-£3m	Bromborough
18	Resurfacing and refurbishing Rock Ferry Promenade	Upgrade of Rock Ferry Promenade between Bedford Road East and New Ferry so that access is suitable for all.	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Interface with 27	0-5	£3m-£10m	New / Rock Ferry
19	Eastham Country Park walking and cycling access improvements from A41	Upgrade of east / west walking and cycling routes from the A41 to Eastham Country Park.	Key lines of severance to pedestrian/cyclist movement exist within the study area such as the A41 itself which east-west limit connectivity Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift		0-5	£1m-£3m	Eastham

Scheme ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
20	A41 street furniture decluttering	Removal of redundant street furniture along the A41, including guard railing, poles, bollards	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift		0-5	£1m-£3m	Multiple
21	A41, improved east / west pedestrian crossing facilities	A review of existing pedestrian crossing facilities of the A41 in light of existing and future pedestrian desire lines and develop improvement proposals.	Key lines of severance to pedestrian/cyclist movement exist within the study area such as the A41 itself which east-west limit connectivity		0-5	£3m-£10m	Multiple
22	New Chester Road 20 mph zone	Traffic management measures to significantly change the appearance of New Chester Road through New Ferry to effectively manage speeds.	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Scheme 6	0-5	£3m-£10m	Multiple
23	Dibbinsdale Brook walk route	A review of the possibility of creating a walk route along Dibbinsdale Brook between the River Mersey and Dibbinsdale Park.			0-5	£1m-£3m	Bromborough
24	Eastham to Ellesmere Port walk / cycle route	A review of the possibility of creating a walk and cycle route between Eastham and Ellesmere Port along public roads and disused rail lines.	Lack of off- road cycle routes within the study area which are often the most safe and attractive and therefore offer the greatest opportunity to increase active travel uptake.		0-5	£1m-£3m	Eastham
25	WIBP access junction Improvements (Old Hall Road)	Improved crossing facilities for pedestrians and cyclists	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Link to development of sites on Old Hall Road	0-5	£1m-£3m	Bromborough
26	Cycle lanes along Riverbank Road	Reallocation of road space to create high quality separated cycle lane along the length of Riverbank Road for Wirral Circular Trail.	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Interface with schemes 2, 7 8	0-5	£1m-£3m	Multiple

Scheme ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
27	Cycle route along promenade at Rock Ferry	Continuation of Cycle Route along the Promenade from Shorefields Nature Park to Refreshment Rooms	Lack of off- road cycle routes within the study area which are often the most safe and attractive and therefore offer the greatest opportunity to increase active travel uptake. Disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations.	Interface with 18	5-10	£10m-£20m	Rock Ferry
28	Open up bridge within Port Sunlight River Park	Open up new bridge within Port Sunlight River Park to enhance connectivity	Disconnect of cycle infrastructure provision across the study area which fails to offer connectivity between key locations		0-5	£1m-£3m	Port Sunlight
29	Removal of on-street parking along A41 New Chester Road to create cycle lane	Removal of on-street parking along A41 New Chester Road between Village Hotel and Magazine Road to create high quality on-street cycle lanes	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Scheme 6, 22	0-5	£1m-£3m	Multiple
30	Cycle lanes along B5137	Reduce verge along B5137 between Spital Crossroads and M53 to implement segregated cycle facility	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift		0-5	£1m-£3m	Clatterbridge
31	Reconfigure area around Eastham Rake / A41 Junction	Eastham Rake / A41 Junction is potentially redundant for general traffic-remove junction to create better quality space for pedestrians and cyclists around Eastham Village	Over provision of highway capacity in some parts of the study area where space could be used to support other modes		0-5	£1m-£3m	Eastham
32	Cycle Lanes from Eastham Village Road to M53	Cycle lane to be added on A41 towards the M53 in both directions between M53 and Eastham Village Road northern junction	Poor connectivity for pedestrians and cyclists over the M53, creating a severance to movement	Interface with scheme 1, 5, 68	0-5	£1m-£3m	Eastham
33	Cycle Lanes from Old Hall Road to Eastham Village Road	Cycle lanes (separated) required in particular on the eastern side of the A41	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift Disconnect of cycle infrastructure provision		0-5	£1m-£3m	Bromborough

Scheme ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
			across the study area which fails to offer connectivity between key locations.				
34	Enhanced footway and crossing opportunities on A41 between Old Hall Road and Eastham Village Road	In particular crossings required opposite Neville Road and footway improvements around Leverhulme Sports Field	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift		0-5	£1m-£3m	Bromborough
35	Crossing facilities on Old Hall Road.	Crossing facilities on Old Hall Road to serve proposed Local Plan development sites and facilitate access to bus stops on either side of the road.	Increased use of road by vehicles and no crossing points to facilitate access to bus stops	Interdependent with provision of bus stops on Old Hall Road (scheme 55)	0-5	<£1m	Bromborough
36	Review barriers presented by guard railing around Birkenhead Central and Rock Retail Park	Gap in the railings could be provided from Tunnel Road to Waterloo Place, so that cyclists can use it to reach the Birkenhead Central station	Provides a safer route than the overpass for cyclists travelling from the A41. Currently some cyclists do use this route, but the nearest gap in the railings is at the pedestrian crossing close to McDonalds and hence cyclists have to walk about 100 metres along the pavement (or illegally cycle along the pavement).	Linked to scheme 37	0-5	<£1m	Tranmere
37	Improved pedestrian crossing facilities at Rock Retail Park Roundabout	Improved pedestrian crossing facilities at Rock Retail Park Roundabout	Crossing from the road from Wickes to the Rock Retail park area as a pedestrian is dangerous. There is no formal crossing, cars exit the roundabout at speed, and there is no eyeline available for pedestrians (high hedges) to see if a car is on the roundabout.	Linked to scheme 36	0-5	£1-3m	Rock Ferry
38	Signal Crossing at Union Way/A41 Junction	Signal Crossing at Union Way/A41 Junction	There is a signed crossing here for the Wirral Circular Trail, but no signals to help people cross the dual carriageway		0-5	<£1m	Rock Ferry

Scheme ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
39	Improved crossing facilities for pedestrians and cyclists at Rock Ferry By Pass/ A41 junction	Improved crossing facilities for pedestrians and cyclists at Rock Ferry By Pass/ A41 junction including dropped kerbs and improved visibility	Dangerous crossing due to reduced visibility of peds and cycles and high vehicle speeds		0-5	£1-3m	Rock Ferry
40	Review introduction of parking restrictions along New Chester Road along cycle lane	Introduce parking restrictions along New Chester Road to encourage greater use of cycle lane- explore options to segregate the route	New painted cycle lane constantly has vehicles parked in it.	Scheme 6, 22, 29 ,42 Emerging Parking Strategy	0-5	<£1m	Rock Ferry
41	Review of footway maintenance along the A41 corridor	Undertake maintenance such as hedge trimming/ removal in areas where this impacts on pedestrian and cycle safety and limits opportunities for social distancing	Reduced visibility creating hazards for peds and cyclists and narrowing widths of footways/ cycle lanes.		0-5	<£1m	New Ferry
42	Enhanced cycle lane along New Chester Road	Separated cycle lane along New Chester Road to encourage long distance cycling	Current cycle lane inadequate and feels unsafe	Link to scheme 40	5-10	£3-10m	Multiple
43	Improved pedestrian facilities in Eastham Village	Explore opportunities to widen footway widths and enhance crossing facilities	Narrow footways within Eastham Village	Link to scheme 44	0-5	£3-10m	New Ferry
44	New pedestrian crossing New Chester Road/ Eastham Village Rd	New pedestrian crossing New Chester Road/ Eastham Village Rd	No crossing facilities at present	Link to scheme 43	0-5	£3-10m	Bromborough
45	Cycle lanes on Old Hall Lane	Provision of cycle lanes on Old Hall Road through to the coastal path to facilitate cycle movements. Should be linked to crossing facilities at Old Hall Road / A41 S to enable crossing of this	No cycling provision to link existing facilities	Linked to delivery of LP sites near Riverside Park	0-5	£1m-£3m	Bromborough

