Transport Background Paper

Wirral Council Local Plan Version 2

April 2022

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Wirral Council Local Plan Version 2

April 2022

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Contents

Tables

Figures

1   Introduction

1.1   Purpose of this document

1.1.1   'Transport evidence bases in plan making and decision taking'[1] guidance from Government states that local planning authorities should undertake an assessment of the transport implications in developing or reviewing their Local Plan so that a robust transport evidence base may be developed to support the preparation/review of that Plan. This document provides an overview of the transport evidence to date; it provides background evidence to summarise the existing transport related evidence and supplement the Infrastructure Delivery Plan.

1.1.2   An earlier version of this background transport document was included within the Regulation 18 consultation process to summarise studies undertaken to date, and as evidence of the transport assessment work which has been undertaken as part of the development of the Local Plan. This document is a revision to include more recent transport studies, to support the Submission Draft Local Plan.

1.2   Document structure

1.2.1   This document is structured as follows

- Chapter 2 – overview of relevant national, regional and local policy.
- Chapter 3 – Wirral's transport context.
- Chapter 4 – key issues relating to transport in Wirral.
- Chapter 5 – summary of the transport evidence studies completed recently.
- Chapter 6 – summary of transport modelling work undertaken.

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[1] Transport evidence bases in plan making and decision taking: https://www.gov.uk/guidance/transport-evidence-bases-in-plan-making-and-decision-taking

2   Policy and Guidance Overview

2.1   National

National Planning Policy Framework[2]

2.1.1   The National Planning Policy Framework (NPPF) places emphasis on the delivery and promotion of sustainable transport. The most recent iteration was published in July 2021. The framework sets out the government's policies on planning for England and how it expects these to be applied. The NPPF also provides a framework for local authorities and people to work within whilst still reflecting the needs of the local community.

2.1.2   The purpose of the planning system is to contribute to the achievement of sustainable development and there is therefore a presumption in favour of sustainable development, in economic, social and environmental terms, within the NPPF. It is recognised, however, that proposals must still be considered against the adopted Local Plan (and other parts of the statutory development plan) and be approved where they fall in line with it or refused if they conflict (unless other material considerations indicate otherwise).

2.1.3   Chapter 9, paragraphs 104-109, of the NPPF discusses the importance of promoting sustainable transport within new developments by setting out key issues, planning policy requirements and necessary development proposal assessments.

2.1.4   In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location
- Safe and suitable access to the site can be achieved for all users
- The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46
- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

2.1.5   The NPPF also states that "developments should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety or the residual cumulative impact on the road network would be severe"[3].

2.1.6   Within this context, the NPPF also states that applications for development should:

- Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second - so far as possible - to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use.
- Address the needs of people with disabilities and reduced mobility in relation to all modes of transport

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[2] https://www.gov.uk/government/publications/national-planning-policy-framework--2

[3] NPPF, para 109, accessed online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

- Create places that are safe, secure and attractive – which minimise the scope of conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards.
- Allow for the efficient delivery of goods, and access by service and emergency vehicles.
- Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

2.1.7 Finally, the NPPF states that all developments that will generate significant amounts of movements should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

Local Transport Act (2008)[4]

2.1.8 This Act gives powers to local authorities to address increasing road congestion and improve the quality of bus services. It contains provisions to amend the law relating to:

- the responsibilities of local authorities in relation to local transport policies and plans
- the operation of local bus services and related matters, including provisions relating to traffic commissioners
- the constitution and functions of Passenger Transport Authorities ("PTAs"), which are renamed as Integrated Transport Authorities ("ITAs")
- the establishment and operation of local and London road user charging schemes (commonly referred to as "local road pricing schemes").

2.1.9 The Act contains details on provisions relating to quality partnership and quality contracts schemes to support the improvement of local bus services, whereby local authorities can stipulate the level of service and facilities required by bus operators in their area. ITAs are able to implement a road charging scheme in conjunction with local traffic authorities and do not require Secretary of State approval for such schemes.

2.1.10 The Act retains the requirement for local transport authorities to develop local transport policies and plans and expands the scope of these policies so that they cover all aspects of transport, but not elements relating to transport facilities and services. They should also contain consideration of how the environment can be protected and improved.

2.2 Regional

Liverpool City Region Combined Authority Transport Plan[5]

2.2.1 The Combined Authority Transport Plan published in June 2019 articulates the City 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 City Region. Transport can support the city region's growth priorities by supporting access to key growth sites, places of learning and cultural venues; ensuring the city's transport-oriented growth priorities and opportunities are evidenced and exploited; and ensuring that transport and growth interventions support the Combined Authority's inclusive economy agenda. Economic growth in the LCR is tracking around 5% above the national average.

2.2.2 The Combined Authority Transport Plan has five strategic objectives and sets out the priority actions needed to achieve those strategic objectives. These actions cover:

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[4] http://www.legislation.gov.uk/ukpga/2008/26/contents

[5] https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCRCA-TRANSPORT-PLAN.pdf

- ensuring the Liverpool City Region is fully integrated and connected to the Northern Powerhouse and enabling sufficient capacity to accommodate increased long-distance rail services.
- growing the visitor economy and using the River Mersey as an international passenger gateway.
- expanding the role of Liverpool John Lennon Airport to serve more destinations including long haul.
- implementing the LCR Bus Strategy with its range of customer-driven initiatives such as smart, good value, multi-operator ticketing, coordinated timetables on key corridors and investment in new vehicles.
- implementing the LCR Long Term Rail Strategy, notably introducing new rolling stock on the Merseyrail network and addressing capacity issues at Liverpool Central Station.
- implement the Local Journeys Strategy, prioritised initially around 9 travel corridors.
- decarbonisation of the motorised transport network to move to a zero carbon LCR by 2040.
- raise the importance of quality of place and placemaking to make walking, cycling and public transport attractive, safe and convenient.
- integrate climate resilience into transport programmes.
- secure a transport network that is well maintained, safe and resilient with roads that are safe for all.
- develop and implement a strategy for the Mersey Tunnels – vital links in the Key Route Network connecting Liverpool and Wirral.

2.2.3 The plan draws priorities from a range of current plans and priorities, updated in light of the Metro Mayor's vision and the Combined Authority's investment priorities. It reflects new structures, priorities and funds, such as High Speed 2, Transport for the North, Northern Powerhouse Rail, the Strategic Investment Fund and the Transforming Cities Fund.

Local Transport Plan 4

2.2.4 The development of a new Fourth Local Transport Plan will be taking place during 2022, with the expectation that it will be adopted in early 2023. This will cover the Liverpool City Region.
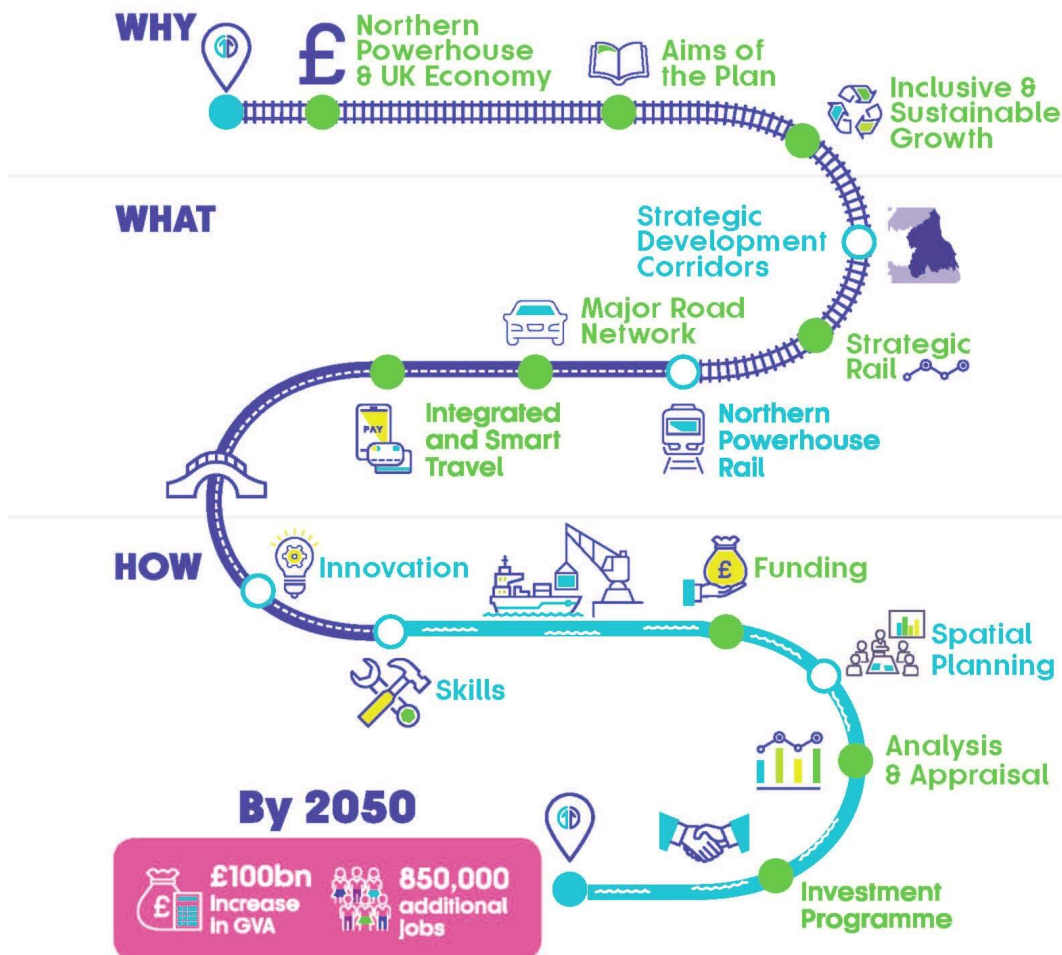
Transport for the North Strategic Transport Plan[6]

2.2.5 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.

2.2.6 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.

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[6] https://transportforthenorth.com/wp-content/uploads/TfN-final-strategic-transport-plan-2019.pdf

Source: Transport for the North

Liverpool City Region Local Journeys Strategy[7]

2.2.7   The Local Journeys Strategy presents the Liverpool City Region Combined Authority's framework for guiding the development of services and infrastructure that supports sustainable short trips across the City Region. The Strategy assists the City Region in delivering its aspirations for economic growth by supporting the use of low-carbon modes and improving access to jobs and services.

2.2.8   As part of the key objectives for achieving its long-term vision, the plan states that "*planning and promoting sustainable transport options as part of an integrated approach to development and regeneration can help create the conditions for healthier, happier and more economically productive places where people have a genuine choice about how they get around*."

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[7] https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCRCA_LCL_JRNYS_STRATEGY.pdf

Liverpool City Region Long Term Rail Strategy[8]

2.2.9 The Liverpool City Region (LCR) Long Term Rail Strategy sets out a "*systematic and evidence-based approach to developing the rail network*" across the LCR. In short, the strategy presents "an ambitious vision of a network that meets future passenger needs and opens up economic opportunity".

2.2.10 For the City Region, a range of developments for the rail network are put forward with the aim to ensure the network meets the LCR's needs over the next 30 years and beyond. Within the committed projects package, the replacement of the current Merseyrail rolling stock, expected to commence delivery from 2020, would see both increased capacity and reduced journey time on the network.

