MOTT MACDONALD

Wirral Waters and Supporting Road Infrastructure- Feasibility Study

Baseline Report

April 2018

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Contents

Executive summary

Introduction

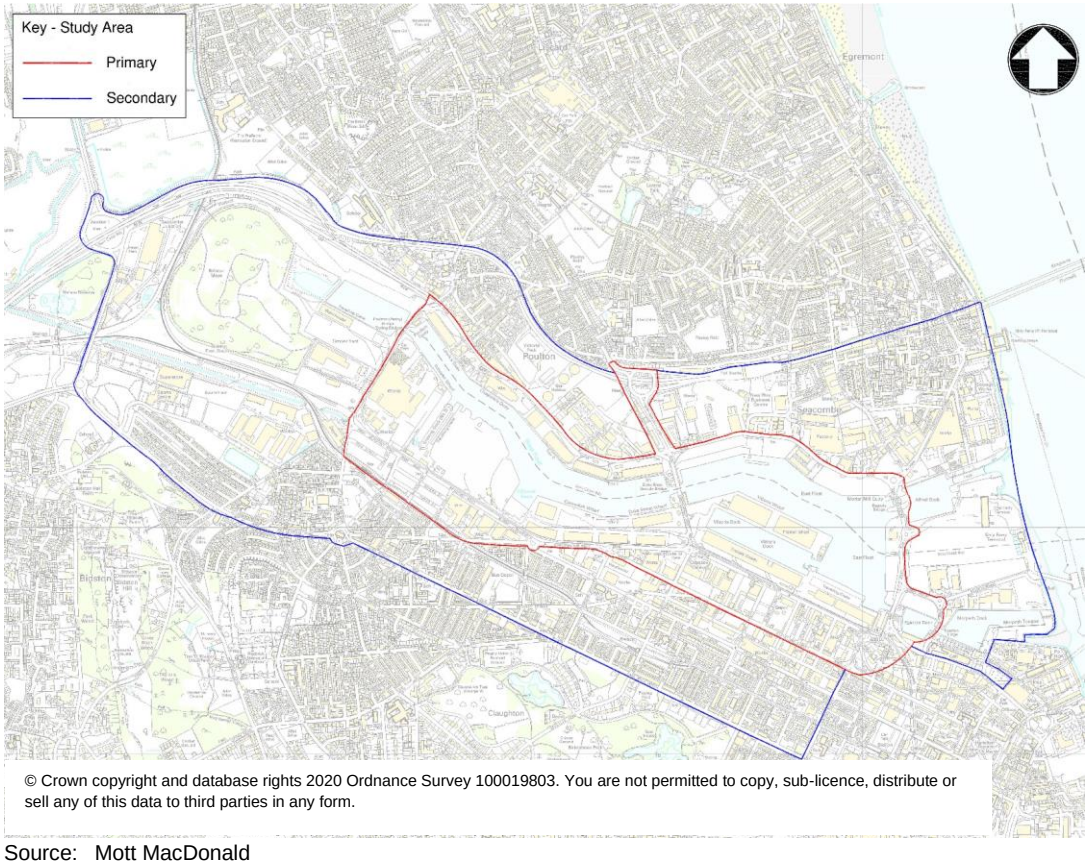
This report documents the baseline stage of the *Wirral Waters and Supporting Road Infrastructure – Feasibility Study* which aims to develop detailed highway improvements that are necessary to serve and bring forward the Wirral Waters regeneration project.

In this baseline report we consider key access and movement issues within the Wirral Waters study area and establish the 'need for intervention' on the highway network.

Understanding the Study Area

A detailed baseline analysis of the study area outlined in the figure below has been undertaken to understand the key characteristics of the transport network and identify the key issues around the Wirral Waters development.

Figure E1: Study Area



Source: Mott MacDonald

Historically, the level of development in the area has declined dramatically since the early 1900s creating a number of parcels of land which can come forward for new development. Existing land uses consist of active ports which have an important influence on traffic movements around the docks.

To support the baseline analysis, a desktop environmental analysis has been undertaken, identifying several potential environmental constraints such as Grade II listed buildings, flood zones and historic landfill sites.

Geography and Strategic Access

Wirral Waters is well located in terms of access to the motorway network and rail lines provide connectivity east towards Liverpool for connections throughout the North of England as well as towards Cheshire, Wales and across the South of England.

In terms of the local transport network, a review of the key characteristics and available modes has been undertaken. The key findings are as follows

- A number of the key junctions and links within the study area have poor or no pedestrian and cyclist facilities.
- Bus penetration through the Wirral Waters area is limited with services on each of the three bridge crossings.
- Rail provision is limited to the south side of the docks and is located peripherally to the primary study area at Birkenhead North and Birkenhead Park Stations. There is no useable rail provision north of the docks.
- The north east of the study area is poorly served by cross-river services with neither bus or rail services available. The Ferry can provide a slight mitigation to this but is unlikely to offer a comprehensive solution.
- A review of walking and cycling accessibility indicates that access from the north of the study area towards the rail stations is poor. It will be particularly important to investigate how this access can be improved.
- A number of schemes to improve walking and cycling routes either within or in the vicinity of the Wirral Waters study area are either underway or proposed.
- Job creation and housing development in Wirral Waters is likely to generate an increase in trips to and from the north of Wirral. Key routes such as the A5030 and A59 will become increasingly important corridors and there will be a need to ensure that junctions can accommodate this likely increase in movements.
- Clusters of injury accidents can be observed at key junctions within the Wirral Waters study area. All three major junctions of Dock Road have been identified as accident hotspots.
- There are few congestion and network capacity issues across the study area. However, as major development at Wirral Waters comes forward it is likely that some of the spare capacity on the network will be used and this could lead to the need for intervention.

Regeneration Strategies and Studies

Several regeneration strategies and studies have been undertaken which relate to the area, outlining the future aspirations for the area and identifying development opportunities that can be realised to support future regeneration. The key strategies and studies are:

- **Wirral Growth Plan-** outlines an ambitious vision for the future of Wirral including nationally significant economic development projects such as the Wirral Waters Enterprise Zone. Such transformational changes present challenges for the transport network in seeking to accommodate and facilitate the planned growth of Wirral.
- Wirral Strategic Regeneration Framework- builds on the Growth Plan and provides further detail on our spatial priorities for investment including Wirral Waters Enterprise Zone.

- East Wirral Transport Scoping Report- reviewed several previous studies across Wirral and recommended a review of work to align with regeneration timescales.
- Wirral Strategic Transport Strategy- provides the context for delivering transport to enable the Strategic Regeneration Framework. The Strategic Transport Strategy suggests that to enable that potential of Wirral Waters to be reached, the transport infrastructure needs to be in place.
- Wirral's Strategic Transport Framework Action Plan- places future transport schemes into a prioritised list in line with regeneration plans.

To date, Wirral Council have worked with Merseytravel and Mott MacDonald to identify a Pipeline of Wirral Transport Investment Schemes, with several schemes currently being progressed or have been completed. These include:

- Wirral Waters Cross Dock Connectivity- costed proposal developed.
- Gateways to Wirral Waters- and Wirral Waters supporting road infrastructure- feasibility funding awarded.
- Wirral Waters Active Travel Connectivity- funding secured.
- Wirral Waters Streetcar- feasibility report produced.
- Wirral Waters Transport Accessibility- Merseytravel improvements relating to bus access to Wirral Waters has been delayed due to the bridge work on Tower Road.

Next Steps

As part of this study, key stakeholders have been engaged to ensure that all key issues have been captured and considered. This has included meetings with Wirral Council and consultants representing Peel, to establish the context for growth and transport investment at Wirral Waters. This stakeholder engagement will continue and develop in greater detail for the next stages of this study.

The next stage will be to identify a long list of improvements options in response to the baseline issues which will be subject to appraisal. A further workshop will be held with stakeholders to discuss potential options and stimulate innovative thinking and a short list of schemes will be proposed for further development into a comprehensive transport strategy for the area.

1 Introduction

1.1 Introduction

This report documents the baseline stage of the *Wirral Waters and Supporting Road Infrastructure – Feasibility Study*. The purpose of this study is to develop detailed highway improvements that are necessary to serve and bring forward the Wirral Waters regeneration project. This commission will include options appraisal and feasibility work to develop highway infrastructure options needed to support investment and growth and Wirral Waters. Specifically, and as specified by Wirral Council (the client), the study will consider infrastructure improvements to five key 'Gateway' junctions that surround the site as well as measures on key corridors that connect the site and at other approach junctions in the vicinity of Wirral Waters.