Scheme ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
46	New Chester Rd/ A41/ Bolton Road East pedestrians crossing improvements	New Chester Rd/ A41/ Bolton Road East- signalise Bolton Road east arm of the junction for pedestrians and cyclists	A key cycle route and currently not signalised		0-5	£3-10m	
47	New pedestrian crossing between Magazine Rd and Croft Retail Park	New pedestrian crossing between Magazine Rd and Croft Retail Park- opposite pedestrian entrance to retail facilities off Welton Rd	Poor pedestrian links from the west to retail and facilities to the east of the corridor in Bromborough		0-5	£3-10m	Bromborough
48	Old Hall Road / New Chester Rd pedestrian crossing improvements	Old Hall Road / New Chester Rd pedestrian crossing improvements- signalised crossing required to the south of the junction	difficult for pedestrians to cross due to lack of signals		0-5	£3-10m	Bromborough
49	New pedestrian crossing to align with pedestrian entrance to Leverhulme sports field	New pedestrian crossing to align with pedestrian entrance to Leverhulme sports field	A key cycle and pedestrian route with no crossings to facilitate access from the west of the A41		0-5	£3-10m	Bromborough
50	Pedestrian crossing improvements at New Chester Rd/. Allport Rd	Pedestrian crossing improvements at New Chester Rd/. Allport Rd- controlled crossing	Crossing is in place however not signalled. This is a wide junction and therefore needs to enhance the safety of pedestrians and cyclists		0-5	£3-10m	Bromborough
51	New pedestrian crossing on A41 between Allport Rd and Torr Drive	New pedestrian crossing on A41 between Allport Rd and Tor Drive	No crossing across the A41 for a long stretch of road with key facilities such as doctors, schools and park either side of the A41		0-5	£3-10m	Bromborough
52	Review crossing facilities over rail line	Review existing crossing facilities and provide additional crossing to meet pedestrian desire lines to support connectivity to local facilities and amenities.	Severance of railway to pedestrian movements.		0-5	<£1m	Multiple

8.2 Bus

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
53	Diversion of more bus services to Wirral International Business Park and Croft Retail Park	Diversion of a greater proportion of routes via Stadium Road (e.g. 1 / X1) to provide a frequent and convenient service with connections to Birkenhead, Liverpool and Chester	Additional employment opportunities at Wirral Business Park will require better public transport connectivity.	Linked to scheme 54	0-5	£1m-£3m	Bromborough
54	Additional bus stops on A41 between Croft Avenue East and Magazine Road	Alternative to above, creation of new bus access opportunities on A41 in particular serving the Croft Retail Park adjacent to ped route from A41.	No current stop here and would serve Croft Retail Park in particular.	Linked to scheme 53	0-5	£1m-£3m	Bromborough
55	Bus stops on Old Hall Road and Riverwood Road	Bus stop facilities and service provisions on Old Hall Road to serve proposed Local Plan development sites.	Proposed residential development sites need to be well connected by public transport to encourage sustainable trips over use of private car	Interdependent with provision of crossings on Old Hall Road (scheme 35)	0-5	<£1m	Bromborough
56	Bus stops on South View	Bus stop facilities and service provisions on South View to serve proposed Local Plan development site (Former Croda site).	Proposed residential development site needs to be well connected by public transport to encourage sustainable trips over use of private car		0-5	<£1m	Bromborough
57	BRT System between Chester and Liverpool	Conversion of the current 1 / X1 service into a BRT system with segregated running, branded bus stops and bespoke vehicles	Congestion and long bus journey times along key sections of the A41. On -street parking causing problems with access to bus stops.	Multiple dependencies including: - Improved cycle lanes along A41 - Removal of parking to facilitate cycle lanes - Improved crossing points and junction remodelling - 20mph zone.	5-10	£20m-£50m	Multiple
58	Bus Priority Route from Queensway Tunnel to Eastham	Creation of a bus priority corridor along the A41 between the Queensway Tunnel and Eastham passing along the B5136 New Chester Road through Rock Ferry and New Ferry, and via Bromborough	Congestion and long bus journey times along key sections of the A41. On -street	Multiple dependencies including: - Improved cycle lanes along A41 - Removal of parking to	0-5	£3m-£10m	Multiple

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
		Village Road. This would consist of bus lanes in each direction, bus gates at key junctions and selective vehicle detection, alongside enhanced parking restrictions.	parking causing problems with access to bus stops.	facilitate cycle lanes - Improved crossing points and junction remodelling - 20mph zone.			
59	Removal of bus laybys on A41 and replacement with in-carriageway bus stops to help to control speed	Removal of the existing bus stop laybys on the A41 and B5136 New Chester Road. Instead, bus stops would be built into the carriageway to force traffic behind to slow down and wait for buses. The aim would be to reduce delay for buses re-joining the carriageway and to help to regulate traffic speed in a future 30mph or 20mph environment.	Bus delay and difficulty in re-joining carriageway. High traffic speeds on A41.	Multiple dependencies including: - Improved cycle lanes along A41 - Removal of parking to facilitate cycle lanes - Improved crossing points and junction remodelling - 20mph zone.	0-5	£3m-£10m	Multiple
60	Bus stops on Old Courthouse Road, Pool Lane and South View	Currently bus stops exist on this section but no stop infrastructure is provided including flags, pole and shelters. This would formalise the location of the stops and provide confidence to transport users that the stops exist as there is currently no indication of this.	Illegibility of the current bus network		0-5	£1m-£3m	Bromborough
61	Restoration of bus route via Port Sunlight Village	Until recently the no 2 service served Port Sunlight via Greendale Road and Bolton Road, however this was withdrawn in favour of an enhanced service along New Chester Road and the bypass. This scheme would restore this important link to provide connectivity for residents of Port Sunlight to Chester and Liverpool.	Lack of public transport connectivity within Port Sunlight Village		0-5	£1m-£3m	Port Sunlight

8.3 Highway

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
62	New access link into WIBP from Liverpool	This scheme would provide a new access link into Wirral International Business Park from Liverpool. This has potential linkage with aspirations for a Mersey tidal barrage.	Supporting economic growth and business development ensuring that transport network does not act as a hinderance to growth	Interdependent with New Mersey Crossing	10+	£3m-£10m	Bromborough
63	Downgrading New / Rock Ferry Bypass	This scheme would downgrade the Rock Ferry bypass to remove severance between New / Rock Ferry and the waterfront, adding at-grade junctions, connecting in side-roads, making it more accessible for pedestrians and encouraging a greater sense of community in the area.	Over provision of highway capacity in some parts of the study area where space could be used to support other modes Highway dominated environment reduces opportunities for pedestrians and cyclists		10+	£50m-£100m	New / Rock Ferry
64	Reduce speed limit to 30mph for corridor	Introduce a blanket 30mph speed limit to instil the change of character in the road from strategic link to local distributor. The bypass may or may not be excluded from this depending on other schemes.	Highway dominated environment reduces opportunities for pedestrians and cyclists Safety concerns for pedestrians and cyclists wishing to travel along the corridor. Current character of the corridor does not promote strategic cycling for longer distances		0-5	£1m-£3m	Multiple
65	Reconnection of A41 bypass into B5136 at Thorburn Close	Creation of a new junction on the bypass with New Chester Road via Thorburn Close, allowing traffic, pedestrians and cyclists greater access between New Ferry and the waterfront.	Lack of connectivity for pedestrians and cyclists at this location to reach the waterfront from Rock Ferry	Contradicts highway capacity reduction measures (i.e. scheme 66, 67)	5-10	£10m-£20m	New / Rock Ferry
66	Reassignment of strategic traffic from A41 to the M53	Preparation of measures to reassign strategic through traffic from the A41 to the M53 to access the Wallasey tunnel rather than Birkenhead.	The A41 is often used as a through route creating additional traffic within the study area which does not contribute to the borough economically and has a detrimental impact on air quality, sense of place and pedestrian/cyclist safety	Linked to scheme 64 -	0-5	£1m-£3m	Multiple

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
67	Capacity reduction along A41	Explore opportunities where capacity along the A41 can be reduced i.e. reduce Rock Ferry Bypass to one lane in each direction	Over provision of highway capacity in some parts of the study area where space could be used to support other modes	Contradicts schemes to improve junction capacity – scheme 71	0-5	<£1m	Multiple
68	Signalised ped / cycle crossings at M53 Junction 5	Signalised ped / cycle crossings at M53 Junction 5 to enhance crossings for peds and cyclists over the motorway junction	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Links to scheme 1, 5, 32	0-5	£1m-£3m	Eastham
69	Croft Avenue East and Spital Dam junction Improvements	Junction improvements to remove congestion on B5137 for all modes	Congestion along BG5137 and at key junctions causing safety concerns for pedestrians and cyclists Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Contradicts highway capacity reduction measures (i.e. scheme 66, 67)	0-5	£3m-£10m	Bromborough
70	Croft Avenue East Caldbeck Road Junction Improvements	Junction improvements to remove congestion on A41. Pedestrian and cycle improvements required at this junction.	Congestion along BG5137 and at key junctions causing safety concerns for pedestrians and cyclists Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift	Contradicts schemes to alleviate congestion, improve junction capacity	0-5	£3m-£10m	Bromborough
71	Capacity improvements at Spital Road/ Mill Road	Consider possible capacity increases at the junction to address future over-capacity predictions	Highway modelling for the Local Plan suggests this junction will be operating over capacity in 2035 without mitigation	Contradicts highway capacity reduction measures (i.e. scheme 66, 67)	5-10	£1m-£3m	Spital
72	Capacity improvements at Old Court House Road / Dock Road South / Thermal Road	Consider possible capacity increases at the junction to address future over-capacity predictions	Highway modelling for the Local Plan suggests this junction will be operating over capacity in 2035 without mitigation	Contradicts highway capacity reduction measures (i.e. scheme 66, 67)	5-10	£1m-£3m	Port Sunlight
73	Capacity improvements at Old Court House Road / A41	Consider possible capacity increases at the junction to address future over-capacity predictions	Highway modelling for the Local Plan suggests this junction will be operating over capacity in 2035 without mitigation	Contradicts highway capacity reduction measures (i.e. scheme 66, 67)	5-10	£1m-£3m	Port Sunlight