2.2.11 The Long Term Rail Strategy identified 12 packages of developments which represent coherent targets for the realisation of the long term vision. Packages included: improving national passenger and freight connections; Merseyrail growth enabling; improved connections from Chester and Ellesmere Port; and Borderlands Line enhancements.

Mersey Tunnels Long Term Operations & Maintenance Strategy[9]

2.2.12 The Mersey Tunnels connect Liverpool with the Wirral Peninsula; they are the two longest road tunnels in the UK and are also regarded as the safest. They are a vital asset for connectivity, so it is important to ensure the tunnels remain sustainable and efficient to support and grow the local and wider economy.

2.2.13 The tunnels are in good condition and expected to last beyond their intended lifespan to around 120 years each. Regular maintenance inspections are carried out and regular maintenance and infrastructure works have extended their life expectancies. This strategy sets out how the tunnels will be maintained as well as options for increasing the level of automation to improve safety and efficiency and reduce operating costs.

Mersey Ferries Long Term Strategy 2014/15 to 2034/35[10]

2.2.14 The aim of the strategy is to provide a long term programme for investment in the Mersey Ferries operation to 2034/35 to maximise their benefit to the local population and economy. They play an important role in the visitor economy, and also provide a useful service for commuters in the peak hours. However, the operation faces several challenges, such as the financial sustainability and the maintenance of the vessels, which are approaching life expiry. The river explorer cruises and Manchester Ship Canal cruises are popular and more financially profitable.

2.2.15 The objectives of the Strategy are to ensure the ferries are available for future generations to enjoy, but are not a drain on the public purse, to operate safely, contribute economically and socially to the LCR, and reduce the environmental impact of the ferries. A key element for the success of the strategy is to have a fleet of new vessels, due to the age and increasing fragility of the existing fleet, which are becoming more expensive and difficult to maintain.

2.2.16 Like the vessels, the piers at Woodside and Seacombe are aging assets and it is recommended that Woodside is closed, and investment focused on Seacombe.

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[8] https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCRCA_RAIL_STRATEGY_MAY18.pdf

[9] https://moderngov.merseytravel.gov.uk/documents/s41725/Enc.%201%20for%20Mersey%20Tunnels%20Long%20Term%20Operations%20and%20Maintenance%20Strategy.pdf

[10] https://www.merseytravel.gov.uk/about-us/corporate-information/Documents/9768%20MT%20Ferries%20Strategy%201.8_WEB.pdf

Liverpool City Region Bus Services Improvement Plan[11]

2.2.17   Liverpool City Region's Bus Services Improvement Plan (BSIP) sets out the city region's ambitious plans for its largest ever investment in the bus network. Published in 2021 and covering the period 2022-2025, it focuses on improving bus services so that they are more frequent, reliable, affordable and easier for passengers to understand. It includes the introduction of hydrogen buses on the busiest routes, and new proposals for Bus Rapid Transit.

2.2.18   The BSIP presents five priorities for bus network investment:

- Quick and reliable bus journeys
- A comprehensive and integrated bus network
- Straight forward ticketing and great value fares
- An excellent passenger experience
- An emission-free bus system

2.2.19   To achieve the desired London-style bus network, the LCR identified 10 schemes that it wants to implement, which it hopes will make the bus network easier, more convenient, and cheaper to use.

Draft Local Cycling and Walking Infrastructure Plan (LCWIP)[12]

2.2.20   The Liverpool City Region Transport Partnership is leading the development of the Liverpool City Region Local Cycling and Walking Infrastructure Plan (LCWIP), an ambitious strategy that sets out the long-term vision for cycling and walking in the city region.

2.2.21   Two-thirds of all journeys taken in the Liverpool City Region are less than 5km, but right now, around 50% of these are still taken by car. The LCWIP sets out a high level approach for how we can encourage more people to take these journeys on foot or by bike by creating a safe, integrated and well linked network of walking and cycling routes. The LCWIP outlines 31 key routes needed across the city region to help more cycling and walking.

2.2.22   A number of the routes will be implemented in Wirral with the 3.7km Leasowe – Seacombe Ferry Terminal Corridor being included in Phase 1. Planning for the second Wirral corridor is underway and will link New Brighton with Birkenhead via Liscard.

2.2.23   It is proposed that these strategic routes will be complemented by a network of local cycling and walking routes, including residential streets and routes through green spaces which will help make active travel more attractive.

Liverpool City Region Road Safety Strategy[13]

2.2.24   Local authorities have a statutory duty under section 39 of the 1988 Road Traffic Act, to "take steps both to reduce and prevent accidents". This means the Local Authority partners must:

- Prepare and carry out a programme of measures designed to promote road safety;
- Carry out studies into accidents arising out of the use of vehicles on roads within their area, and take appropriate measures to prevent such accidents; and
- Take measures to reduce the possibilities of road accidents when building new roads.

2.2.25   The third Local Transport Plan for Merseyside (LTP3) has a transport vision for 'A city region committed to a low carbon future, which has a transport network and mobility culture that

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[11] https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCR_BSIP_2021.pdf

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

[13] https://www.merseytravel.gov.uk/about-us/local-transport-delivery/Documents/LCR%20Road%20Safety%20Strategy%20FINAL%20v10%20-%20July%202017.pdf

positively contributes to a thriving economy and the health and wellbeing of its citizens and where sustainable travel is the option of choice'. To achieve this vision six goals were identified. Goal Three – Ensure the transport system promotes and enables improved health and wellbeing and road safety, sets out the LTP3 road safety strategy and the context for the Merseyside Road Safety Partnership.

2.2.26   Achieving safer roads requires the use of various methods and measures which reduce the risk to persons using the road network. The LCR strategy focuses upon the use of evidence for the prevention of serious injury and death at point of conflict; the essence of 'casualty reduction'. The Partnership employs support officers, whose function is to monitor, investigate and analyse casualty data to ensure that a co-ordinated and intelligence led approach is undertaken across the City Region, ensuring the Partnership uses its available resources to target road safety interventions in the most cost-effective way.

2.2.27   To meet the statutory requirements, and to deliver our vision, the Road Safety policies must work as a cohesive whole. Partnership working and collaboration are, therefore, central to this strategy. The activities of the Partnership, which are grouped under the traditional road safety 3 'E's of Education-Enforcement-Engineering but supplemented by continuous Monitoring and Evaluation.

2.3   Local

Strategic Regeneration Framework[14]

2.3.1   The 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. The peninsula boasts many nationally significant economic development projects such as Wirral Waters Enterprise Zone alongside key growth sectors such as advanced manufacturing, visitor economy and energy. The SRF identifies five spatial priority areas which are significant for growth potential; these are:

- Birkenhead Town Centre including Hamilton Square and Woodside
- Wirral Waters Enterprise Zone
- A41 Employment corridor including Wirral International Business Park
- New Brighton
- Local Town Centres

2.3.2   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.

Wirral Growth Plan[15]

2.3.3   The purpose of the Growth Plan is to attract and guide investment into Wirral, to overcome barriers and maximise sustainable growth from local opportunities, benefitting Wirral's communities, businesses and residents. The vision is for Wirral to be place where businesses want to invest and can thrive, and where all residents are able to contribute to and benefit from sustained prosperity and a good quality of life. The Wirral Growth Plan sets out the aspiration for

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[14] https://www.wirral.gov.uk/sites/default/files/all/business/Regeneration/Strategic%20Regeneration%20main%20report.pdf

[15] https://www.wirral.gov.uk/business/regenerating-wirral/wirral-growth-plan

growth for the borough and the implementation of the plan will support the delivery of the following thematic outcome areas:

- Growing competitive businesses
- 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.

Birkenhead 2040 Framework

2.3.4   The draft Birkenhead 2040 Framework sets out the vision for transforming and regenerating Birkenhead to create a town which its residents and businesses are proud of and which many people choose to call home. It recognises that Birkenhead is at a pivotal moment with a sizeable opportunity for regeneration and change. The Birkenhead 2040 Framework identifies the priorities, opportunities, progress and challenges faced in transforming the town. Eight projects and nine neighbourhoods are prioritised as catalysts for driving the transformation. The Birkenhead 2040 Framework recognises the challenges involved with bringing about change but looks ambitiously towards capitalising on the unique assets of Birkenhead.

2.3.5   The Birkenhead 2040 Framework aims to see the existing Merseyrail network fully utilised, with new development concentrated around improved transport hubs. However, to extend its reach, 'last mile' connectivity needs to be enabled and linked, to provide full connectivity to all parts of Birkenhead. This is likely to be in the form of a Mass Transit system, the feasibility for which is under investigation.

Wirral Network Management Plan[16]

2.3.6   The 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 Merseyside to grow and become 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 objectives:

- Provide appropriate infrastructure for regeneration
- Ensure accessibility for all
- Manage demand through effective management strategies and awareness programmes
- Promote healthier communities
- Protect and enhance the environment

2.3.7   Wirral Highway Infrastructure Asset Management Policy[17] and Wirral Highway Infrastructure Asset Management Strategy[18]

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[16]https://www.wirral.gov.uk/sites/default/files/all/Parking,%20roads%20and%20travel/transport%20policy/Network%20Management%20Plan.pdf

[17]https://www.wirral.gov.uk/sites/default/files/all/Parking,%20roads%20and%20travel/road%20maintenance/Highway%20infrastructure%20asset%20management%20policy.pdf

[18]https://www.wirral.gov.uk/sites/default/files/all/Parking,%20roads%20and%20travel/road%20maintenance/Highway%20infrastructure%20asset%20management%20strategy.pdf

2.3.8   The asset management policy describes the principles adopted in applying asset management to achieve the council's strategic objectives.

2.3.9   The asset management strategy sets out how the long-term objectives for managing Wirral's highways are to be achieved. It links with other relevant documents, such as corporate plans, and sets out the benefits of investing in the highway infrastructure within the context of any constraints, such as funding.

3 Local Transport Context

3.1 Overview

3.1.1 This section provides an overview of the transport context already in place in Wirral. It covers details on local travel behaviour, alongside provision and usage of highways, rail, bus, ferries, walking and cycling.

3.2 Local Travel

3.2.1 The borough of Wirral has a population of 324,300[19] and 72% of the 140,583 households in Wirral have access to a car or van; this is the same as the North West figure and slightly below the figure for England at 74%. Car availability varies across the borough, with 90% of Heswall households having a car compared to 44% in Birkenhead. In the 2017 LCR Household Travel Survey, 65% of over 17s surveyed had a full driving licence, with 2% holding a provisional licence. 91.9% of trips made by Wirral residents were within Wirral. Wirral's population has a notably high proportion of older residents compared to the national average. Figure 3.1 shows the mode share for trips made, all purposes.