In this baseline report we consider key access and movement issues within the Wirral Waters study area and establish the 'need for intervention' on the highway network. An Options Appraisal Report will subsequently detail the process for deriving a shortlist of concept scheme proposals for the key identified gateways and corridors. The final output of the study will be a Strategic Outline Case report to communicate and capture the benefits of shortlisted scheme options, detailing options for delivery and financial requirements to support further business case work and funding applications.

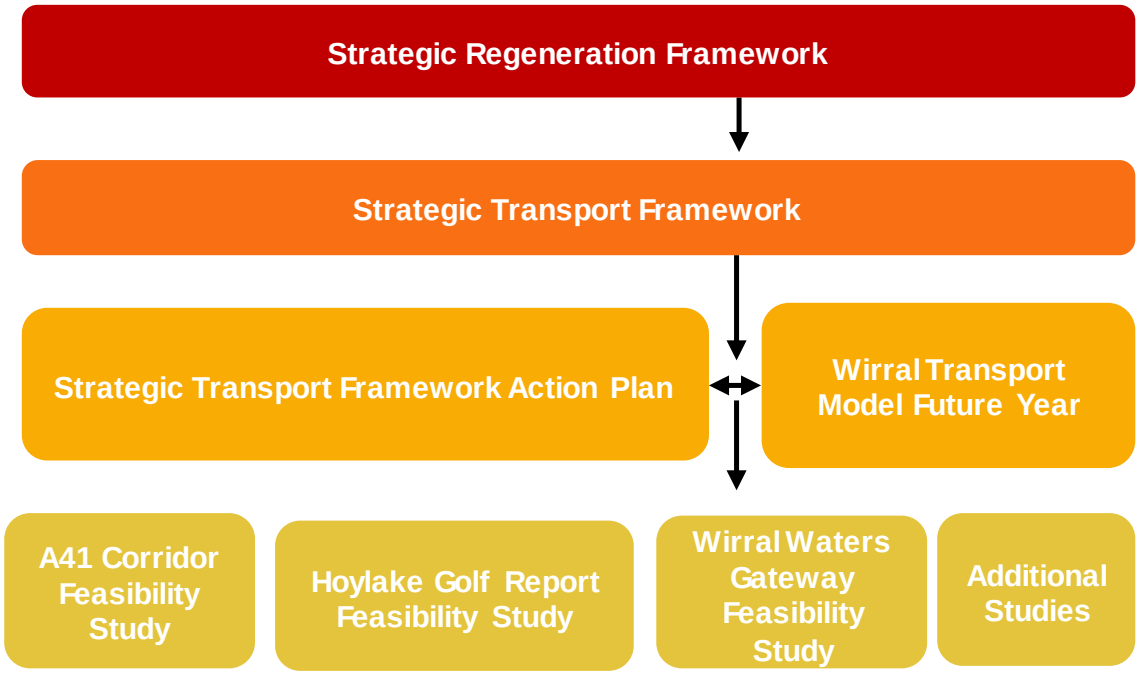
1.2 Wirral Waters and supporting Road Infrastructure- Feasibility Study in Context

Wirral Council (the Council) has set out its priorities within its Strategic Regeneration Framework and in February 2018 appointed Muse as its joint venture partner to bring forward the £1bn regeneration plan and help realise the Council's economic ambitions. The Council has demonstrated its desire for development and regeneration through the announcement at MIPIM 2017 of a billion-pound investment programme in the borough. This has been reinforced through the March 2018 announcement for plans for housing projects at Wirral Waters to deliver 1,000 new homes including a dementia care village as part of a £55m investment[1].

To realise these plans we understand that it is necessary to develop a prioritised, cohesive, and coordinated approach to developing a transport network to support this and other key attractors and the wider regeneration programme for the borough. Figure 1 below highlights where this study sits in context alongside the Council's programme to identify a transport investment programme to support borough wide development.

[1] http://www.wirralglobe.co.uk/news/16086008.Peel_announces_major_building_projects_for_Wirral_Waters/#comments-anchor

Figure 1: Study Context



Source: Mott MacDonald

The council has already identified key access and movement issues and opportunities in the Wirral Waters area through discussions with Peel, in their capacity as Wirral Waters developer, and through a number of council projects including the Wirral Transport Investment Pipeline project completed in 2016. This Gateways to Wirral Waters study forms part of a wider programme to deliver infrastructure investments in the Wirral Waters area including:

- Dock Bridges Scheme to replace A and C bridges on A554 Tower Road
- Walking and cycling improvements delivered through Sustainable Transport Enhancements Programme (STEP)
- A554 Tower Road Civilised Street Scheme
- Ongoing ESIF applications for sustainable transport/carbon reduction projects
- Maritime Knowledge hub and Tower Road Office Schemes, being progressed through the Single Investment Fund (SIF)

Five specific junctions that surround the Wirral Waters area have been identified as potentially requiring infrastructure improvements and will therefore be considered in detail through the study. These approach junctions are as follows:

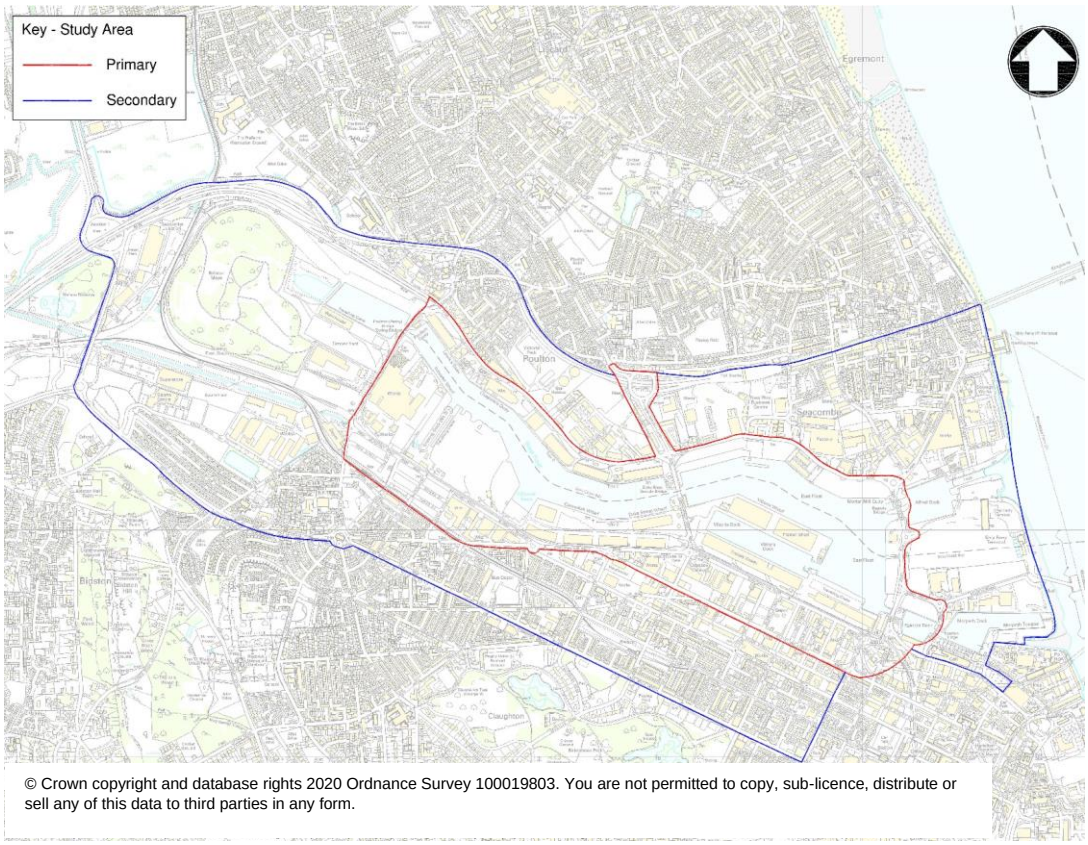
- Dock Road (A5139) and Wallasey Bridge Road (A5088) roundabout and the junction at Dock Road (A5139) and Gorsey Lane (A5027);
- Duke Street / Dock Road / Gorsey Lane including the roundabout at Gorsey Lane;
- Roundabout at Dock Road (A5139), Tower Road (A554) and Birkenhead Road;
- Junction and roundabout at Tower Road (A554) and Rendell Street (A5029), including the junction with Corporation Road; and
- Junction improvements at the roundabout of Duke Street (A5027) and Corporation Road.