8.4 Multi Modal

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
74	New Mersey Crossing e.g. Bromborough - Aigburth	This scheme would deliver a new Mersey Crossing, connecting Aigburth/South Liverpool Key Corridor to Bromborough/A41. This has potential linkage with aspirations for a Mersey tidal barrage.	Supporting economic growth and business development ensuring that transport network does not act as a hinderance to growth	Interdependent with New access link into WIBP from Liverpool	10+	£500m-£1bn	Bromborough
75	Port Wirral Improvements and Signage Strategy	Improved access and signage to Port Wirral development areas	Supporting economic growth and business development ensuring key industrial, business or development areas are highly accessible by all modes		5-10	£1m-£3m	Eastham
76	Integration of LCRPT Ticketing with Cheshire West and Chester	Introduction of new Smartcard-based integrated cross-boundary ticketing products to enable rail and bus journeys beyond EP and Chester into the rest of Cheshire West and beyond (e.g. Neston, Frodsham, Northwich etc)	Enable integrated ticketing across networks making ticketing simpler	Integrated ticketing being reviewed by LCRCA/ Merseytravel	0-5	£3m-£10m	Multiple
77	Junction Capacity and Crossing Improvements at A41 / Old Hall Road junction	Enhanced junction layout to support a higher number of movements including those made by active and public transport modes	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift Key lines of severance to pedestrian/cyclist movement exist within the study area such as the A41 itself which limit connectivity, particularly east-west movements	Contradicts highway capacity reduction measures (i.e. scheme 36, 51)	0-5	£3m-£10m	Bromborough
78	Review of junction of B5136 New Chester Road and Bebington Road / New Ferry Road	Creation of a section of pedestrian priority space to cover the junction of Bebington Road and New Chester Road at which a large number of accidents have been recorded in recent years	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift		0-5	£3m-£10m	New / Rock Ferry
79	A41, rationalisation of road space and junction configurations	Rationalisation of excessive road space, corner radii and crossings to reduce highway domination	Over provision of highway capacity in some parts of the study area where space could be used to support other modes		0-5	£10m-£20m	Multiple

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
			Highway dominated environment reduces opportunities for pedestrians and cyclists				
80	Bromborough Village public realm improvement scheme	Upgrade of the village centre of Bromborough to rationalise road space and provide more space for pedestrians and cyclists.	Over provision of highway capacity in some parts of the study area where space could be used to support other modes Highway dominated environment reduces opportunities for pedestrians and cyclists		0-5	£3m-£10m	Bromborough
81	Reconfiguration of Bromborough Village Road / The Rake junction	Reconfiguration of Bromborough Village Road / The Rake junction to create a new square with traffic removed from Allport Lane (Bromborough Village section)	Over provision of highway capacity in some parts of the study area where space could be used to support other modes Highway dominated environment reduces opportunities for pedestrians and cyclists		0-5	£3m-£10m	Bromborough
82	Implement Future High Street Fund scheme for New Ferry	Implementation of improvements outlined in the FHSF application	Rejuvenation will play a key role in the wider regeneration taking place across the borough	New Ferry Masterplan	0-5	£3m - £10m	New Ferry

8.5 Park & Ride and Parking

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
83	Wirral Line Park and Ride Enhancements	The scheme would deliver increased parking capacity at stations, and promote multi-modal options as an alternative to driving along the A41 corridor.	Parking capacity constraints at rail stations reduces opportunities for park and ride limiting the number of sustainable trips to be undertaken	Emerging Parking Strategy	0-5	£1m-£3m	Multiple
84	Removal of on-street parking around Eastham Country Park	Restrict on-street parking along Wirral Circular Trail on approach to Eastham Country Park (Ferry Road) car park to enhance environment for pedestrians and cyclists. Schemes would be informed by an emerging parking strategy taking into account views on supporting local businesses, acting as	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift On-street parking limiting available space for pedestrians and cyclists	Emerging Parking Strategy	0-5	£1m-£3m	Eastham

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
		an evidence base at long list sifting stage					

8.6 Public Realm

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
85	Reduce on street parking & improve public realm at Allport Road	Restrict on-street parking along shop fronts adjacent to Allport Road / Dawpool Drive to create more space for shop users to dwell and spend time, enhanced public realm.	Poor quality of walking and cycling infrastructure fails to promote greater use and encourage modal shift On-street parking limiting available space for pedestrians and cyclists	Emerging Parking Strategy	0-5	£1m-£3m	Eastham

8.7 Rail

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
86	Wirral Line Station facilities and waiting environment enhancements	This scheme will deliver new and improved waiting shelters and ticket machines on platforms to improve waiting environment for passengers, and improved public realm to increase the attractiveness of rail for potential users.	Unattractive waiting facilities	Provision of new rolling stock to increase capacity	0-5	£10m-£20m	Multiple
87	Green Lane Station Refurbishment	This scheme would see a complete refurbishment of the station, including disabled access, upgraded lighting, a new ticket counter and two seated waiting areas.	Unattractive station facilities	A41 North work and Birkenhead Regeneration Framework	0-5	£3m-£10m	Tranmere

Scheme Ref.	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
88	Wirral Line Connectivity - Wirral Line to Northern Line Link	This scheme would connect the Wirral Line to the City Line/Northern Line, removing the requirement for an interchange on the Liverpool Loop.	Interchange requirement meaning longer journey time and requirement to change trains.	Long Term Rail Strategy	10+	£10m-£20m	Bromborough

8.8 Rapid Transit

Scheme Ref	Scheme	Description	Issue being addressed	Interdependencies / Link	Timescales (0-5, 5-10, 10+)	Cost Range	Location
89	Wirral Mass Transit	This scheme would provide a phased, scalable transit scheme that would connect New Brighton to Rock Ferry, via Wirral Waters. This would capture an area which the existing Merseyrail network does not serve and provide connectivity to the wider public transport network at Birkenhead / Hamilton Square.	Traffic and congestion along the A41 may impact the speed and reliability of bus services - this may be particularly an issue along the corridor where the highest frequency of services is present The majority of the area to the east of the A41 is poorly connected to the rail network	On-going work in A41N and Birkenhead Regeneration Framework. Scheme 90 and 91 below	5-10	£3m-£10m per phase	Tranmere
90	Further Mass Transit Extension to the south using existing railway land adjacent to Merseyrail	Extend mass transit south of Rock Ferry using existing railway land adjacent to Merseyrail line - 4 track railway extends south of Spital and could run into Croft Retail Park or WIBP	Traffic and congestion along the A41 may impact the speed and reliability of bus services - this may be particularly an issue along the corridor where the highest frequency of services is present The majority of the area to the east of the A41 is poorly connected to the rail network	Scheme 89 above and 91 below	10+	£50m-£100m	Multiple
91	Further Mass Transit Extension to WIBP via Turbine Road	Extend mass transit south of Green Lane into WIBP	Traffic and congestion along the A41 may impact the speed and reliability of bus services - this may be particularly an issue along the corridor where the highest frequency of services is present The majority of the area to the east of the A41 is poorly connected to the rail network	Scheme 89 and 90 above	10+	£50m-£100m	Multiple

9 Next Steps

This final section of the report sets out our suggested next steps for progressing the long list forwards and identifying priority schemes for further work to support eventual delivery and implementation.