Figure 3.1: Mode share for trips, all purposes
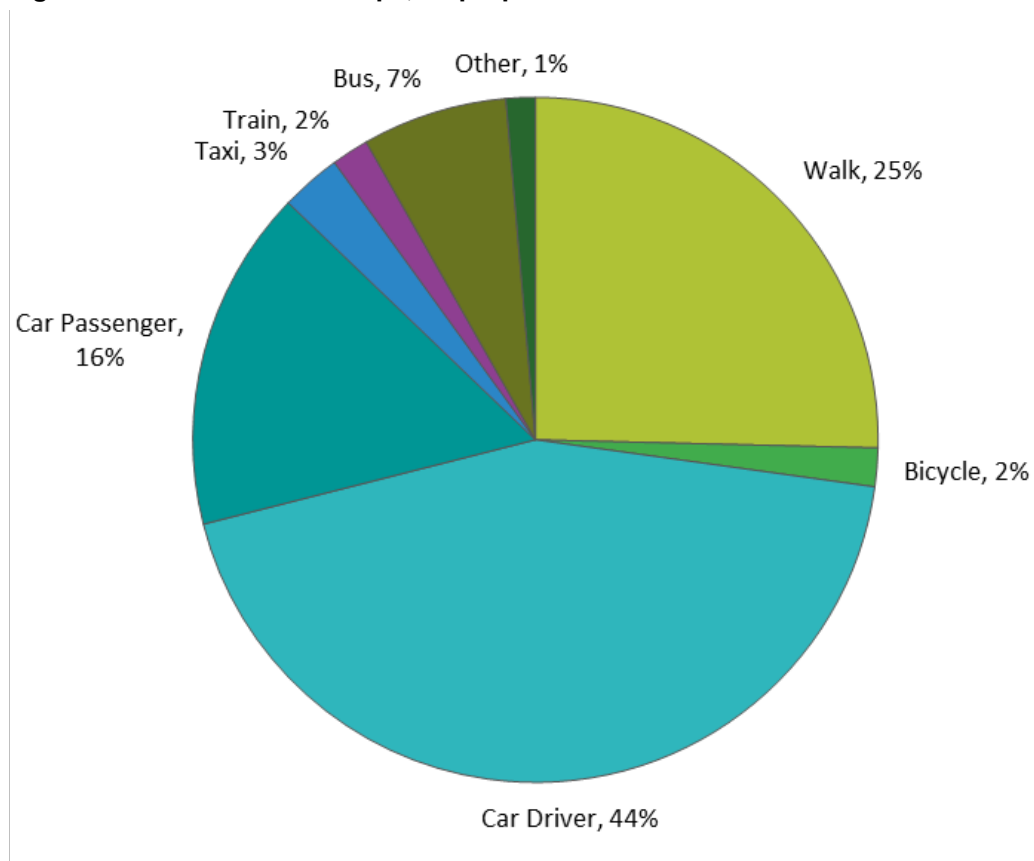
Source: LCR Household Travel Survey, 2017

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[19] ONS Population Estimates, 2020

Travel times

3.2.2   Table 1 shows the average travel time by mode in minutes to key destinations from origins within the borough[20].

Table 1 Average travel time (mins) to key destinations

Destination	Car	Public Transport	Cycle
Employment centre with 500-4999 jobs	7	11	9
Employment centre with 5000 jobs	12	24	19
Nearest town centre	9	16	13
GPs (Doctors)	7	10	9
Primary School	8	8	7
Further Education	14	17	10

Travel to Work

3.2.3   According to Census 2011 data, around two-thirds of people who live or work in Wirral drive to work. On foot is the second most common method of travel, followed by bus, train and car passenger. This information is shown in Table 2.

Table 2 Mode share by travel to work journey

Mode	Live in Wirral, work anywhere	Work in Wirral, live anywhere	Great Britain
Car as driver	65%	66%	60%
Car as passenger	6%	7%	6%
Bus	8%	8%	9%
Train	8%	5%	10%
Taxi	1%	1%	<1%
Bicycle	2%	2%	3%
On foot	9%	11%	12%
Other	1%	1%	1%

3.2.4   It can be seen that usage of the car for commuting is higher in Wirral when compared nationally; use of train, bus and walking is lower in Wirral than nationally.

3.2.5   Table 3 shows the number of people commuting between Wirral and selected local authorities. The local authorities shown below have the highest commuting patterns. In addition, 74,137 people live and work within Wirral; this represents 63% of all Wirral residents who are in work. Wirral is a net exporter of commuters, with more people travelling from Wirral to other local authorities than travelling from other local authorities to Wirral. The strongest commuting links are with Liverpool and Cheshire West and Chester.

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[20] Department for Transport, Journey Time Statistics 0401 - 0408

**Table 3 Commuting movements to/from Wirral by surrounding area**

Local Authority	Commute to Wirral	% of all people who work in Wirral	Commute from Wirral	% of all working Wirral residents
Cheshire West and Chester	6,135	7%	10,189	9%
Flintshire	991	1%	2,828	2%
Knowsley	1,065	1%	1,305	1%
Liverpool	4,195	5%	18,094	15%
Sefton	1,194	1%	1,918	2%
Warrington	382	<1%	1,156	1%
Other	3,316	4%	8,826	7%

3.3 Highways

3.3.1 Wirral has 1,135km of highway; Figure 3.2 shows Wirral's Key Route Network – highways which are of strategic importance for the success of Wirral and the Liverpool City Region. The M53, A59 and A41 carry the highest volumes of traffic in Wirral. Wirral is connected to Liverpool by two road tunnels – the Kingsway tunnel and the Queensway tunnel. Between them, the tunnels carried around 90,000 vehicles a day between the two centres prior to Covid-19[21].

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[21] Merseytravel: https://www.merseytravel.gov.uk/about-us/media-centre/Pages/Facts-and-Figures.aspx

Figure 3.2: Wirral Key Route Network
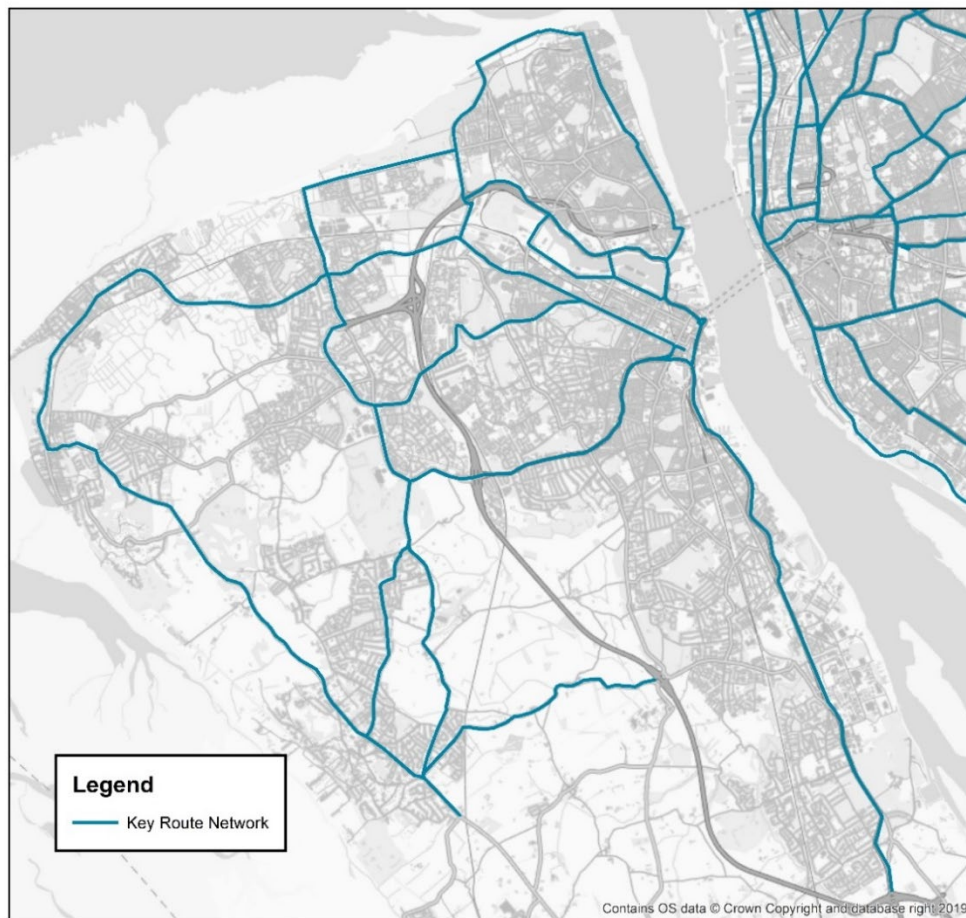
Source: Mott MacDonald

3.3.2   In 2019, 1,287 million miles were made by motor vehicles in Wirral. This represents a 19% increase in traffic miles since 2005 but is below the 24% increase seen in Merseyside in the same period[22].

Congestion

3.3.3   Locations on the Wirral highway network which have been identified as having congestion problems are:

- Both Mersey tunnels between Wirral and Liverpool
- A41 Rock Ferry bypass
- M53 at J1
- A552 Woodchurch Road between M53 and Arrowe Park Road
- A540 between Telegraph Road and Chester High Road
- A553 between West Kirby and Moreton.

3.3.4   Figure 3.3 and Figure 3.4 show the links on the highway network which are currently experiencing capacity issues, with a volume over capacity ratio of 0.85 or higher, indicating queues and delays occur.

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[22] Department for Transport, TRA8901, 2020

Figure 3.3: AM Peak Congestion (2015)
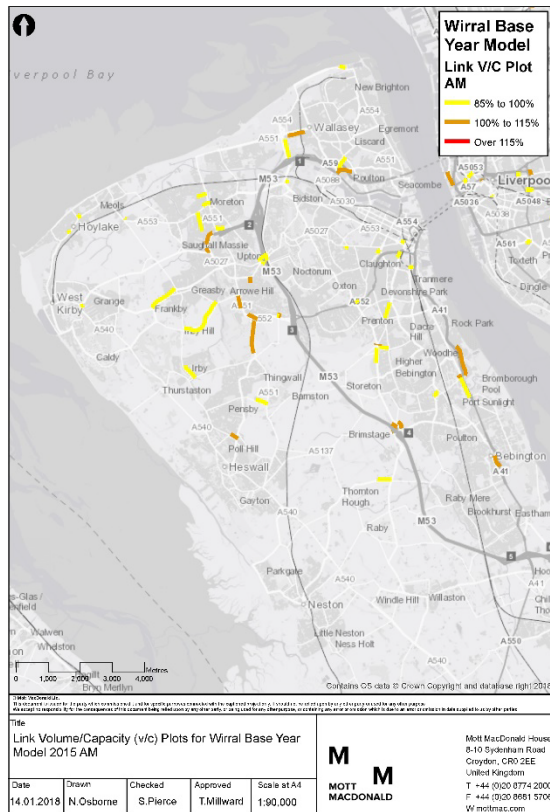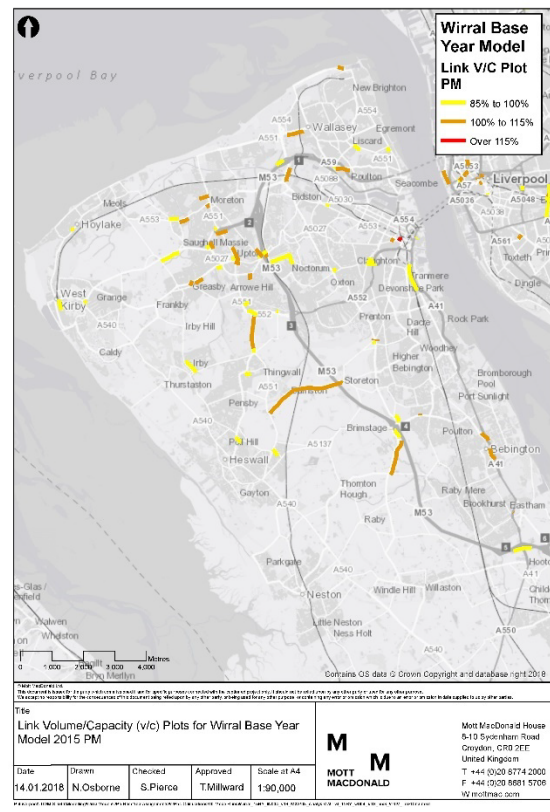

Source: Mott MacDonald

Figure 3.4: PM Peak Congestion (2015)

Source: Mott MacDonald

Road safety

3.3.5   Department for Transport and Wirral figures on road safety show that there were 380 accidents reported in Wirral in 2020, broken down by severity as follows in Table 4.