A number of further key corridors that link Wirral Waters to surrounding neighbourhoods and the wider transport network have also been identified as potentially requiring corridor improvement measures. These include:

- Dock Road;
- Tower Road;
- Wallasey Road Bridge; and
- Corporation Road/Beaufort Road (identified within the Wirral Waters outline planning application as a possible new 'City Boulevard' linking North Birkenhead with Birkenhead town centre.

Both the primary and secondary study areas for this feasibility study are indicated below Figure 2. The primary study area includes all five of the junctions which have been specifically highlighted within the study brief as requiring detailed analysis with a view to deliver infrastructure improvements. The wider secondary study area incorporates a number of further junctions and corridors which also play a key role in facilitating access to and from the Wirral Waters area including M53 J1 and various junctions of the A553.

Figure 2: Study Area



Source: Mott MacDonald

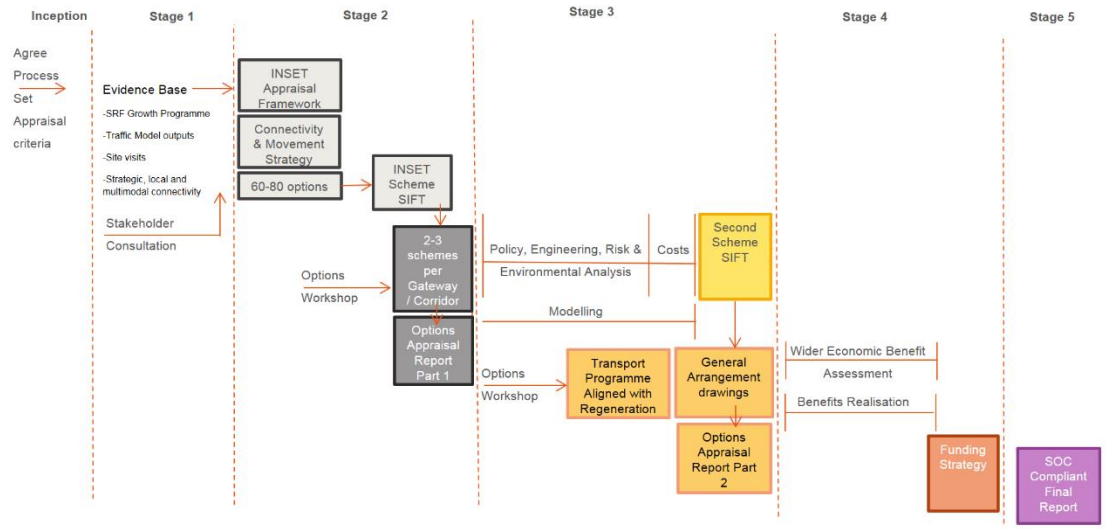
1.3 Study Methodology

Figure 3 below displays the study process that will be adhered to produce the final outputs:

- **Stage 1** – Baseline analysis report.

- **Stage 2** – Options development cumulating in the finalised options Appraisal Report (Part 1).
- **Stage 3** – More detailed emerging options assessment resulting in Options Appraisal Report (Part 2)
- **Stages 4** & **5** – Economic assessments and the identification of funding opportunities supporting the completion of the Strategic Outline Case compliant report, using the information captured in the preceding stages.

Figure 3: Study Process



Source: Mott MacDonald

1.4 Report Structure

This report is structured in the following order:

- **Section 2**: Understanding the study area – A high level overview of the context of the Wirral Waters study area including its geography and history followed by a more detailed examination of access and movement to and within the area.
- **Section 3**: Development Proposals & for Wirral Waters – An overview of what is proposed for the area as part of the Strategic Regeneration and Local Plan in addition to the Wirral Waters outline planning application and applications for more specific parts of the site including the International Trade Centre.
- **Section 4**: Site Analysis – An overview of headline issues and opportunities across the study area based upon work completed on site.
- **Section 5**: Stakeholder Engagement – A summary of the consultation undertaken as part of the baseline stage of work, summarising the issues and priorities raised by the stakeholders.
- **Section 6**: Issues and Opportunities – Summary of key issues and opportunities emerging from of the baseline evidence gathering and stakeholder engagement.
- **Section 7**: Next Steps – Final conclusions of the baseline stage outlining the way forward to progress this Feasibility Study.

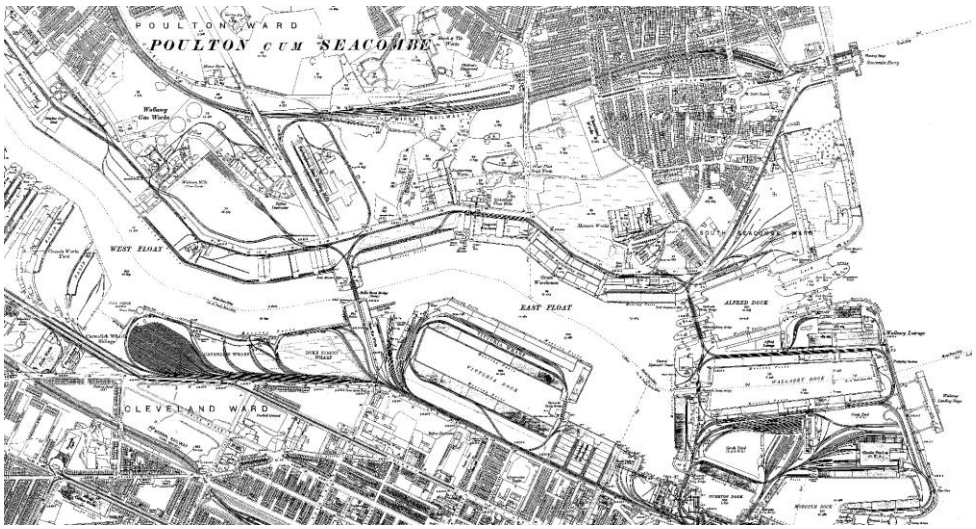
2 Understanding the Study Area

This section sets out the context of the study area in terms of the land uses and key characteristics of the transport network including traffic flows and travel patterns. This aims to identify the key issues around the Wirral Waters development site and highlight opportunities to address these issues through improvements to the highway network.

2.1 Historic Context

The figures below illustrate an overall view of the primary study area in both 1912 and 2018.

Figure 4: Primary Study Area 1912



Source: Wirral Council

Figure 5: Primary Study Area 2018

Source: Google Satellite Images

In general terms, the level of development in the Wirral Waters area has significantly decreased between the early 1900s and the present day. This is best reflected in the fact that a number of rail connections focused around Cavendish Wharf and Victoria Dock are now disused. This however now presents opportunities for the area in terms of the fact that rail alignments have been preserved, enabling a potential new Wirral Waters tram network or other public transport system to come forward. Some of the docks have also been infilled over the last 100 years, most notably the Wallasey Dock which is now used as the Belfast to Birkenhead ferry terminal. Portions of the docks within the study area are also actively used for port operations, and generate large vessels on a regular basis.

So, what does this mean for the Wirral Waters Feasibility Study?

- Whilst activity in the Wirral Waters area has dramatically decreased since the early 1900s, this now presents opportunities in the fact that there are a number of parcels of land which can come forward for new development.
- Active port operations have an important influence on traffic movements around the docks. Notably, significant generation of HGV's at times, and the lifting of the Tower Road and Duke Street bridges.

2.2 Environmental Context

A desktop analysis has been undertaken to identify potential environmental constraints within the study area that might affect the successful delivery of potential transport schemes. The environmental baseline has been established using publicly available information, including Ordnance Survey (OS) mapping, local planning policy documentation and environmental data sets from government agencies.