Following compilation of the long list of schemes for the A41 study area, the next steps should comprise of:

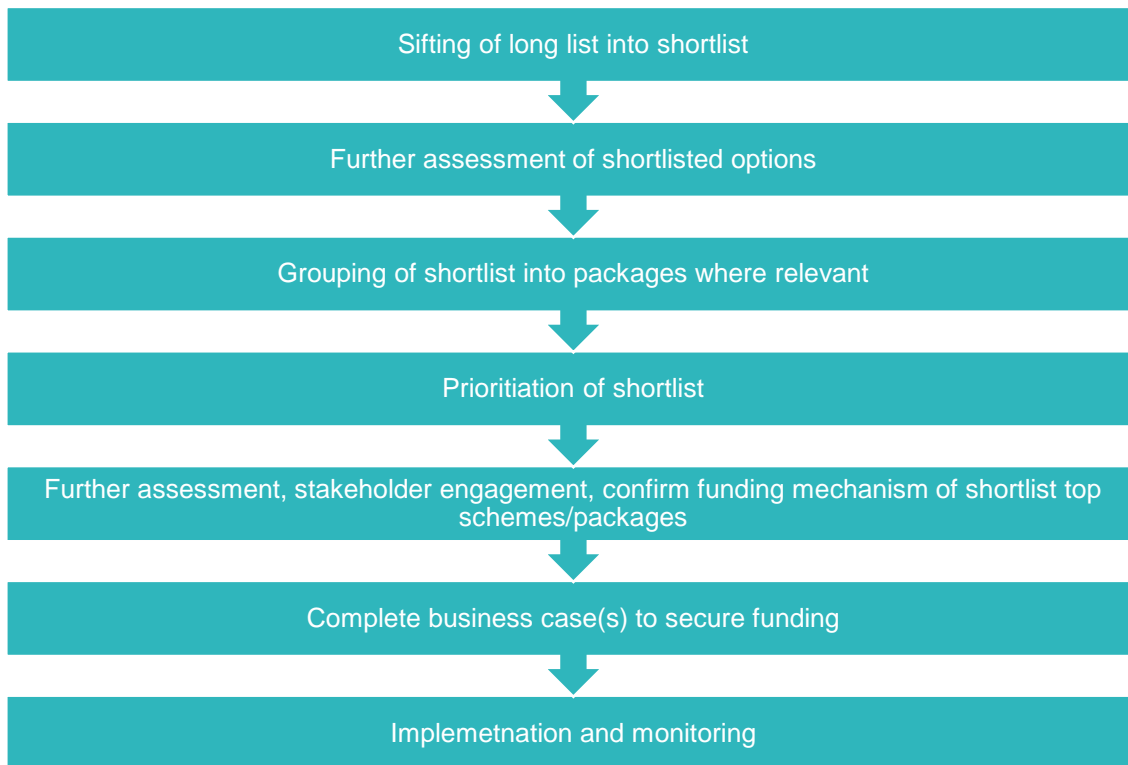
1. Creating an appraisal framework to enable the sifting of the long list of schemes created in this document and to identify a short list of schemes to consider in more detail.
2. Assessing the shortlist of schemes in more detail including a greater understanding of:
 - a. Scheme detail including scale, location (extents) and design
 - b. Feasibility, to include better understanding any constraints and risks.
 - c. Cost
 - d. Value and potential scheme benefit, through a proportionate approach agreed in discussion with potential appraisers at the Combined Authority
 - e. Impact assessment – will the scheme have any adverse impacts which may need considering in more detail. This could include for instance modelling the impact of some of the schemes which alter the public highway to determine if they deliver benefits.
 - f. Deliverability

As part of progressing the long list to a shortlist, there should be further stakeholder engagement undertaken to help inform the above considerations.

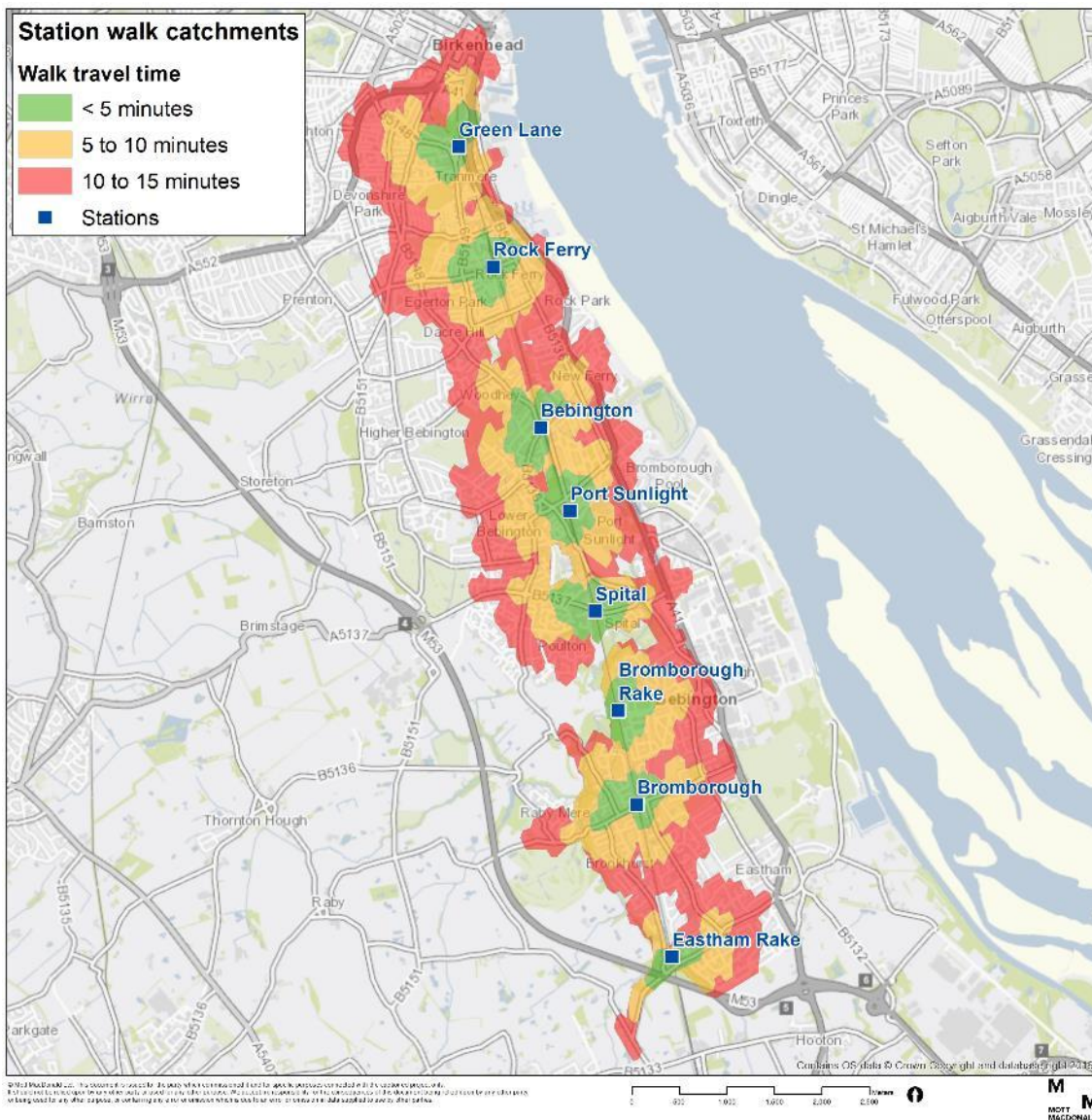
Following the confirmation of the shortlist, this should be finalised, with any schemes no longer considered feasible being removed, and the remaining schemes put into a priority order, with owners assigned to be responsible for taking them forward for delivery. Depending upon the type and nature of the individual schemes, this is likely to entail progression through the business case route to secure funding. The prioritisation process may also involve 'packaging' or grouping of some schemes to be delivered together to provide value for money or greater benefits.