Table 4 Road safety figures

Severity	Number of accidents
Fatal	3
Serious	87
Slight	290

Source: Department for Transport

3.3.6   Overall, there is a long-term improving picture of safety on Wirral roads with 380 injury collisions in 2020, compared to 430 in 2018 and 1,379 in 2000. Whilst measuring collision data year to year is affected by annual random fluctuations, there were 1.6% fewer people injured on Wirral in road crashes in 2018 compared to 2017 and 24% fewer people injured comparing the average of the last 5 years (2014 – 2018; 651 casualties) to the average of the previous 5 years (2009 -2013; 860 casualties).[23]

3.4   Rail

3.4.1   Wirral's rail network is constituted of the Wirral Lines of the Merseyrail network, and the Wrexham-Bidston Line operated by Transport for Wales between Bidston and Wrexham
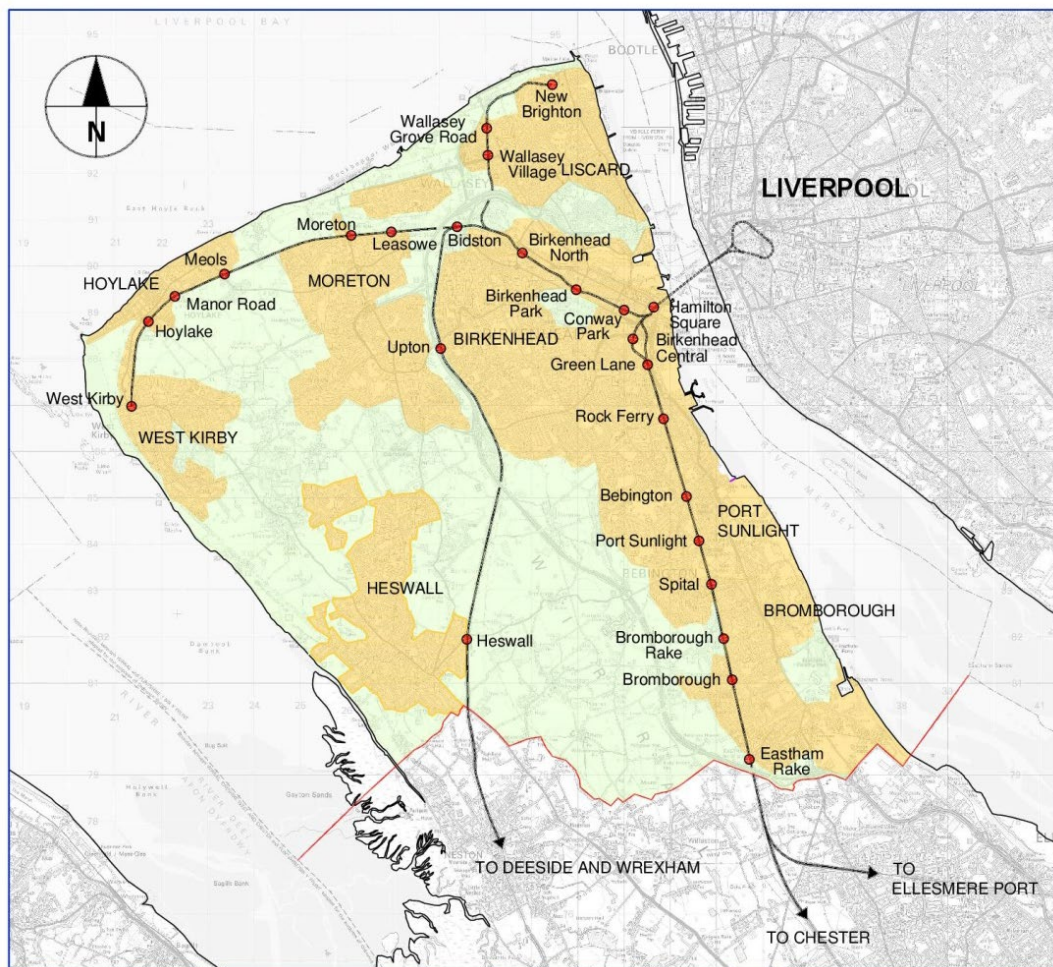
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[23] Wirral Road Safety Officer

Central. Figure 3.5 illustrates the location of stations in Wirral. The east and north areas of Wirral are better served by rail than the centre, west and southern areas. The Merseyrail network has four lines, terminating at Chester, Ellesmere Port, West Kirby and New Brighton. All four routes serve Hamilton Square, then cross the River Mersey, run around the Liverpool Loop Line – and return to the terminus stations via Hamilton Square.

3.4.2   At the time of writing, all Merseyrail lines except Ellesmere Port run at a frequency of three services per hour Monday to Saturday daytimes; the Ellesmere Port line operates at two services per hour. Outside this, frequencies generally drop to two services per hour across the network. The frequencies have changed at different points during the Covid-19 pandemic to reflect passenger demand and may change again in the future.

3.4.3   The Wrexham-Bidston service between Bidston and Wrexham Central operates at an hourly frequency Monday to Saturday daytimes. Enhancing this line was identified as an ambition within the Liverpool City Region Long Term Rail Strategy; this would include increased service levels, line electrification, new stations at Beechwood, Woodchurch and Deeside Industrial Park, and direct connectivity and integration with the Merseyrail Wirral Line.

3.4.4   Transport for Wales committed to delivering the North East Wales Metro by increasing frequency on the Wrexham-Bidston line to 2 trains per hour (tph) from December 2021, with fully refurbished metro trains[24] but this has not yet been realised. A fleet of new rolling stock will be rolled out across Wales which will be operated using hybrid diesel electric engines. These will use diesel and batteries, which will negate the need to wait for lines to be electrified, with associated cost savings from this. North Wales will be the first to benefit from the additions to the fleet along the Wrexham to Bidston, Crewe to Chester and Llandudno to Blaenau Ffestiniog routes[25].

3.4.5   The Merseyrail network operates as a Park & Ride network for Birkenhead and Liverpool; consequently, many of the stations have car parks. Hooton, Birkenhead Park, Bidston and Wallasey Grove Road have the largest car parks, all of which are free except for Hooton (although it should be noted that Hooton is outside of Wirral and operated by Chester West and Chester).

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[24] https://tfw.wales/whats-happening-north-wales (accessed 10/01/2020)

[25] https://gov.wales/new-trains-will-be-boost-north-wales-rail-passengers (accessed 10/01/2020)

Figure 3.5: Merseyrail network map

Source: Merseyrail

3.4.6   Table 5 presents the number of passengers entering and exiting Wirral stations in 2020/21. Hamilton Square is by far the busiest station, followed by New Brighton. Hamilton Square is the sixth busiest station in Merseyside. In the five years prior to Covid, rail passenger numbers increased by 13.5%.

Table 5 Wirral station entries and exits 2020/21

Station	2020/21 Station Entries/Exits
Bebington	278,516
Bidston	109,252
Birkenhead Central	317,518
Birkenhead Hamilton Square	530,284
Birkenhead North	298,418
Birkenhead Park	246,518
Bromborough	178,264
Bromborough Rake	110,834
Conway Park	301,530
Eastham Rake	137,464

Station	2020/21 Station Entries/Exits
Green Lane	167,190
Heswall	19,894
Hoylake	160,230
Leasowe	189,894
Manor Road	90,840
Meols	109,896
Moreton (Merseyside)	184,086
New Brighton	382,298
Port Sunlight	199,582
Rock Ferry	260,252
Spital	118,590
Upton (Merseyside)	2,974
Wallasey Grove Road	159,822
Wallasey Village	160,442
West Kirby	359,868

Source: Office of Rail and Road; Station Usage Estimates 2020/21

3.4.7 Direct rail connections to destinations outside of Wirral and Liverpool are limited to the Borderlands line to Wrexham via Heswall, Shotton and Hawarden, and the Merseyrail lines to Ellesmere Port and Chester. However, from Wrexham, Ellesmere Port, Chester and Liverpool Lime Street there are mainline connections to destinations including Manchester, Warrington, Leeds, Sheffield, Birmingham, North Wales, Shrewsbury, Cardiff, London, Blackpool and Scotland.

3.4.8 Wirral specific rail patronage is not available, but 940 million passengers use Merseyrail every year.

3.5 Buses

3.5.1 Bus forms an important part of the public transport network in Merseyside. Despite the strong rail offer, around 80% of journeys made by public transport in Merseyside are by bus. There are 37 bus routes which serve Wirral, of which 11 run across the boundary to Liverpool, and 4 run across the boundary to Cheshire and North Wales.

3.5.2 Stagecoach and Arriva are the two largest commercial operators in Wirral, with their services supplemented by a number of Merseytravel supported services operated by other operators where there is a gap in the network or a particular social need. In total there are 38 bus routes operating in Wirral. Only one of these, 471/472 between Liverpool City Centre and Heswall, forms part of the LCR Bus Alliance Network, an agreement between Merseytravel, Arriva and Stagecoach to improve bus travel for people across the Liverpool City Region. The Alliance's ambition is "*for a thriving, affordable and sustainable bus network that offers the customer a value for money and hassle-free journey experience - leading to an increase in fare paying passengers*"[26].

3.5.3 This voluntary partnership has realised many benefits for bus users across the city region such as the fixed price "Solo" ticket accepted by all operators for unlimited travel in a day throughout the Liverpool City Region. Similarly, the "Walrus" smart card has digitised several bus ticket products allowing them to be loaded on to a card and then activated by users. This also provides future opportunities between wider interoperability for tickets between different regions

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[26] https://www.merseytravel.gov.uk/about-us/guide-to-Merseytravel/Pages/Buses.aspx

and operators. The work of the Bus Alliance is believed to have assisted in the city region going against national trends of significantly decreasing bus usage. From the three years from Alliance's establishment fare paying passengers across LCR rose by 16.2% (LCR Bus Alliance, 2017). This does not align with DfT statistics.

3.5.4   Heswall and Birkenhead both have bus stations; however, it is Birkenhead's station which functions as the hub for the borough's bus network. The network covers a significant proportion of the borough, although some routes operate at relatively low frequencies (hourly or less). In terms of bus connectivity outside of the borough, there are direct bus services from Wirral to Chester, Ellesmere Port and Liverpool. However, there is no direct bus connectivity to Deeside and North Wales.