This analysis has found a number of environmental constraints within the study area and within 500m of the study boundary, summarised in the points below and displayed geographically in Figure 6:

- There are five Grade II listed buildings within the study area. Planning permission will therefore be required if any works are likely to impact the setting of the buildings.
- Multiple locations around the study area fall within Flood Zone 2 and Flood Zone 3 due to the proximity of the River Mersey and associated docklands. This poses a potential risk of surface water flooding around the site.
- Indicative recorded historic landfill sites have been identified at 10 locations within the study area and within a 500m buffer of the study area.
- There is a Site of Special Scientific Interest (SSSI) at one location within 500m of the site boundary at the Mersey Narrows and North Wirral Foreshore. Therefore, any works with potential to impact these sites will require consultation with Natural England.
- There is a Noise Important Area (NIA) at one location in the study area associated with Park Road North and Duke Street. Therefore, the potential of an increase in noise and possible mitigation measures will need to be considered for scheme options in this area.
- Birkenhead Park is located within 500m of the study boundary and is a Registered Park. Scheme options will therefore need to consider potential impacts to the landscape in this area to secure planning permission.
- There are multiple Groundwater Source Protection Zones (SPZ) within the study area where Potential impacts to underlying groundwater resources will need to be considered. Any intrusive earthworks which may impact underlying groundwater are likely to require planning permission or consent from the Environment Agency.

Figure 6: Environmental Constraints Overview Map

Source: Mott MacDonald

Whilst some constraints such as designated ecological sites 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 development coming forward. The constraints may make the design or consenting regime more complex, however mitigation measures can be explored to minimise this risk.

Further investigation will be required during the detailed design stage of this project prior to any works commencing including various risk assessments and consultation with the council's planning team, highways authorities and the Environment Agency. More detail on the location, potential risks and actions required associated with these constraints are set out within the Environmental Constraints Report supporting this document.

So, what does this mean for the Wirral Waters Feasibility Study?

- A number of environmental constraints have been identified within the study area and within 500m of the study boundary which may restrict options for transport improvements.
- Further investigation will be required at the detailed design stage to assess the potential impacts of schemes on key environmentally sensitive areas.

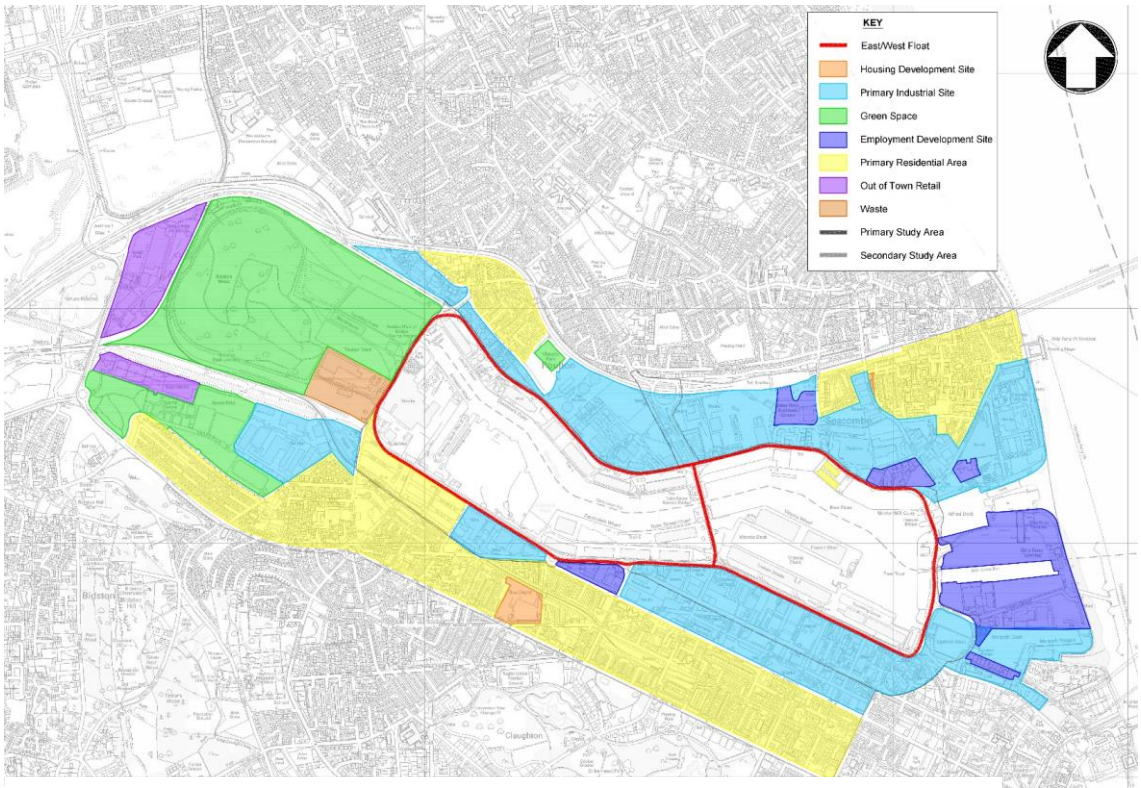
2.3 Current Land Uses

Figure 7 highlights the array of differing land uses within the Wirral Waters study area today. As observed in this figure, a belt of industrial land largely surrounds the East and West Float, with residential areas located further towards Birkenhead and Seacombe. Whilst a number of the industrial units are currently vacant, many are still in use which could slow down the rate at which new development can come forward. The far west of the study area has a different composition to the wider study area, with edge of town retail development at Bidston Moss and

adjacent to the M53. There is also a large area of green space (a reclaimed land-fill site) situated between the Bidston Recycling Centre and the M53, with cycle and walking routes through this area providing connectivity between Wallasey Bridge Road and the Junction ONE Retail park.

Across the study area, development is of relatively low density, with buildings typically between 1 and 2 storeys high. This has led to an inefficient use of space in some areas however it is understood from discussions with council officers and the developers associated with Wirral Waters that delivering development of far greater density than at present in the area is a key ambition for the Wirral Waters project.

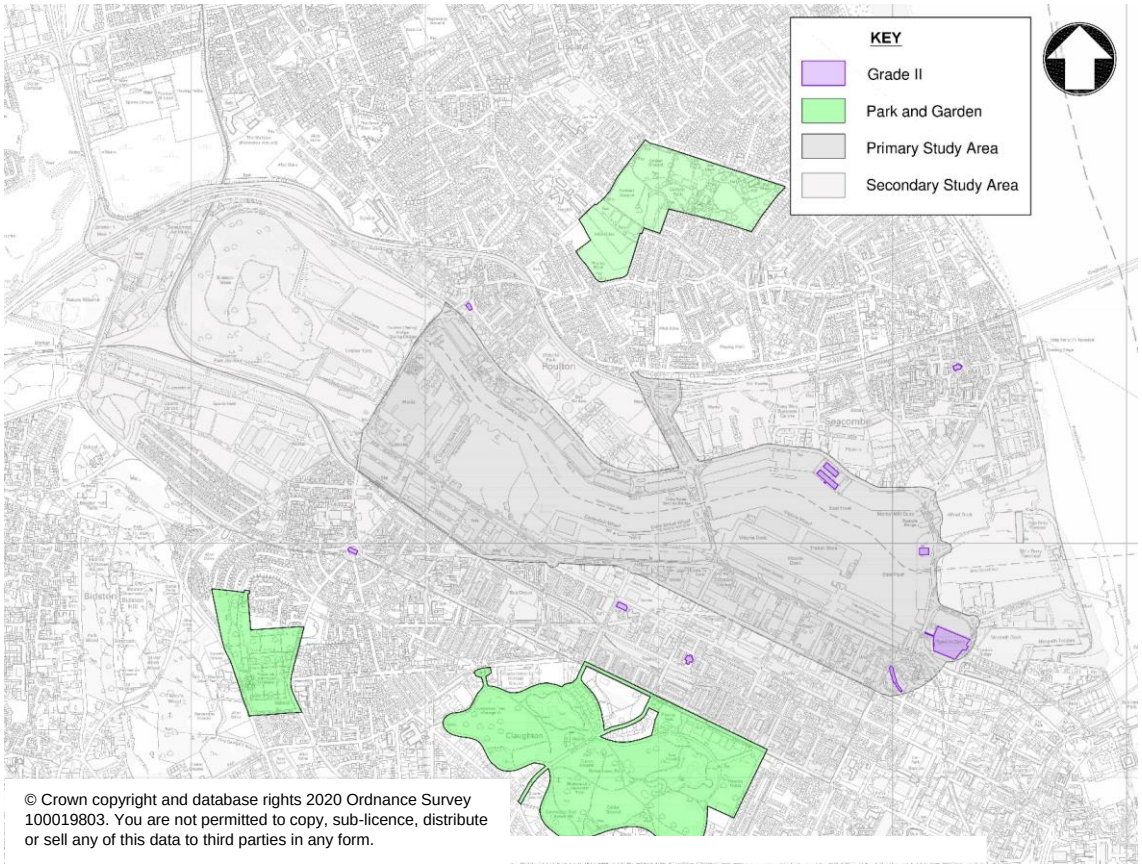
Figure 7: Land Uses in the Study Area



Source: Mott MacDonald (based on Wirral UDP)

There are few listed buildings within the study area however there are a number of green spaces to the south of site including Birkenhead Park. This creates opportunities to provide a network of walking and cycling routes which offer connectivity to the wider area.