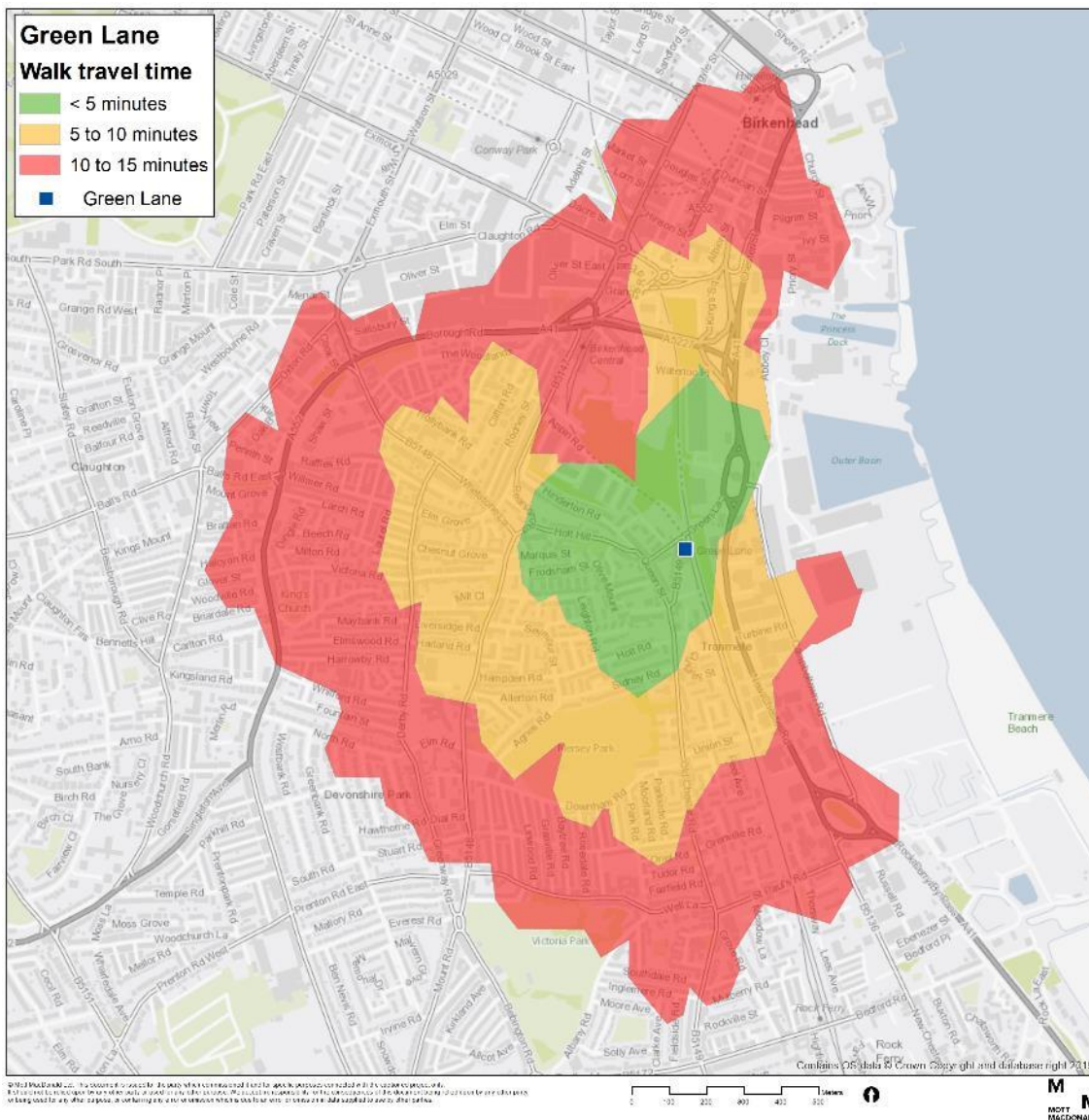
The following diagram provides a high-level overview of the proposed next stages of work:

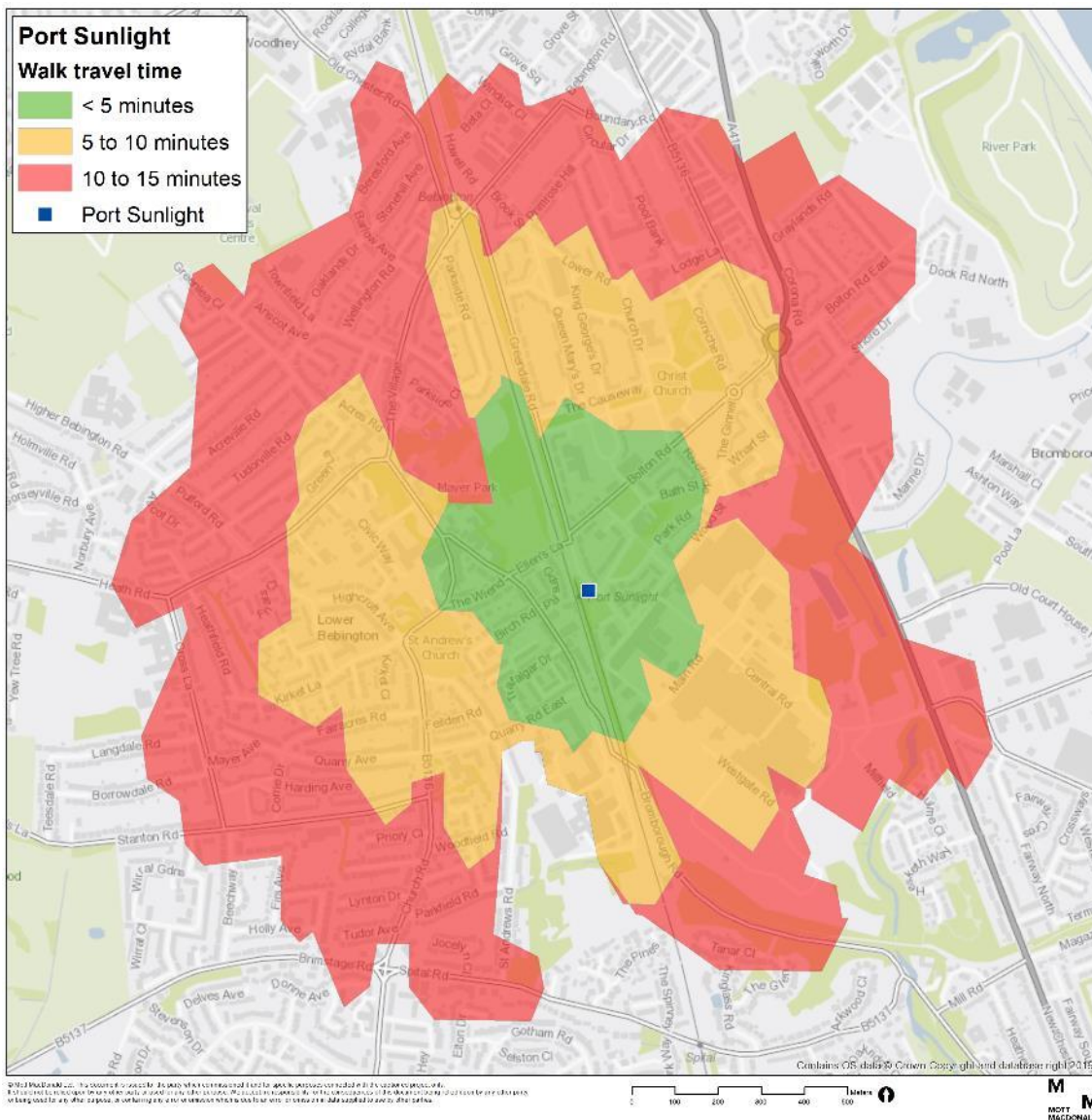
Figure 9.1: Overview of next steps

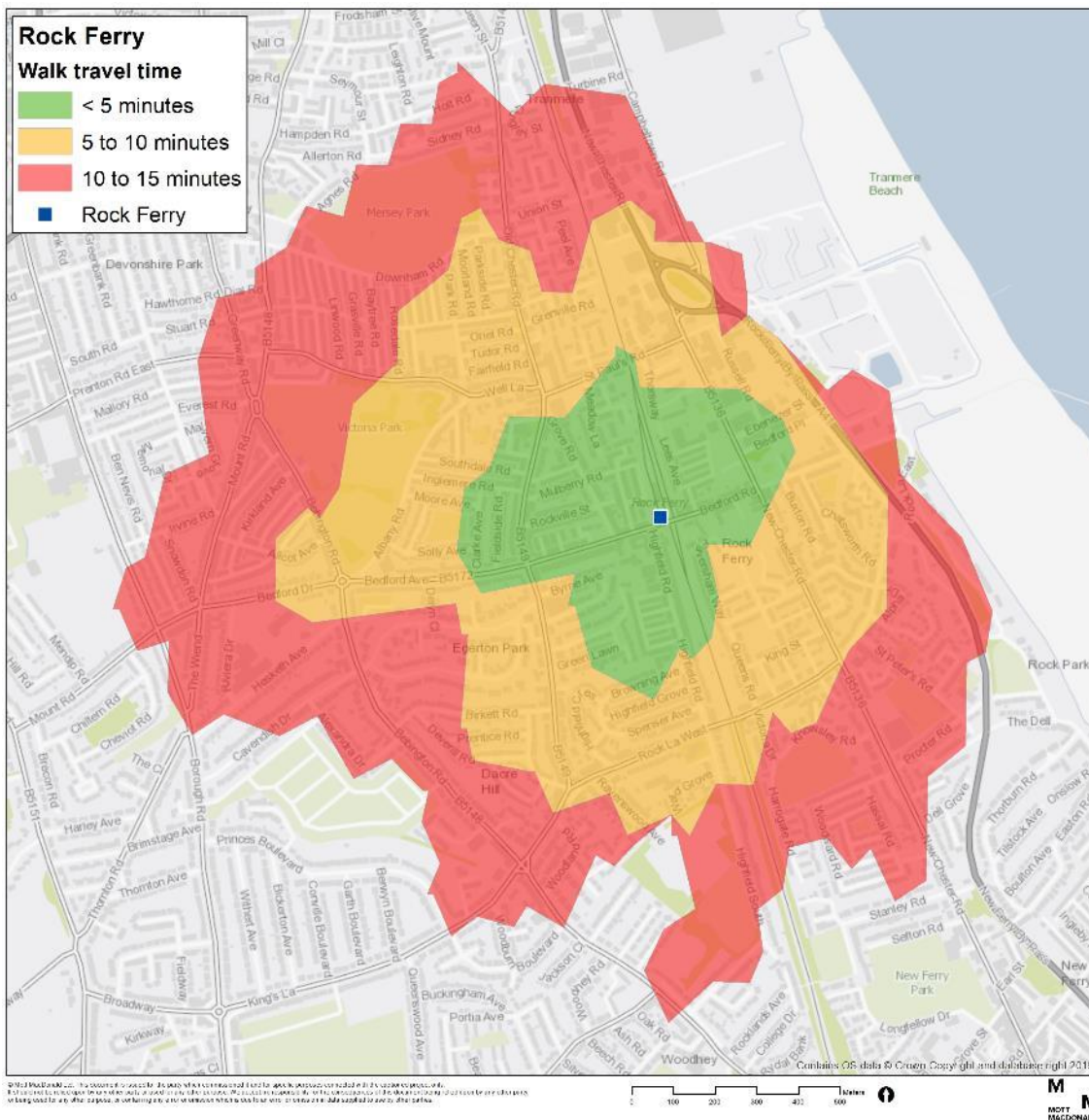


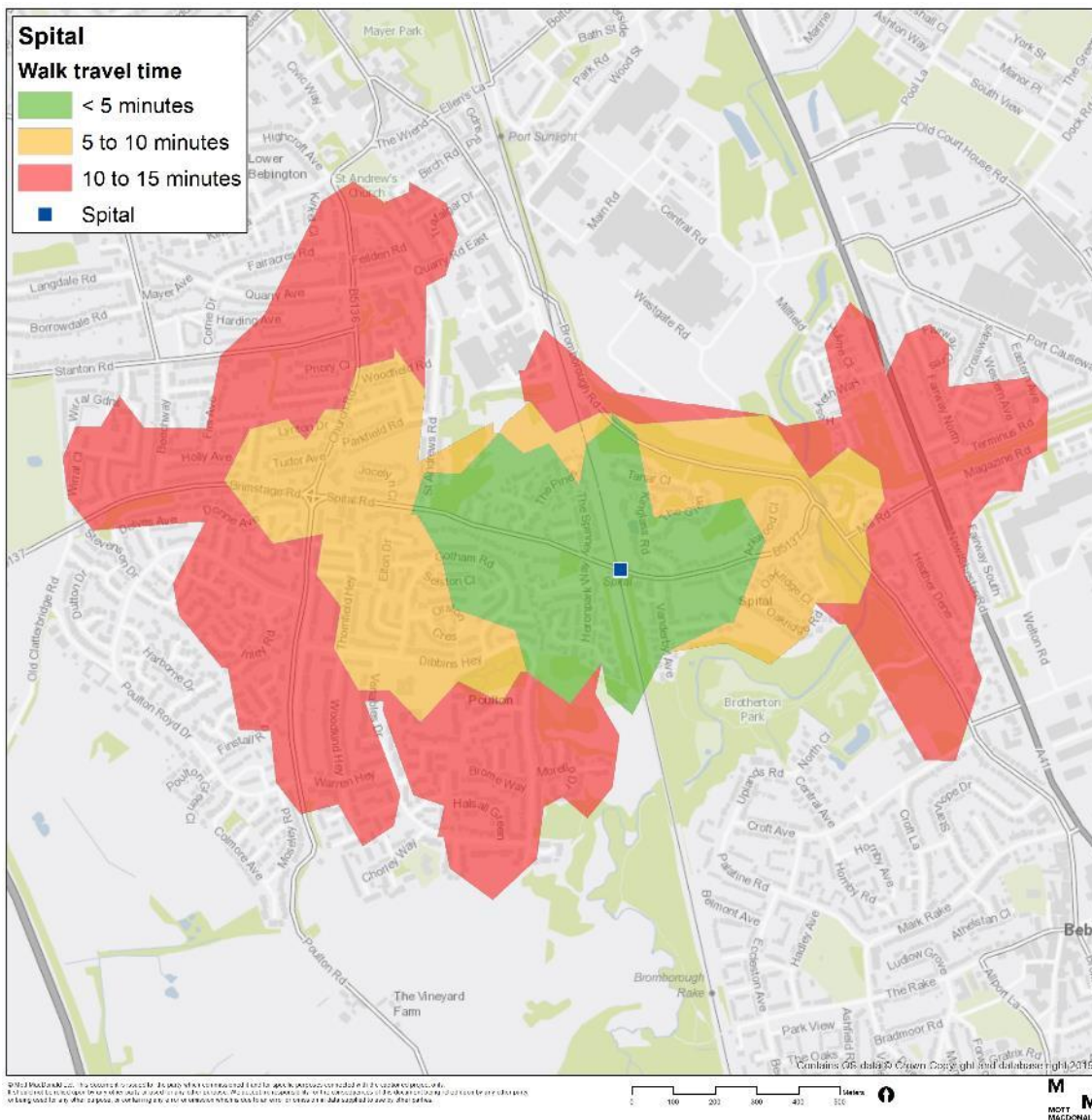
A. Rail Station Walking Isochrones

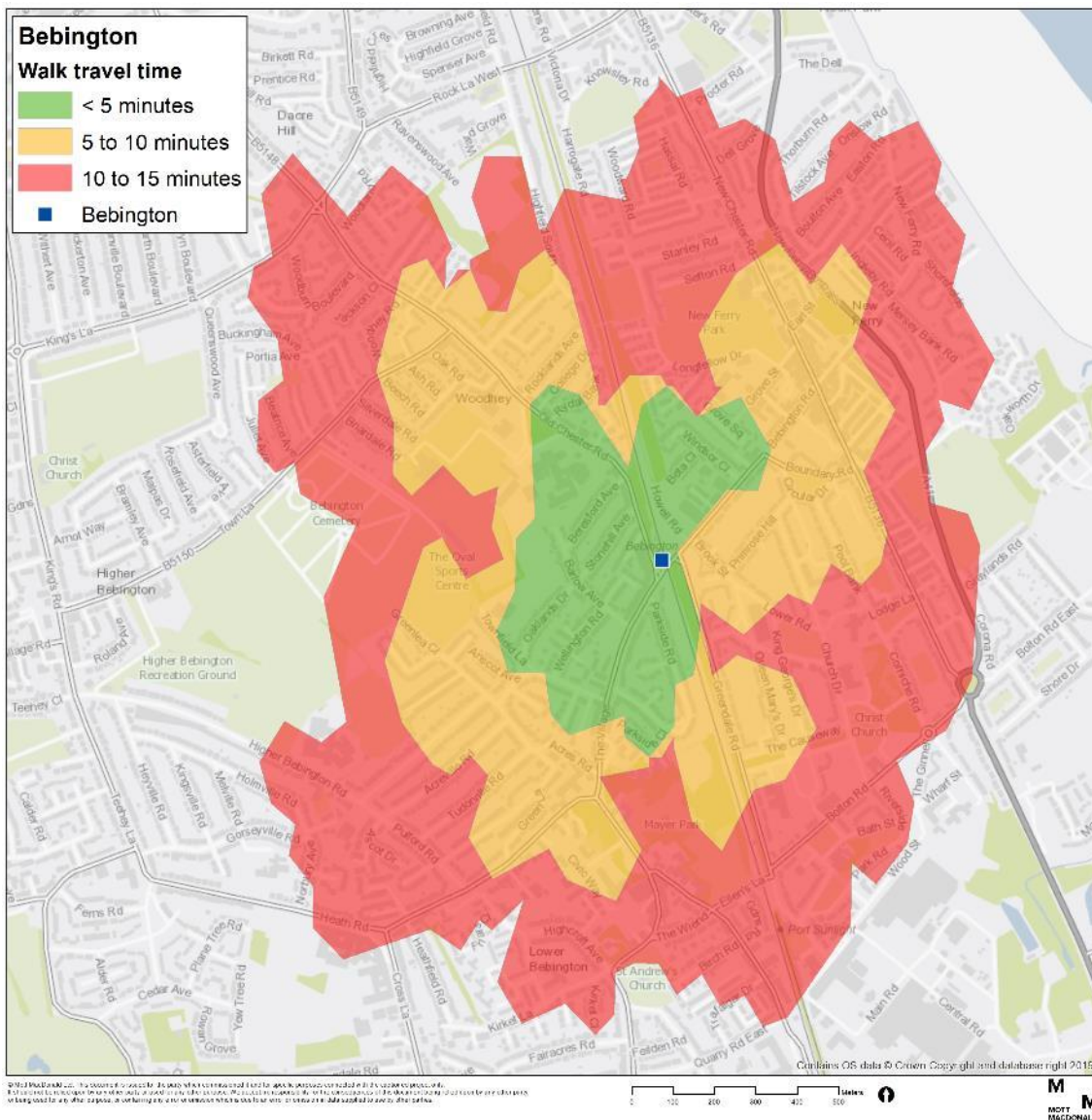


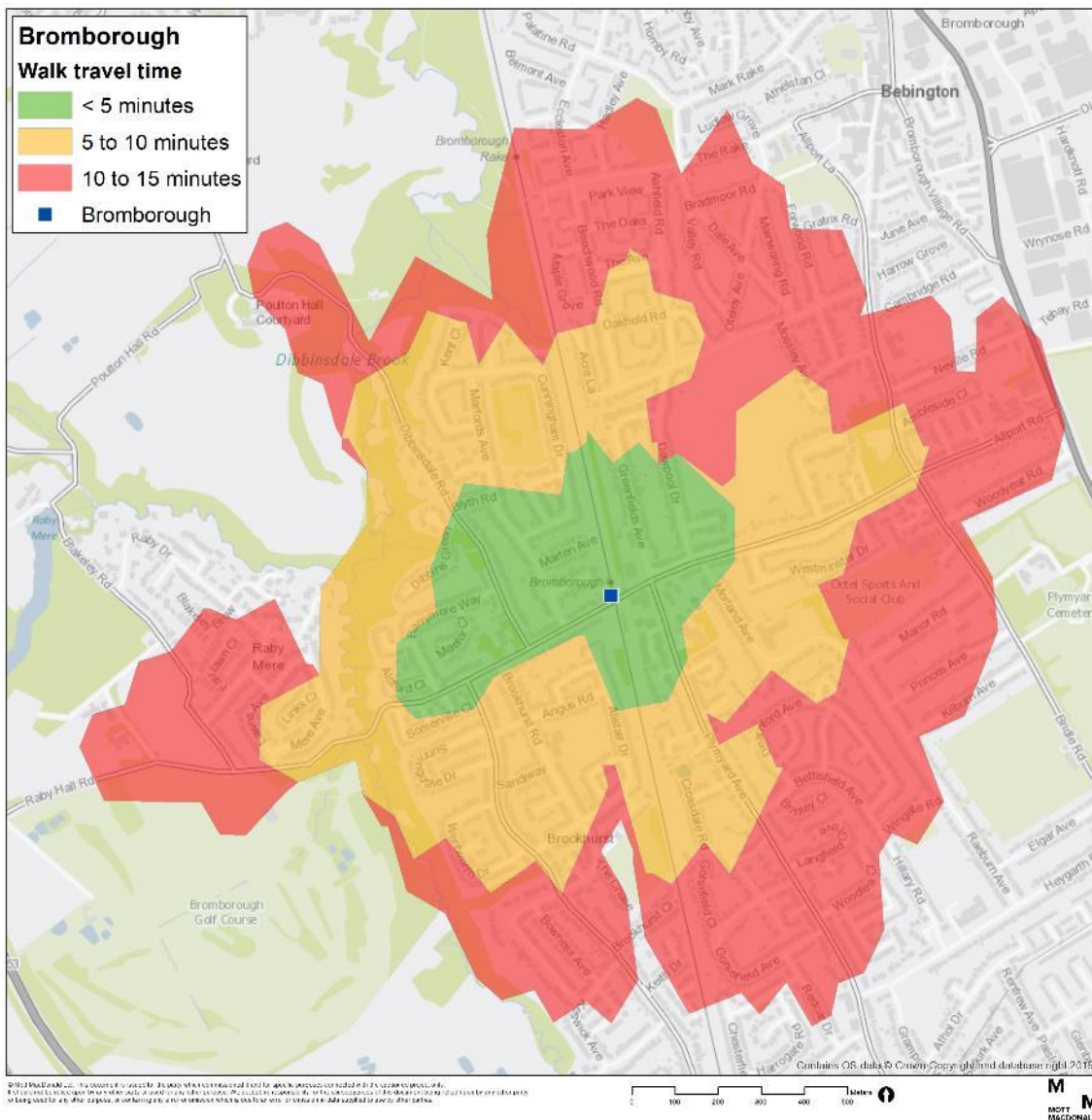


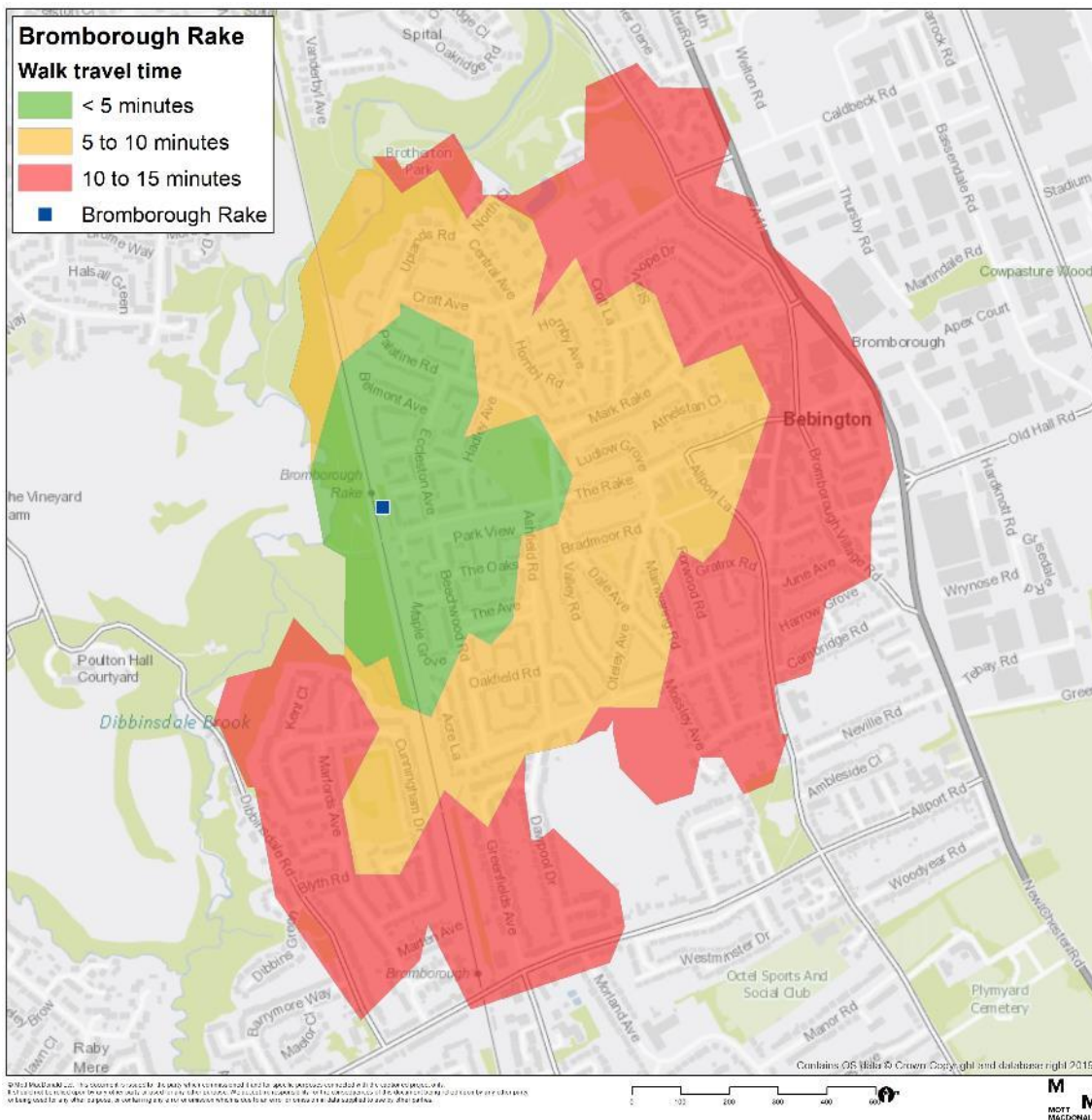


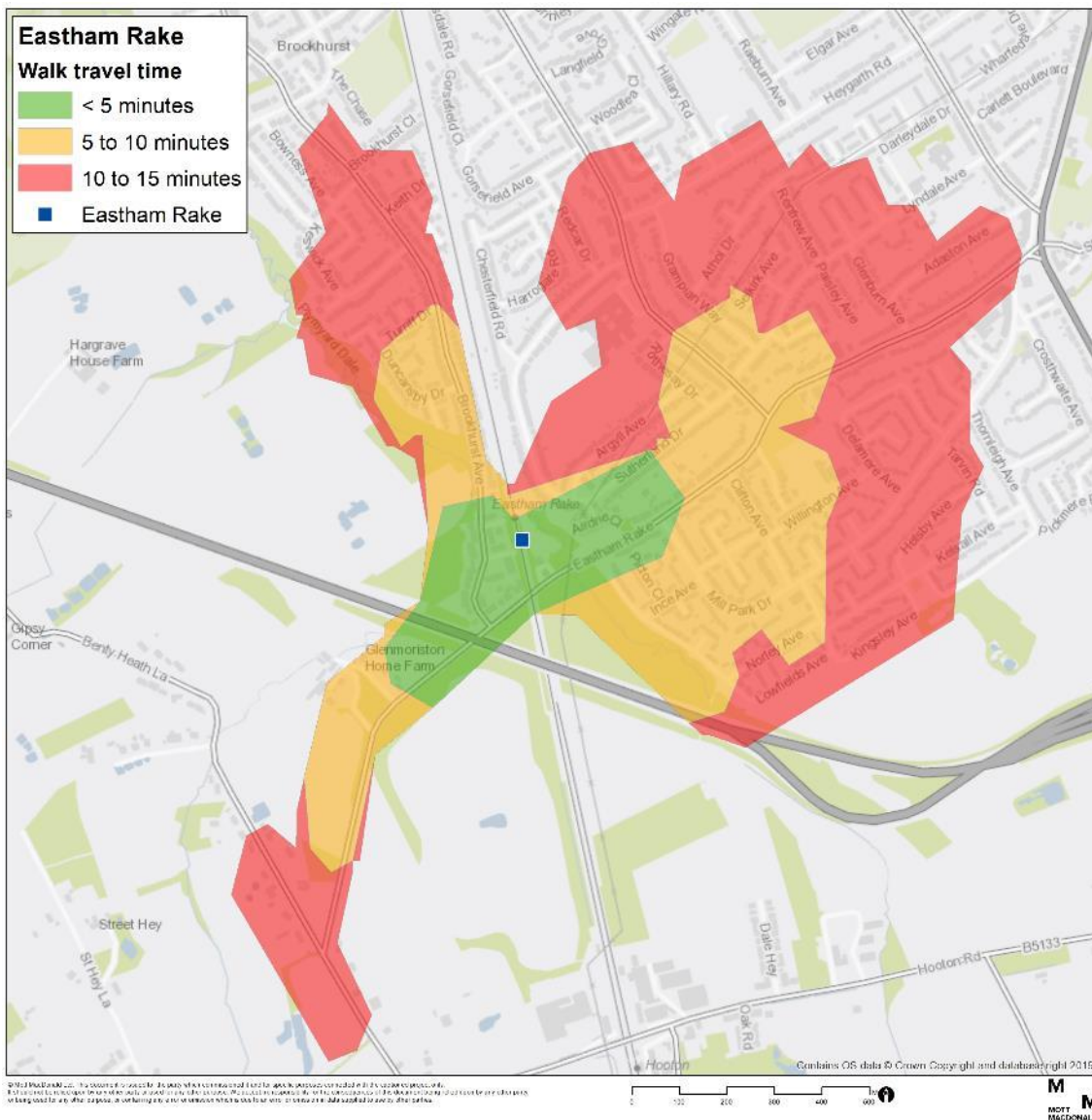












B. Scheme location plans

Scheme Type

Active travel: New/
improved crossings

Scheme List

- 2. Wirral Circular Trail Improvements -
Rock Ferry Bypass Crossing
- 4. M53 Junction 4 crossing improvements
- 5. M53 Junction 5 crossing improvements
- 14. A41/Croft Avenue East improvements
- 25. A41/Old Hall Road crossing improvements
- 28. New A41 pedestrian crossing between
Magazine Road and Croft Retail Park
- 31. A41/Eastham Rake reconfiguration
- 35. Crossing facilities on Old Hall Road
- 37. Rock Ferry Retail Park Roundabout -
review of crossing facilities
- 38. A41/Union Way signalised crossings
- 39. A41/Rock Ferry By-Pass crossings
- 44. New A41 pedestrian crossing at A41/
Eastham Village Road junction
- 46. A41/Bolton Road East improvements
- 49. New A41 pedestrian crossing at
entrance to Leverhulme Sports Fields
- 50. A41/Allport Road crossing improvements
- 51. New A41 pedestrian crossing between
Allport Road and Torr Drive



Scheme Type

Active travel: Routes

Scheme List

- 3. Port Sunlight cycle path
- 6. New Chester road cycle lanes
- 7. Wirral Circular Trail Improvements - Port Sunlight River Park diversion