3.5.5   Data on bus patronage is not available at for Wirral; at a Merseyside level, bus patronage, as is common nationally, has been declining from 110.8m passenger journeys on bus services in 2010/11 to 100.3m in 2019/20. Similarly, the annual number of bus journeys made per head of population in Merseyside has fallen from 82.1 in 2009/10 to 70.1 in 2019/20[27].

3.5.6   A new MetroCard smart travel scheme has recently launched to replace the Liverpool City Region's Walrus card. The scheme provides an opportunity for online management of travel through a smart ticketing scheme with 'tap and go' travel, digital season tickets and online accounts for customers across bus and rail[28].

3.6   Ferries

3.6.1   Mersey Ferries operate services 7 days a week between Pier Head, Seacombe and Woodside. During peak travel hours, a fast shuttle service operates every 20 minutes between Seacombe and Pier Head with a journey time of around 10 minutes between the two terminals. Between 10am and 5pm on weekdays and all day at weekends a cruise service operates, calling at all three terminals and taking around 50 minutes to complete the cruise.

3.6.2   Mersey Ferries services are operated by two vessels: Royal Iris of the Mersey and Snowdrop. These vessels are around 60 years old and approaching life expiry. The costs of maintenance are increasing and time lost due to vessel failures is growing. Merseytravel heavily subsidise the operation of the ferry services and the terminals at Woodside and Seacombe.

3.6.3   Each year there are 450,000 to 500,000 passengers using the river explorer service which outnumbers the commuter service approximately three to one[29].

3.6.4   As part of the Mersey Ferries Long Term Ferry Strategy[30], funded by TCF investment, two new low carbon ferries, new bridges and an updated landing stage at the Seacombe Ferry terminal are planned. This will help to strengthen and improve connectivity across the Mersey between Liverpool and Wirral, supporting growth on both sides of the river.

3.6.5   As well as the Mersey Ferries, Wirral also acts as a gateway to island of Ireland; in 2019, 298,000 people travelled on the Birkenhead – Belfast ferry route, representing a 14% increase from 5 years earlier.

3.7   Walking and Cycling

3.7.1   Wirral has a comprehensive walking and cycling network. The Wirral Circular Trail (Regional Route 89) is a 35 mile mainly traffic-free route around the perimeter of the boundary. In addition,

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[27] Department for Transport BUS0109 Statistics

[28] https://www.liverpoolcityregion-ca.gov.uk/new-metrocard-travel-scheme-to-replace-walrus-card/

[29] Liverpool City Region Combined Authority Mersey Ferries Long Term Strategy 2015/16 to 2034/35

[30] Liverpool City Region Combined Authority Mersey Ferries Long Term Strategy 2015/16 to 2034/35

national cycle route 56 runs from Chester to Neston then north through the centre of Wirral to Wallasey and New Brighton; the route continues through South Liverpool.

3.7.2   Over recent years, significant investment has been made in improving infrastructure for cyclists through funding secured via the LCRCA from the Department for Transport (DfT). New facilities for cyclists and pedestrians enable easier and safer journeys to be undertaken using active modes of travel. Scheme examples include improvements along the A41 and in the Wallasey Dock area, a strategic link between Leasowe and Wirral Waters, as well as planned routes across the Left Bank and a planned e-cargo bike pilot. An Active Travel Strategy for Wirral is currently under development.

3.7.3   Cycling connectivity between key towns in Wirral is poor, worsened by the M53 which creates severance between the east and west of Wirral for cyclists. The Council is working closely with National Highways (Highways England) to address this issue of severance and works are planned for Junction 4 which will provide improved facilities for pedestrians and cyclists.

3.7.4   It can be seen in Figure 3.6 that the number of people regularly cycling in Wirral lags behind the regional and national rates, but walking is above the regional and national rates.

Figure 3.6: Percentage of residents walking and cycling 3 times per week
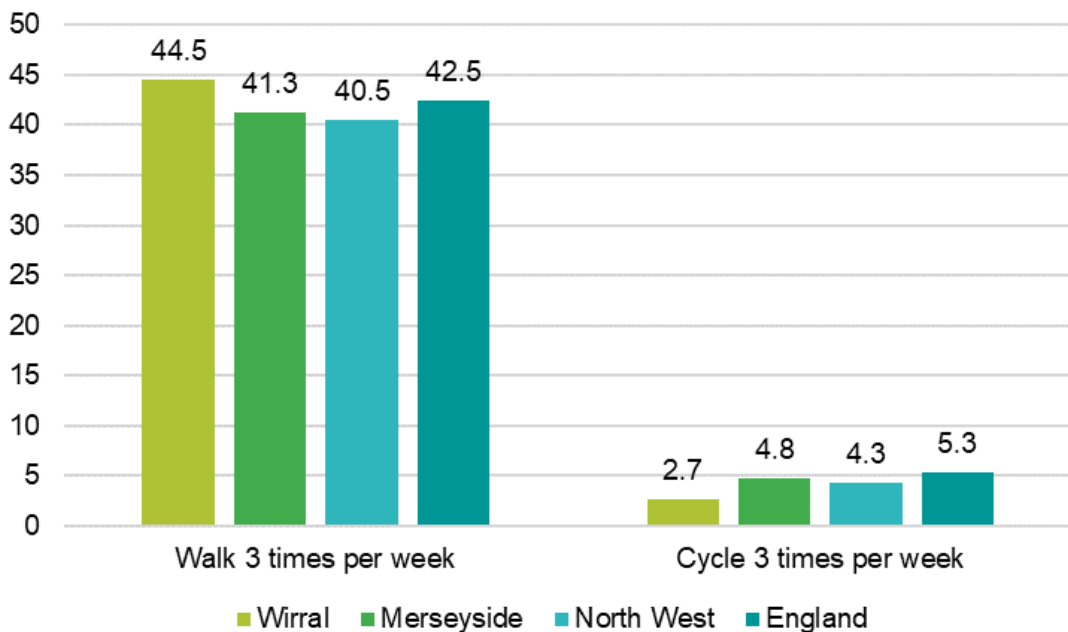
Source: Department for Transport, CW0302 and CW0303, 2020

4   Key Issues

4.1.1   The following table provides an overview of known key transport issues across Wirral, presented by mode.

Mode	Key issue
Highways	Congestion on A41 and A552 corridors, A59 Kingsway Tunnel, and Queensway Tunnel.
	Cross-river traffic is reliant on two tunnels which cause pinch points on the network, and in the event of an incident or closure, reduce connectivity between Wirral and Liverpool.
	Operating close to capacity; congestion north of junction with M53 to Eastham.
	Congestion on A540 between Telegraph Road and Chester High Road.
	Congestion on A553 between West Kirby and Moreton.
	Congestion on J5 northbound on-slip and between J6 and J5, and around J1.
	Heavy reliance on private car for journeys within Wirral.
	Kingsway Tunnel Approach Road cuts a swathe into the landscape which generates severance particularly between Seacombe and Wirral Waters.
	Congestion and conflicts between HGVs and other road users around the Ro-Ro terminal. HGV movements are expected to increase with development of the Ro-Ro and potentially Wirral Waters.
	Surplus of cheap, long stay car parking increases number of vehicles in area and discourages walking and cycling. Inconsistent charging and tariffs encourage this.
Rail	Low frequency service on Wrexham/Bidston rail line; lack of integration with Merseyrail Wirral lines.
	Some stations on Merseyrail network are not fully accessible for disabled users.
	Public transport connectivity to Wirral Waters is limited in provision.
	Interchange between bus and rail is limited at rail stations.
	Some urban centres in Wirral are poorly served by public transport, such as Heswall and Seacombe, as well as rural communities in the west and south-west of Wirral.
	Park and Ride provision at rail stations is limited.
	By 2045, demand for rail services through Birkenhead and through tunnels to Liverpool is expected to exceed 80% of capacity.
	Journey times by public transport can be 2-3 times longer than by car.
	Historic rail lines create severance for vehicle and pedestrian movement.
	Lack of flexible ticketing options to make savings on passes for people who want to use bus or rail 2-3 days a week.
	Most east-west bus and rail services require going through or changing in Birkenhead which increases journey times.
Bus	Bus patronage has been declining across the area, with the number of passenger journeys made by bus decreasing by 10% between 2010/11 and 2017/18.
	Public transport connectivity to Wirral Waters is limited in provision.
	Interchange between bus and rail is limited at rail stations.
	Some urban centres in Wirral are poorly served by public transport, such as Heswall and Seacombe, as well as rural communities in the west and south-west of Wirral.
	Journey times by public transport can be 2-3 times longer than by car.
	Lack of flexible ticketing options to make savings on passes for people who want to use bus or rail 2-3 days a week.
	Most east-west bus and rail services require going through or changing in Birkenhead which increases journey times.
Ferry	Ferries are approaching life expiry and maintenance costs are rising as a result.

Mode	Key issue
	Ferry terminals have ageing infrastructure and limited interchange with walking and cycling.
Walking and cycling	Severance created by M53 limits east-west movements.
	Walking and cycling routes of poor quality in places which decrease the attractiveness of these modes.
	Rates of people walking and cycling at least three times per week are lower than national average rates.
	Rates of cycling are low, with around 2% of all trips undertaken by bicycle (although this is not lower than the national average)[31].
	Off-road and segregated cycle routes are limited and discontinuous beside the Wirral Circular Trail.
	Limited cycling parking facilities across the borough to support increased numbers of cycle journeys.
	Major A roads create barriers to movement from residential areas south of Birkenhead into the town centre.
	Severance created in A41 North area by the flyovers around the Queensway Tunnel entrance, the tunnel toll plaza and the large number of A roads.
	Walking and cycling could be better used as modes of choice for shorter journeys

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[31] National Travel Survey 2018; accessed via:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/823068/national-travel-survey-2018.pdf (accessed 10/01/2020)

5   Transport Evidence Studies

5.1.1   This chapter summarises the various transport studies which have been completed since 2018, which are of relevance to the development of Wirral's Local Plan.