Figure 8: Listed Buildings in the Study Area



Source: Mott MacDonald

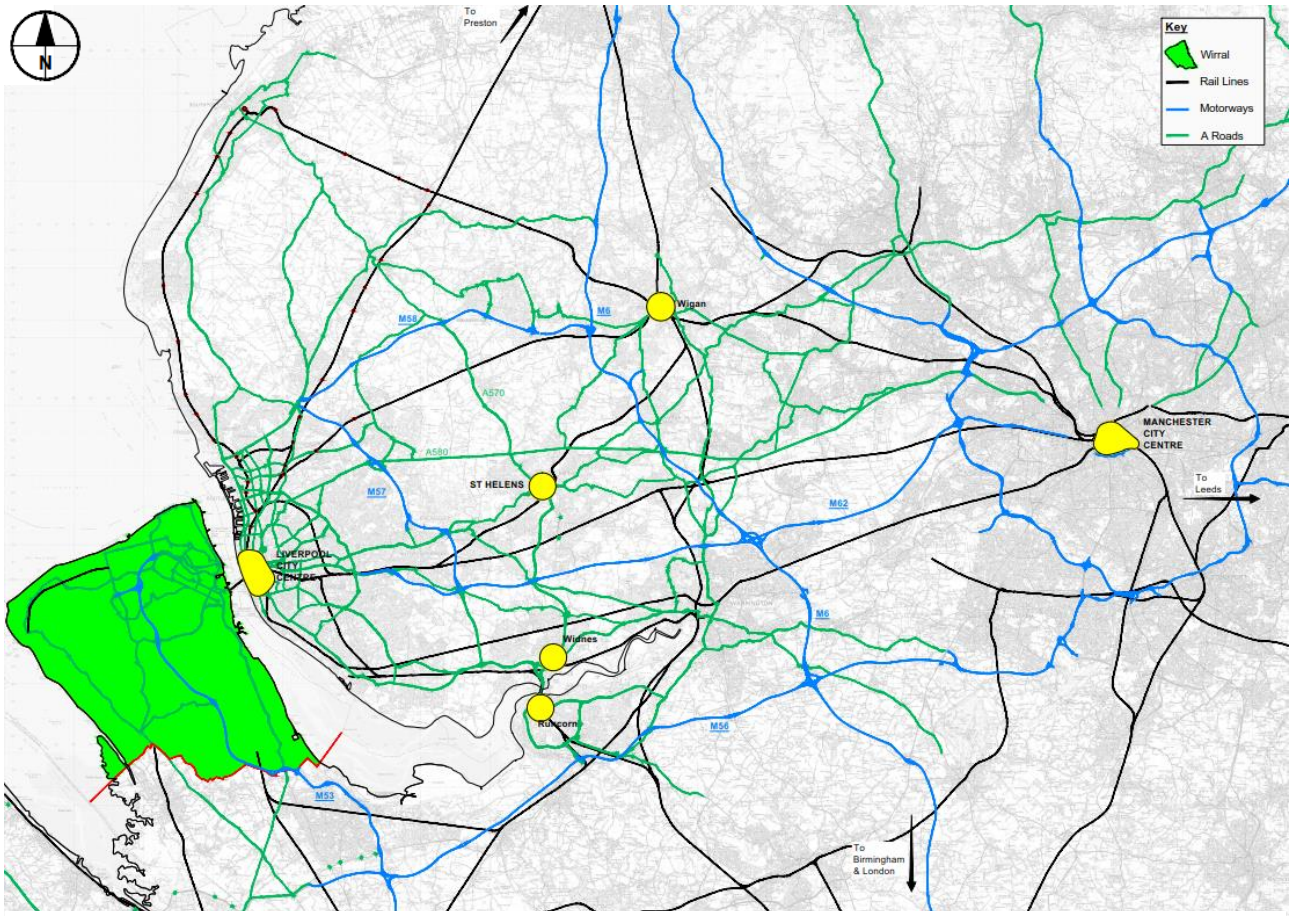
So, what does this mean for the Wirral Waters Feasibility Study?

- In terms of land use, a belt of light industrial land is located around the perimeter of the East and West Floats. Whilst many buildings are currently unoccupied, new development will need to be mindful of the existing businesses in the area, particularly the access requirements that these businesses may have.
- There are few listed buildings within the study area which should help development to come forward more quickly; the significant green spaces immediately outside of the study area are key assets for the area and enhanced connectivity should be delivered to them from Wirral Waters.

2.4 Geography and Strategic Access

The study area is located to the north of east Wirral in close proximity to a number of rail lines and the motorway network providing a good level of strategic connectivity to the wider region. The location of Wirral in relation to the wider transport network is demonstrated in Figure 9.

Figure 9: Location and Strategic Connectivity



Source: Mott MacDonald

Due to its location in proximity to major roads and rail lines, the study area is well positioned to support economic growth and development taking place at Wirral Waters. However, local connectivity should be further considered to ensure the local highway network is suitable for future development proposals.

So, what does this mean for the Wirral Waters Feasibility Study?

- Wirral Waters is well located in terms of access to the motorway network and rail lines provide connectivity east towards Liverpool and throughout the North of England as well as towards Cheshire, Wales and across the South of England.
- Opportunities to enhance 'last mile' journeys between the strategic road and rail networks and the heart of Wirral Waters should be explored.

2.5 Local Transport Network Key Characteristics

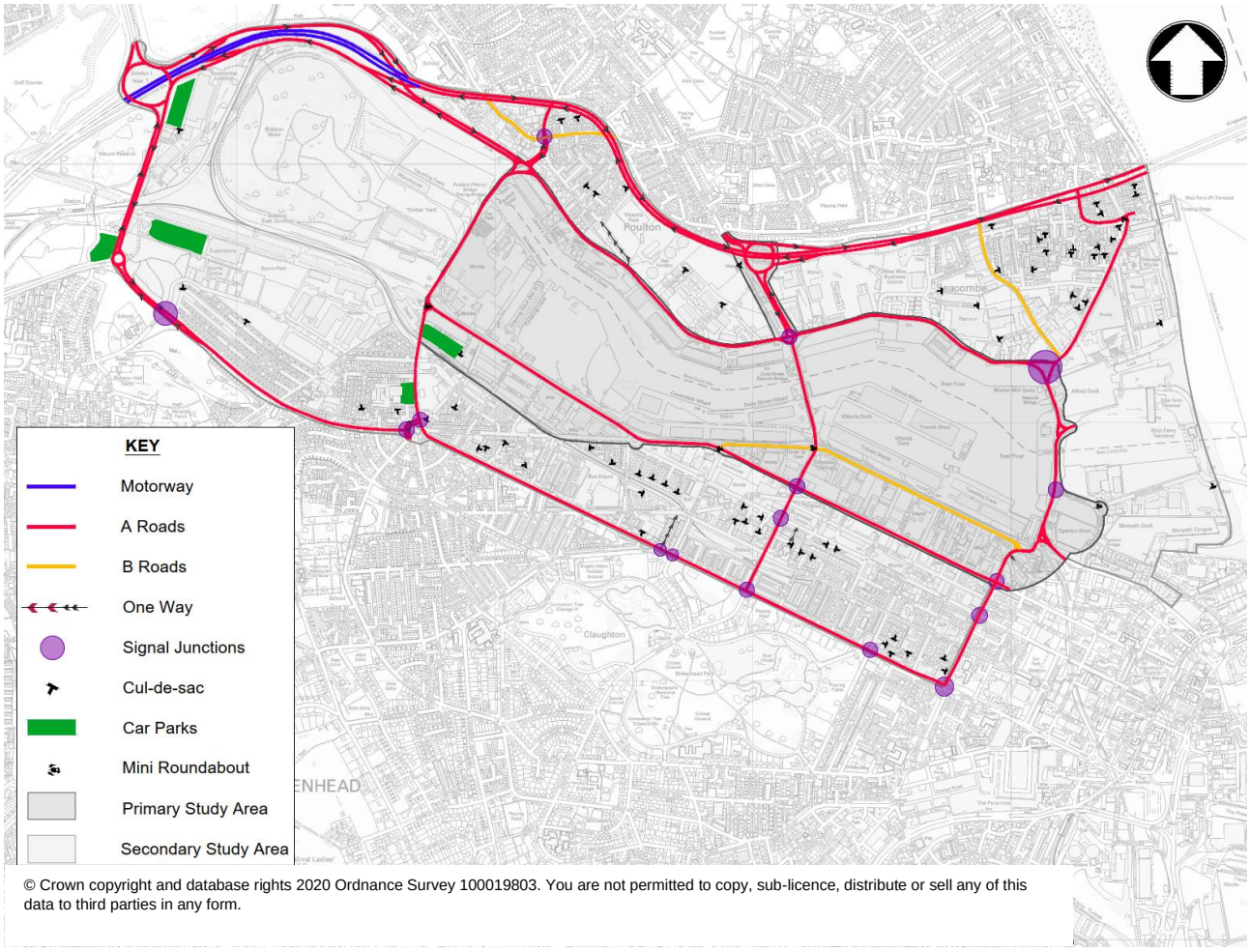
2.5.1 Local Road Hierarchy and Car Parking