- 8. Wirral Circular Trail Improvements - Campbeltown Road
- 9. LCR LCWIP Phase 3 route
- 10. LCR LCWIP Phase 2 route
- 11. Green Corridor southern extension
- 12. Clatterbrige-Waterfront improvements
- 13. Wirral Circular Trail Improvements - Coastal Cyle Strategy
- 15. Port Sunlight-Eastham Country Park
- 17. Port Sunlight-Croft Retail Park access
- 19. A41-Eastham Country Park improvements
- 23. Dibbendsdale Brook walk route
- 24. Eastham-Ellesmere Port walk/cycle route
- 26. Cycle lanes along Riverbank Road
- 27. Rock Ferry Promenade cycle route
- 29. Removal of on-street parking along A41 to create cycle lane
- 30. Cycle lanes along B5137
- 32. Eastham Village-M53 cycle lanes
- 33. Old Hall Road-Eastham Village cycle lanes
- 34. Old Hall Road-Eastham Village footway and crossing enhancements
- 42. Enhanced New Chester Road cycle lanes

Scheme Type

Active travel: Other

Scheme List

- 18. Rock Ferry Promenade resurfacing
- 20. A41 street furniture decluttering
- 22. New Chester Road 20 mph zone
- 28. Port Sunlight River Park bridge access
- 36. Review Rock Ferry Retail Park guard rails
- 40. New Chester Road parking restrictions
- 41. A41 footway maintenance
- 43. Eastham Village pedestrian improvements



Scheme Type

— Rail

Scheme List

- 86. Wirral Line Station facilities and waiting environment enhancements
- 87. Green Lane Station refurbishment
- 88. Wirral Line connectivity - Wirral Line to Northern Line Link



Scheme Type

- Bus
- Rapid Transit

Scheme List

- 53. Diversion of more bus services to Wirral International Business Park and Croft Retail Park