Transport Evidence Study	Date completed	Local Plan Contributions / Relevance
Wirral Waters Supporting Infrastructure	2018	A detailed review of existing transport infrastructure in the vicinity of Wirral Waters development proposals, from which a supporting package of multi-modal transport improvements was developed. These included junction and link improvements, new walking and cycling measures, the concept of a new mass transit public transport system, and public realm and landscaping improvements.
Connecting Wirral Waters	2019	Transport feasibility study for Wirral Waters which suggested public transport and active travel infrastructure improvements, including the Mass Transit system. These suggestions provide a framework for accessing this large development site from Birkenhead and Seacombe, and for moving around within the site by removing existing barriers.
Strategic Transport Framework	2019	Overarching strategic transport framework action plan - in practice a refresh of Wirral's future transport scheme pipeline. This analysed potential schemes from a number of sources, assessed and appraised them, and provided a revised phased and high level costed action plan for development over the coming years. As part of this, consideration was given on how best to serve local development sites, including those form part of the proposed Local Plan.
A41 South Baseline Assessment	2020	This study assessed the existing transport issues along the A41 South, to determine how the corridor would cope with potential development sites coming forward. It identified where congestion may form, and where site access would need to be improved to enable the site to be developed, either in the form of active travel or public transport connectivity. A long list of options was produced for further consideration.
Emerging Urban Brownfield Site Assessment Study - Transport and Accessibility inputs	2020	Assessment of brownfield sites to determine their accessibility and suitability for inclusion as a development site within the Local Plan. The study identified whether improvements such as new active travel infrastructure or a bus stop should be included to improve each site's suitability. The recommendations were considered in the development of the Local Plan.
Wirral Local Plan Strategic Spatial Options Modelling Report 2019	2020	A base year plus four possible Local Plan scenarios tested for their impact on Wirral's transport network. From this, a preferred option was selected and taken forward for the draft Local Plan and for further testing.
Birkenhead 2040 Framework	2021	Vision for transformation of the land use and economic vitality in Birkenhead, through delivery of new housing, upgraded infrastructure and wholescale change. The BRF directly enables a number of the proposed Local Plan sites, which prioritises urban intensification and utilisation of brownfield sites, replacing low density sites with higher density ones. Transport and infrastructure requirements to support the BRF have been identified.
Neighbourhood Frameworks	2021	Neighbourhood Frameworks are focused studies in particular areas contained within the Birkenhead 2040 Framework, to set out the specific actions which will achieve the delivery of the Birkenhead 2040 Framework in that area. Transport and infrastructure requirements to support the Neighbourhood Frameworks have been identified.

Transport Evidence Study	Date completed	Local Plan Contributions / Relevance
Wirral Preferred Options Modelling Report	2021	The chosen preferred option included within the submission draft Local Plan was subjected to further modelling to produce a full baseline test of the Plan on the transport network, covering multiple highways changes and new developments. This highlights the effects of the forecasted changes through the Local Plan on the highway network.
M53 Local Plan Modelling	2021/ 2022	Detailed assessment and junction modelling of Junctions 1 to 6 of the M53 to test the traffic impact of various Local Plan development scenarios. The work identified that most junctions would be minimally impacted by the preferred Local Plan land-use scenario. However, a number of possible mitigating improvements were developed. The work was undertaken in consultation with National Highways (Highways England), and resulted in their technical sign-off and approval in principle.
Urban Sites Transport and Utilities Assessment	2021/2022	Mott MacDonald has been working with Wirral Borough Council's Local Plan team to provide specialist transport planning and utility assessment support on possible major sites for inclusion in the Local Plan update.
Charing Cross and Grange Road (RIBA 1&2) and Conway Street Programme	2021 / 2022	Charing Cross, Grange Road and Conway Street are public realm schemes to reimagine and redesign the public realm of these important streets within the town of Birkenhead. These schemes will improve the living environment for the local community, thus making Birkenhead a more viable location in terms of the property market and economic vitality.
Dock Branch Park phase 1	Ongoing	Concept design, ecology, environmental and engineering work completed in support of an OBC for an urban park within central Birkenhead. The linear park, identified as a site within the proposed Local Plan, entails active travel infrastructure and a transport museum. A masterplan for the site is imminent, and it is expected to invigorate development of housing and commercial units on either side of the park.
Hind St Highways Strategy	Ongoing	The Hind Street Highways Strategy details the highways and public transport infrastructure changes which are needed to enable the development of Hind Street, a flagship residential development site within Birkenhead. The large brownfield site is currently inaccessible; the recommendation to remove the flyovers will allow the northern section of the site to be developed. Other work, such as at-grade highways and active travel infrastructure, bus layover facilities and links to the town centre will make the site accessible and developable.
Mass Transit Outline Business Case	Ongoing	A new Mass Transit system would bring about a wholescale change in the last mile connectivity around Wirral Waters, Seacombe and Wallasey, thus supporting development of residential and employment sites in the north east of Wirral. The Mass Transit system would help prevent car dependency for new residents and businesses at Wirral Waters, and connect communities in Seacombe and Wallasey, areas of low car ownership, to employment, education, health and leisure facilities.
Wirral Walking & Cycling Infrastructure Study Stage 1 & 2	Ongoing	These studies advocate for active travel infrastructure within Wirral, present the strategy for active travel within Birkenhead, and identify specific areas which should be prioritised for intervention. Improved active travel infrastructure will prevent and reduce car dependency through connecting new and existing sites by facilities which make sustainable modes attractive.
Various cycle studies (B/2, Seacombe / Riverside Cycle Route, Birkenhead Road Cycle Infrastructure Design, WP7 Section A (Cycling), and WP7	Ongoing	Development of new / improved packages and active travel schemes, including Birkenhead Road, between Tower Road and Seacombe Promenade, Seacombe Waterside, Morpeth Docks to Woodside, and Beaufort Road to Hamilton Square. The work was used for funding applications to the LCRCA. Work is currently being

Transport Evidence Study	Date completed	Local Plan Contributions / Relevance
Section A (Cycling) (Phase J)		undertaken to progress the schemes through consultation and detailed design.

6 Transport Modelling

6.1.1 The Local Plan will provide for a minimum of 13,360 net additional dwellings. The spatial strategy including site allocations, allowances and regeneration areas makes provision for almost 18,000 homes. A cumulative impact assessment has been undertaken which accounts for traffic changes associated with planned Local Plan housing and employment, together with any committed network updates. The amount of housing growth that has been modelled exceeds the housing requirement and is therefore considered to be a robust "worst case" scenario. The effect of strategic infrastructure schemes identified to support development during the Local Plan period has also been modelled.

6.1.2 The forecasts have been developed based on the 2015 calibrated/validated base year Wirral Traffic Model (WTM). The WTM has been developed using SATURN software, which allows the impact of changes in traffic volumes on junction performance to be assessed.

6.1.3 The model scenarios that have been assessed are defined below:

- **Baseline, 2025 and 2037**- models the projected impacts of the baseline position with background growth but without growth being planned through the Local Plan Submission Draft.
- **Wirral Draft Local Plan (Preferred Option), 2025 and 2037 -** models the projected impacts of growth being planned through the Local Plan Submission Draft without the implementation of new strategic infrastructure schemes.
- **Baseline and Wirral Draft Local Plan (Preferred Option) plus Strategic Schemes, 2037**- models the projected impacts of growth being planned through the Local Plan Submission Draft with the implementation of new strategic infrastructure.

6.1.4 The Baseline scenarios contain 2015-2020 housing completions, planning permissions, new build windfalls, conversions, demolitions and empty homes, and 2020 SHLAA allocations. The Draft Local Plan (Preferred Option) scenario contains 2015-2020 housing completions, planning permissions, new build windfalls, conversions, demolitions and empty homes, site trajectory and regeneration areas. The Baseline and Draft Local Plan (Preferred Option) plus Strategic Schemes incorporates SHELMA (2015-2020) and WELPS (2020-2040).

6.1.5 These scenarios have been developed based on an updated version of Option 1A: Urban Intensification, which had been recognised by Mott MacDonald to be the Preferred Option for the Wirral Local Plan. A number of highway schemes identified by Wirral Council are included within all three scenarios, with additional schemes relating to Wirral Waters and the A41 corridor included only within the 'plus Strategic Scheme' scenario.

6.1.6 Model forecasts for the defined scenarios have been prepared for the following time periods:

- AM peak (08:00 - 09:00)
- Inter peak (average hour 10:00 - 16:00)
- PM peak (17:00 - 18:00)

6.1.7   Table 6 summarises the number of junctions with a volume over capacity ratio (V/C) of over 85% in each scenario. A V/C of over 85% indicates that a junction will be experiencing congestion.

Table 6 Number of junctions over capacity by scenario

	Base Year 2015	2025 Baseline	2025 Preferred Option	2037 Baseline	2037 Preferred Option	2037 Baseline plus Strategic Schemes	2037 Preferred Option plus Strategic Schemes
AM	71	148	149	167	174	168	180
IP	26	62	62	84	89	84	88
PM	78	121	121	143	148	151	152

6.1.8   The impact of the Draft Wirral Local Plan (Preferred Option) is relatively moderate when compared against the relevant Baseline scenario. The two forecast years of 2025 and 2037 illustrate this, where there is a total of only 1 additional junction which has a V/C ratio of greater than 85% between the 2025 Baseline and Preferred Option scenario. This increases to 17 additional junctions which are forecast to exceed the V/C threshold of 85% between the 2037 Baseline and Preferred Option scenarios.

6.1.9   The inclusion of strategic transport schemes planned during the Local Plan period are forecast to have a positive effect on network performance and capacity along the corridors to which the schemes are local. The highway assessment metrics for the Preferred Option plus Strategic Schemes scenario illustrate the impact of the schemes on the network, specifically in the comparison of traffic flows where there is a limited increase in flow on links surrounding the schemes, compared to the greater increases forecast for the 'without schemes' scenario. However, the impact of the schemes across the whole Wirral Borough network is forecast to increase the total number of junctions deemed to be over capacity. Across all periods, there are 7 junctions that have a V/C ratio greater than 85% for the Baseline with Strategic Schemes compared with the Baseline without Strategic Schemes. This number increases to 9 junctions over the 85% V/C threshold when the Draft Wirral Local Plan Preferred Option is modelled. Modelling outputs are included as Figure 6.1 to Figure 6.6.

6.1.10   It should also be noted that rather than the provision of additional highway capacity, Wirral Council are committed to reducing car use from new developments through public transport and active travel improvements through the Wirral Mass Transit scheme, development mobility hubs, active travel junction improvements and walking and cycling investment. Further, Wirral's ambition to primarily utilise brownfield sites for the delivery of the Local Plan will maximise the opportunity for residents to make use of existing transport hubs and infrastructure in established urban areas. This will also be complimented by reduced car parking capacity which will be supported as appropriate for planning applications for residential development within the Birkenhead 2040 Framework Area and town centres.