Figure 10 illustrates the local road network within the study area including the location of A roads, signal junctions and one-way streets. As the majority of traffic is likely to be travelling

from the south of the study area, junctions in this area will form key gateways to the Wirral Waters development. However, as explored further in Section 4, these junctions are generally of a poor quality, including a lack of safe crossing points for pedestrians and cyclists, most notably at the Duke Street/Dock Road/Gorsey Lane junction.

Therefore, it is important to ensure that these junctions are designed to create high quality environments which are easily navigable and increase provision for pedestrians. This is an important issue as the residential areas of Liscard and Poulton to the north have a feel of significant segregation to areas to the south due to the Wallasey Highway Tunnel and the docks themselves.

Figure 10: Road Hierarchy, Traffic Circulation and the Location of Car Parks



Source: Mott MacDonald

2.5.1.1 Car Parking

As can be seen in Figure 10 above there are few public car parks within the study area. The small number of car parks which are available within the study area are located off the key A roads and therefore have good access and egress points. These car parks are also largely associated with retail parks, where spaces are only available for a short time for customers, as well as the Birkenhead North car park, again where spaces are only available to rail

passengers. Car park provision within the study will therefore need to be reviewed in order to ensure that the needs of new development is being best supported.

Development proposals will need to be mindful of the wider shift surrounding private vehicles and predicted future trends including 'mobility as a service' which suggests that ownership of private vehicles will fall into the future in favour of the use of pool or hire cars, potentially reducing the need to provide private car parking space for new developments.

So, what does this mean for the Wirral Waters Feasibility Study?

- A number of the key junctions and links within the study area have poor or no pedestrian and cyclist facilities, reducing the overall attractiveness of the environment for active travel.
- Whilst there is currently a lack of car parking across Wirral Waters, we should be mindful of emerging trends including predictions that car ownership will fall into the future as new businesses emerge which provide 'on demand' access to a car. This could reduce the need to provide significant car parking for new developments.

2.5.2 Bus Network

The Wirral Waters study area is served by a wide range of bus services with an equally wide range of frequencies. Some of these buses route directly through the heart of the primary study area although the majority serve more peripheral routes. To describe the current services that route via Wirral Waters, it is helpful to group the services by their routing patterns. Only routes of frequencies of an hour or more frequent are considered in this discussion.

2.5.2.1 Buses through the Primary Study Area

The services that route through the primary study area are characterised by the bridge crossings of which there are three. Wallasey Bridge Road is served by the 10A service between New Brighton and Arrowe Park Hospital. This service runs half-hourly during the daytime and links the site to the north with Liscard and New Brighton and to the south with Oxton, Woodchurch and Prenton. The nearest bus stops to the primary site are located on Wallasey Bridge Road, adjacent to the bridge itself.

The middle bridge (Duke Street) is served by the frequent 410 and 411 routes between New Brighton and Woodside (with some 410 services extending to Clatterbridge Hospital). These services split to the north of the site with the 410 serving Gorsey Lane and Liscard, and the 411 serving the Dock Road and the A554 route to New Brighton. To the south both services route via Park Road North/Conway Street with half of the 410 buses continuing via Argyll Street to Bebington and Clatterbridge. The combined frequency of these routes is 8 buses per hour through the primary site. Stops of most use to the primary site are located on Duke Street south of the junction with Corporation Road, and also north of Duke Street bridge making these routes highly accessible to a kay part of the study area.

The most easterly set of bridges are on Tower Road which is served by several buses including the 124,125, 408, and 409 routes. These connect the site with Liscard, Wallasey Village, New Brighton and other areas of Wallasey. These services ensure a half hourly service during the day is maintained between Seacombe and Wallasey Village with an hourly service at evenings and on a Sunday. The nearest stops to the main study area are on Tower Road south of the bridges (in the northbound direction) and on Tower Wharf (in the southbound direction). There are also stops on Birkenhead Road to the north of the bridges.

Figure 11: Birkenhead Road Bus Stop

Source: Mott MacDonald

These services are shown in the following table:

Table 1: Primary Study Area Bus Service Specification

Route No.	Route	Frequency (buses per hour)			Operator
		Peak	Mon - Sat Daytime	Evening and Sunday	
10A	New Brighton – Arrowe Park	2	1 (not Sat)	-	Avon Buses
124	Woodside – Harrison Drive (Wallasey)	-	-	1	Merseytravel Bus Service
125	Woodside – Harrison Drive (Wallasey)	-	-	1	Merseytravel Bus Service
408/409	Woodside -Liscard – Woodside Circular	2	2	-	Merseytravel Bus Service
410	New Brighton – Clatterbridge	6 Birkenhead 3 Clatterb'ge	6/4 B'head 3/2 Clatter'ge	2	Arriva

411	Woodside - New Brighton	2	2	1	Arriva

2.5.2.2 Cross River Bus Services

The Wirral Waters secondary study is served peripherally by several services that run across the Mersey via one of the two road tunnels. The Queensway Tunnel between Birkenhead and Liverpool is served by buses that route via the Laird Street, Park Road North and Conway Street corridor which forms the southern boundary of the secondary site. The 407 and 437 routes run along this corridor at a combined frequency of 9 buses per hour. In the other direction, these routes serve Moreton via Bidston and West Kirby via Upton respectively.

An additional evening service through Queensway Tunnel is provided from Seacombe Ferry Terminal in the north east of the secondary site with the 423 route providing half hourly journeys, however this route is impractical for cross-river trips from the site since it routes via Leasowe, Moreton, Arrowe Park and Prenton on its way to Liverpool and therefore takes over 75 minutes to complete the journey. Instead, the frequent 432 and 433 services run between New Brighton and Liverpool via the Kingsway (Wallasey) tunnel, serving Liscard and Gorsey Lane with a combined frequency of 6 per hour, however the nearest stops are located on Gorsey Lane to the north of the secondary study area making these services of limited use for residents further east within the site.