- 54. Additional bus stops on A41 between Croft Avenue East and Magazine Road
- 55. Bus stops on Old Hall Road and Riverwood Road
- 56. Bus stops on South View
- 57. BRT system between Chester and Liverpool
- 58. Bus priority route from Queensway Tunnel to Eastham
- 59. Replacement of bus laybys on A41 with in-carriageway bus stops (control speed)
- 60. Bus stops on Old Courthouse Road & Pool Lane
- 61. Restoration of bus route via Port Sunlight Village
- 89. Wirral Mass Transit
- 90. Further Mass Transit Extension to the south using existing railway land
- 91. Further Mass Transit Extension to WIBP via Turbine Road



Scheme Type

- Highway/PR
- Park & Ride
- Parking

Scheme List

- 83. Wirral Line Park and Ride enhancements
- 62. New access link into WIBP from Liverpool
- 63. Downgrading New / Rock Ferry By-Pass
- 64. Reduce speed limit to 30mph for corridor
- 65. Reconnection of A41 bypass into B5136 at Thorburn Close
- 66. Traffic reassignment from A41 to the M53
- 84. Removal of on-street parking around Eastham Country Park
- 67. Capacity reduction along A41
- 68. Signalised ped / cycle crossings at M53 Junction 5
- 69. Croft Avenue East and Spital Road junction improvements
- 70. Croft Avenue East Caldbeck Road junction improvements
- 71. Capacity improvements at Spital Road/ Mill Road junction
- 72. Capacity improvements at Old Court House Road/ Dock Road South/ Thermal Road junction
- 73. Capacity improvements at Old Court House Road/ A41 junction
- 80. Bromborough Village Public Realm (PR)