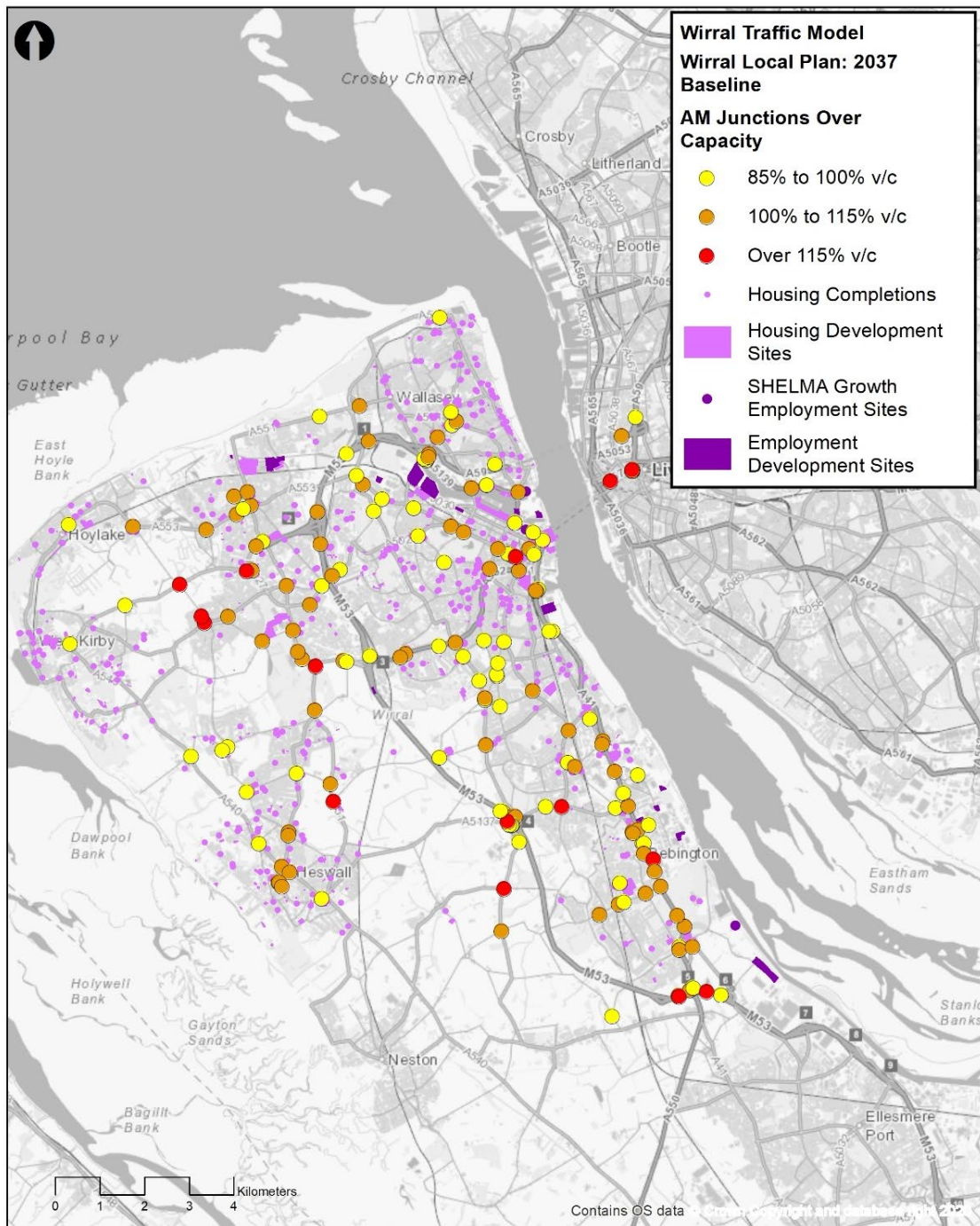**Figure 6.1: Junctions Over Capacity: 2037 Baseline Growth Scenario: AM**

Figure 6.2: Junctions Over Capacity 2037 Baseline Growth Scenario: Inter Peak
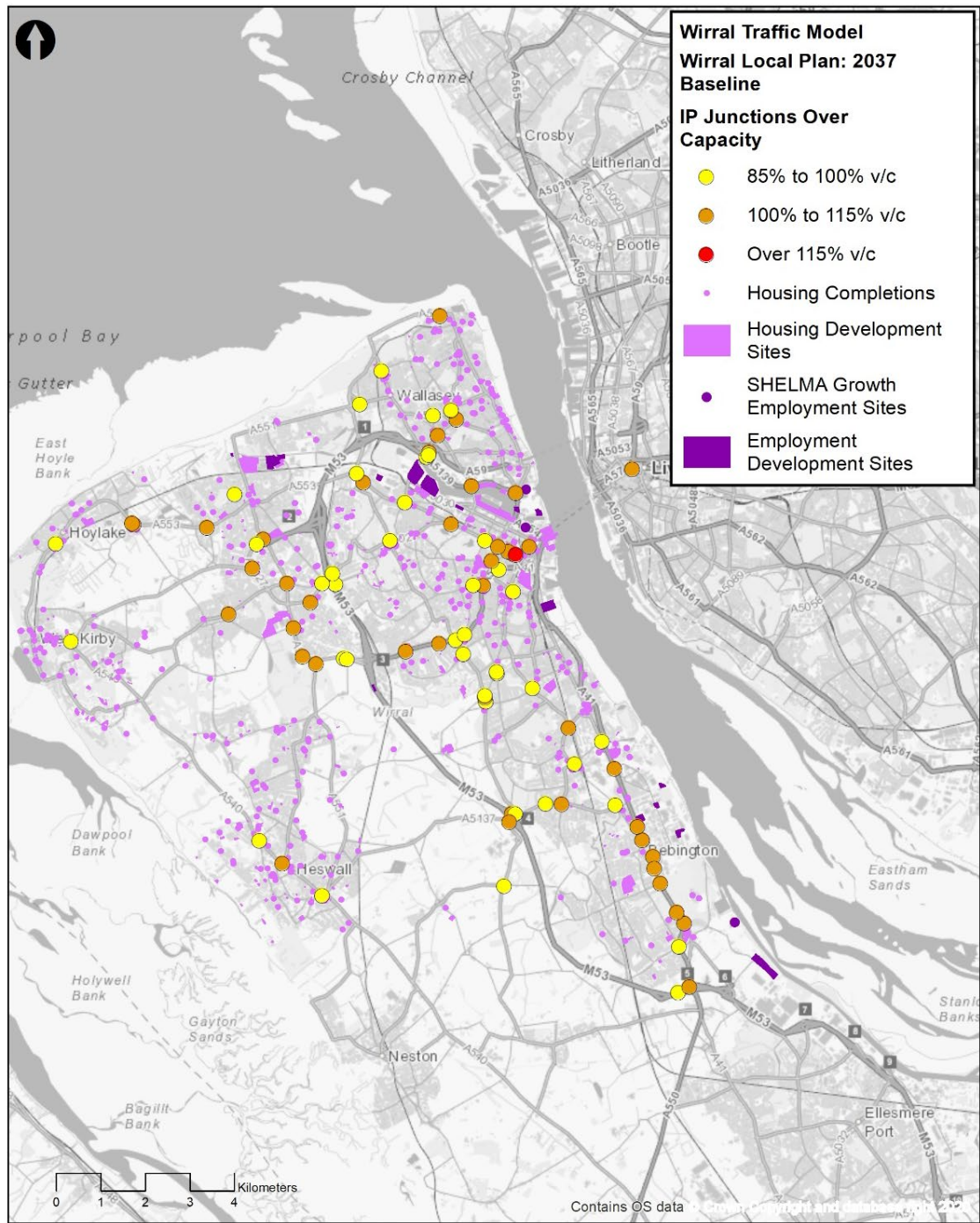
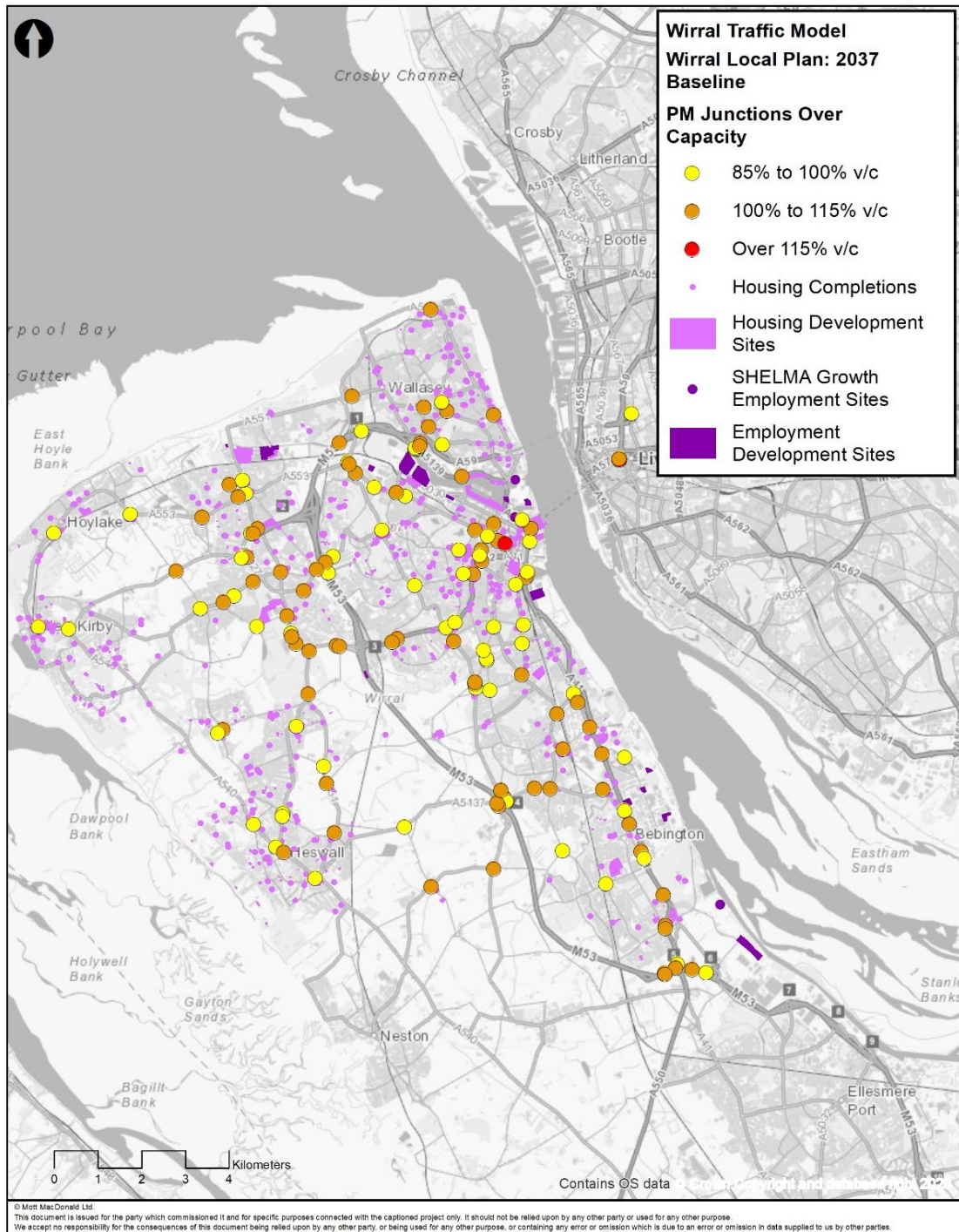**Figure 6.3: Junctions Over Capacity 2037: Baseline Growth Scenario: PM**