Table 2: Cross River Service Specification

Route No.	Route	Frequency (buses per hour)			Operator
		Peak	Mon - Sat Daytime	Evening and Sunday	
407	Town Meadow – Liverpool City Centre	3	3	-	Arriva
413 / 423	Liverpool / Woodside – Seacombe	2	2	2	Arriva
432/433	Liverpool – New Brighton	6	6	3/4 (sun)	Arriva
437	Liverpool – West Kirby	6	6	3/4	Arriva

2.5.2.3 Other Bus Services Peripheral to the Site

In addition to those noted above, there are a number of further bus services of some value to the Wirral Waters site, which mainly serve the A553 Laird Street / Park Road North / Conway Street corridor. These range in frequency and destination but provide, via bus stops located at several locations along this corridor, some additional bus connectivity for the study area. The destinations and frequencies are summarised in the following table:

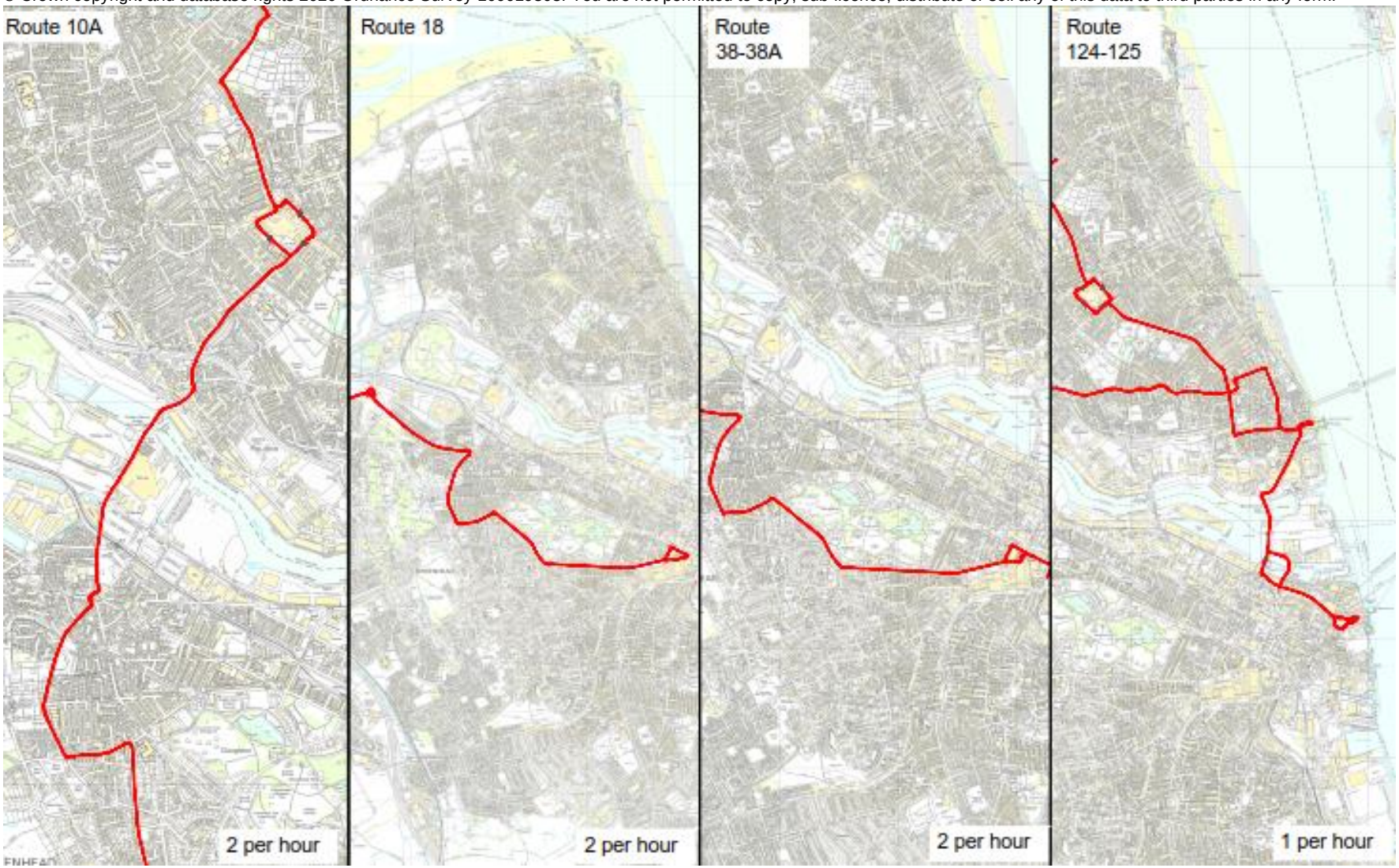
Table 3: Other Bus Specification

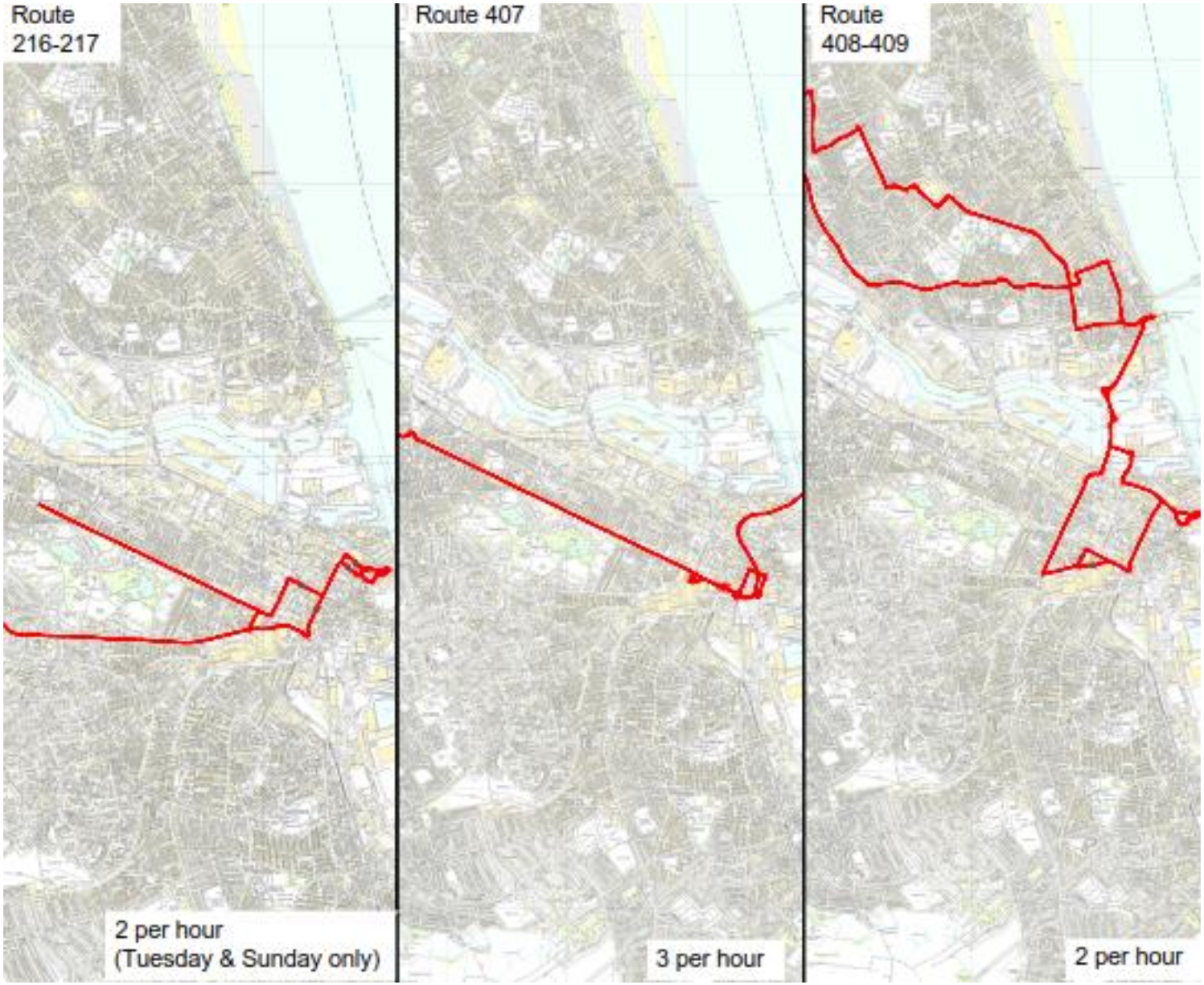
Route No.	Route	Frequency (buses per hour)			Operator
		Peak	Mon - Sat Daytime	Evening and Sunday	
18	Birkenhead - Moreton	2	2/1(Sat)	-	Avon Buses