Figure 6.4: Junctions that Become Over Capacity in 2037 Preferred Option plus Strategic Schemes Scenario: AM
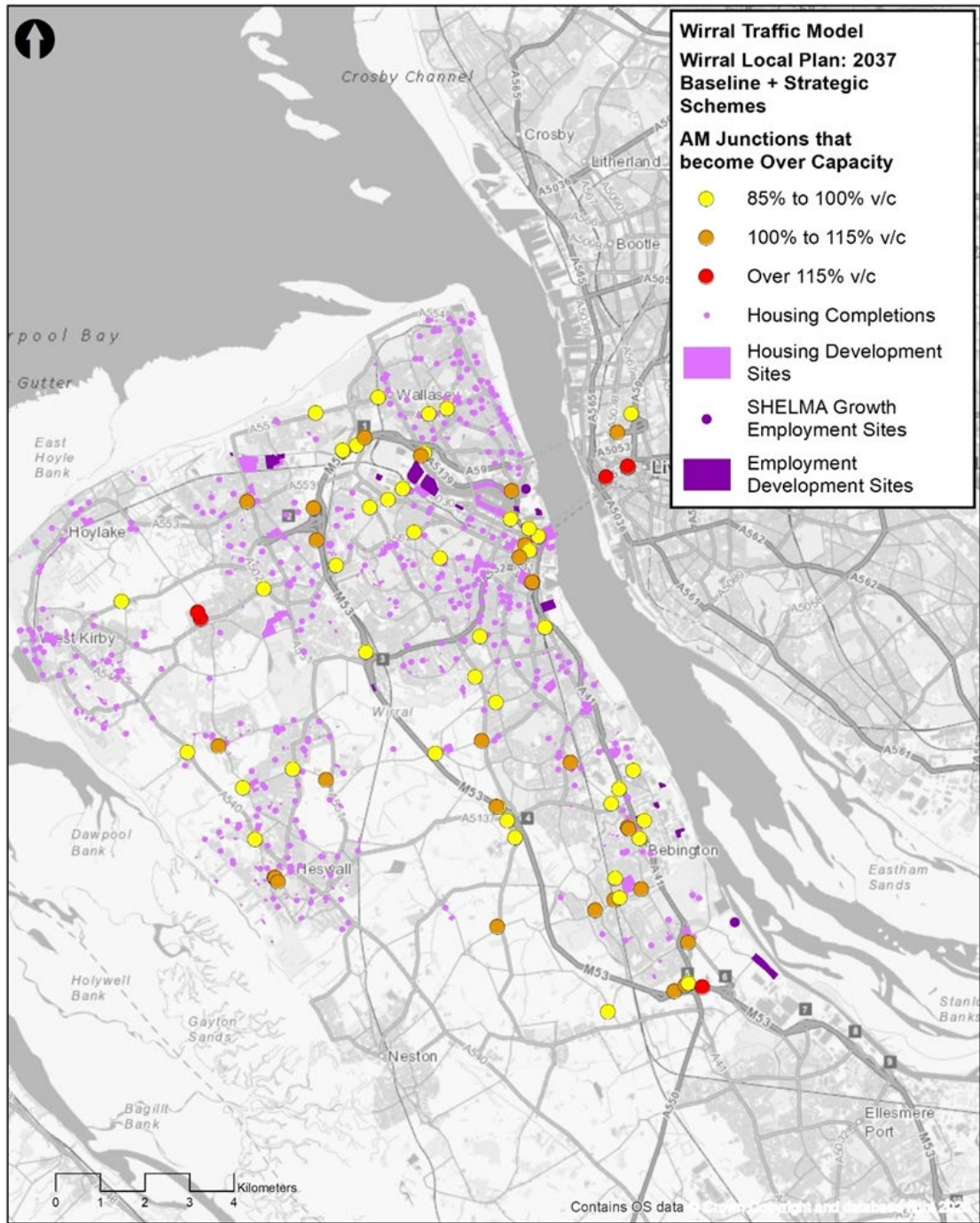
Figure 6.5: Junctions that Become Over Capacity in 2037 Preferred Option plus Strategic Schemes Scenario: IP
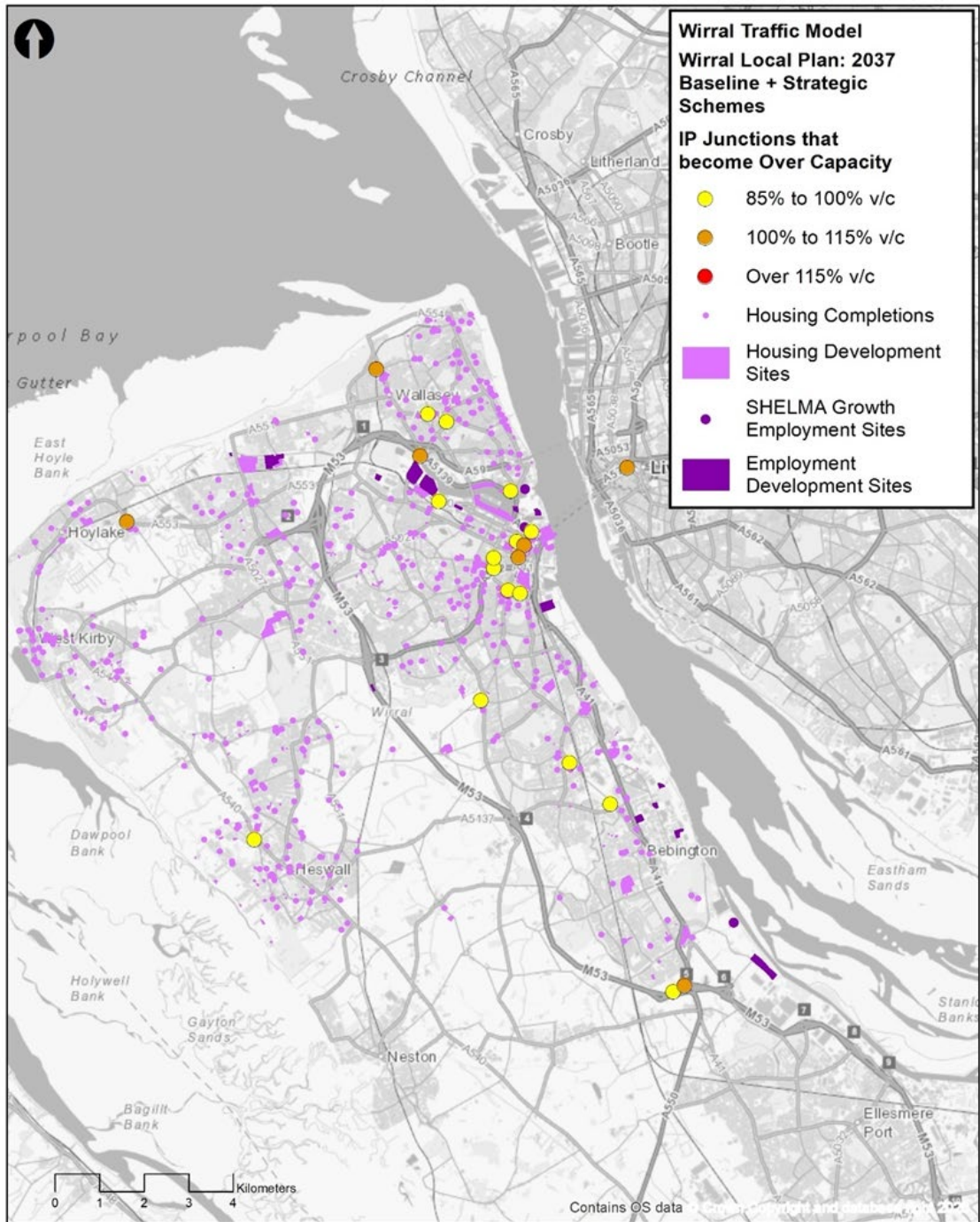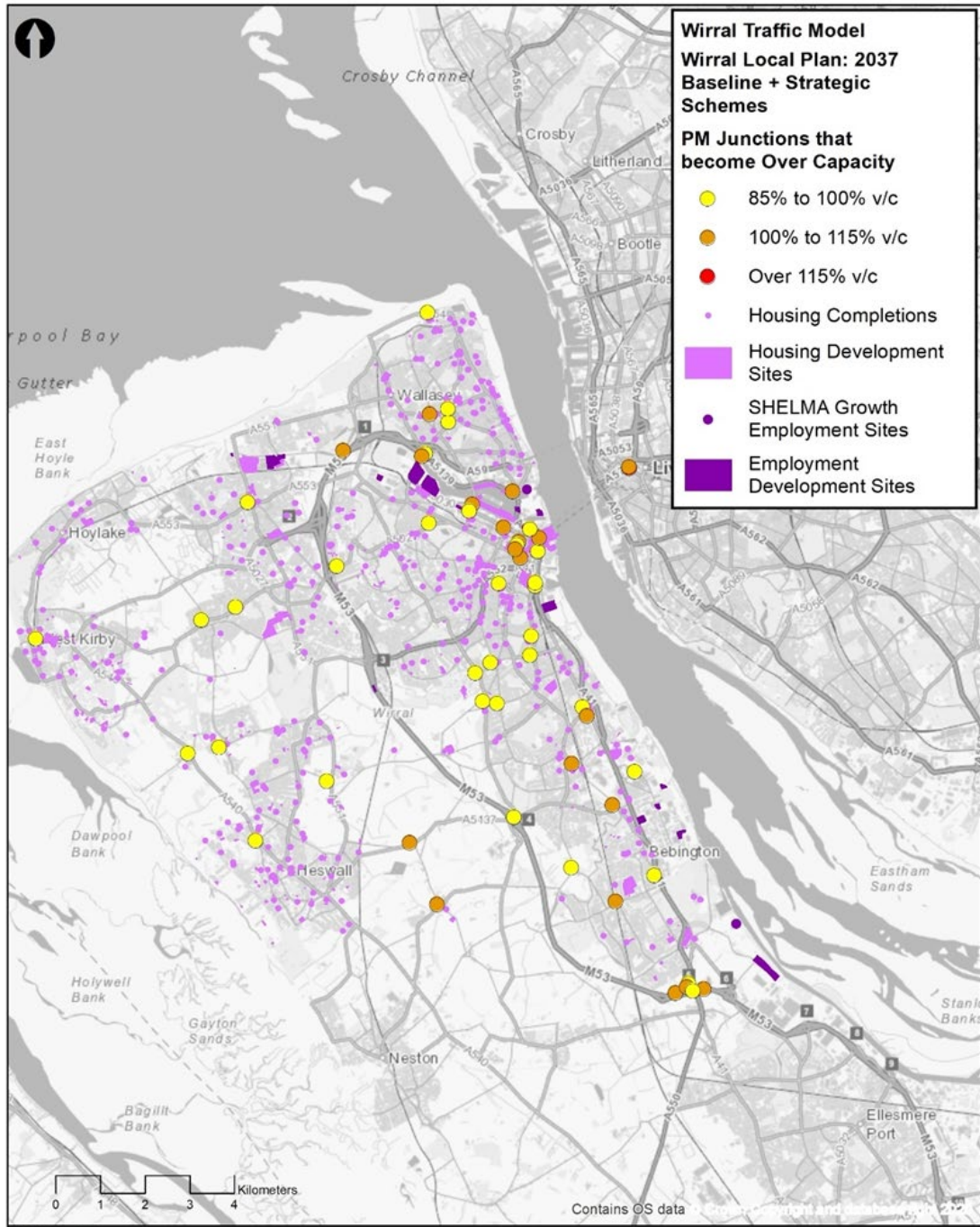
Figure 6.6: Junctions that Become Over Capacity in the 2037 Preferred Option plus Strategic Schemes Scenario: PM

6.1.11   The transport model assessments have been scrutinised and agreed with National Highways with regards to the motorway network and further junction analysis undertaken. Analysis is noted to generally show marginal additional impact on junction operation with regard to Local Plan growth. However, capacity issues are noted, and therefore possible improvements to junction lane markings and signalisation have been identified to enhance the operation of M53 junctions 3, 4 and 5.