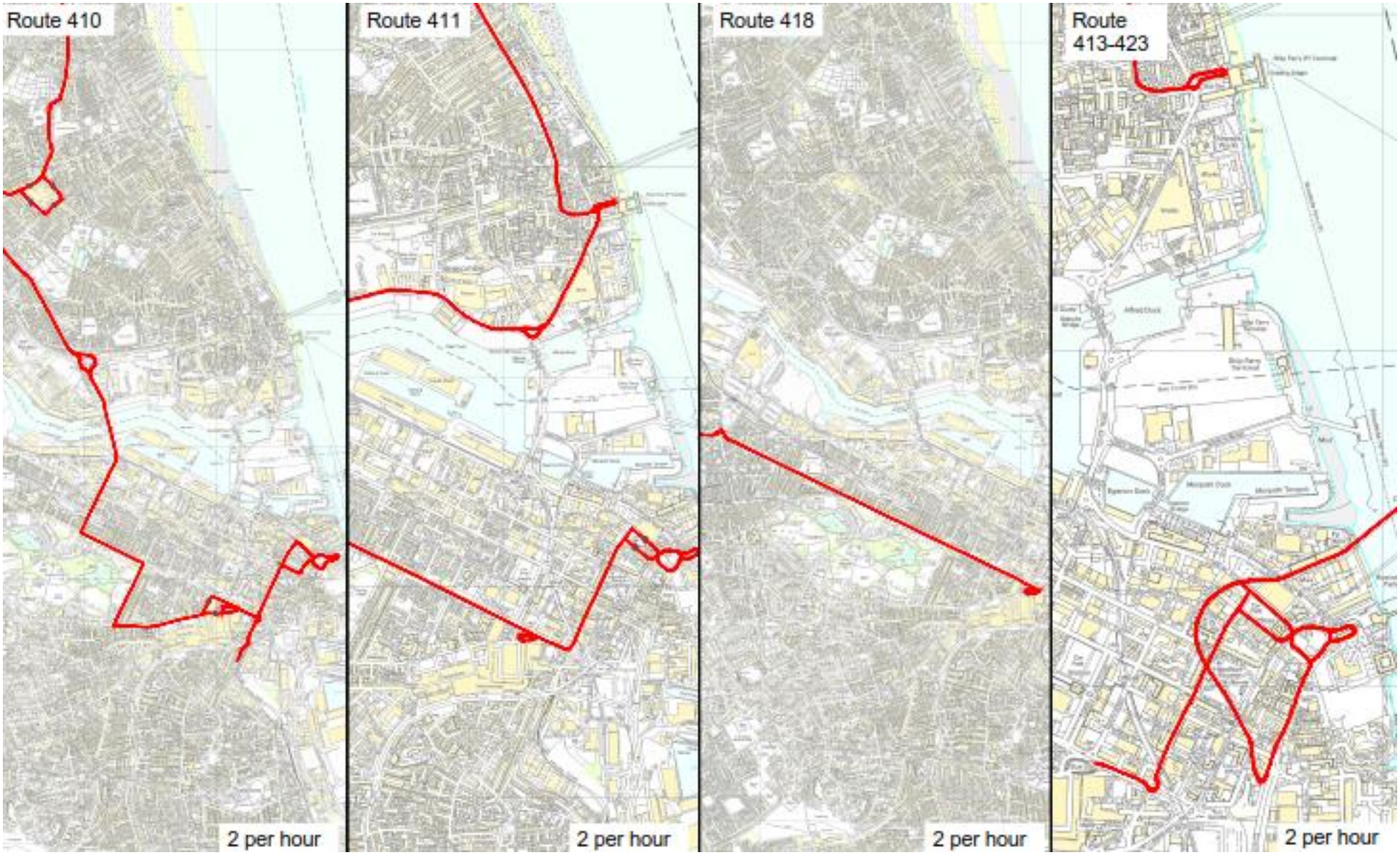
38/38A	West Kirby – Mill Park	2 Birkenhead 1 Mill Park	2 Birkenhead 1 Mill Park	1	Stagecoach
216/217	Woodside – Arrowe Park Circular	2/3 journeys	3/5 journeys (sat only)	2 (sat / sun only)	Merseytravel Bus Service
418	Woodside -New Ferry	2	2	-	Arriva
492/495	Woodside – Noctorum Circular	2	2	1	Arriva

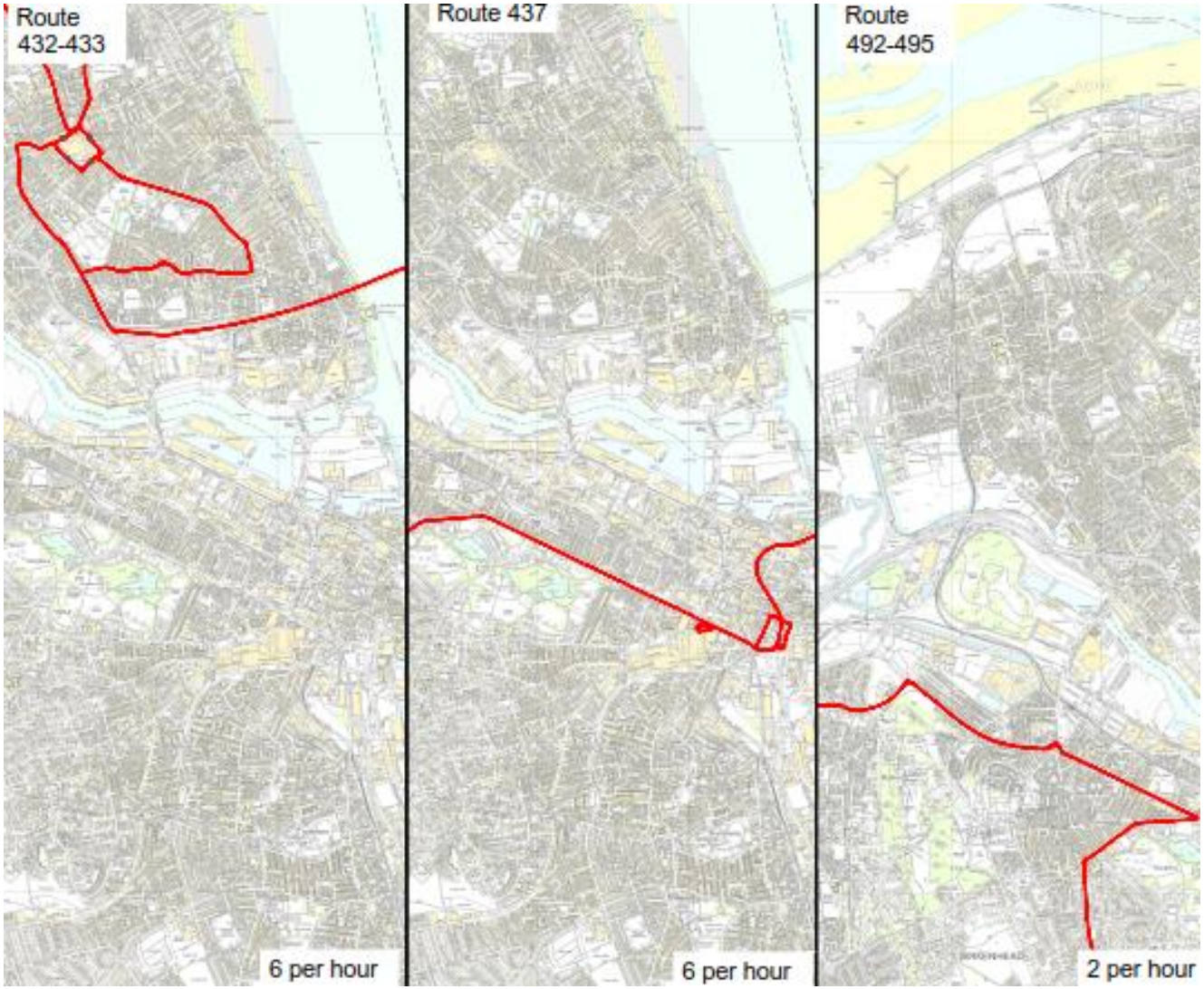
Overview plans of the key bus routes that serve Wirral Waters are indicated over the following pages.

Figure 12: Bus routes serving Wirral Waters




Route
216-217
Route 407
Route
408-409
2 per hour
(Tuesday & Sunday only)
3 per hour
2 per hour


Route 410
2 per hour
Route 411
2 per hour
Route 418
2 per hour
Route
413-423
2 per hour



Source: Mott MacDonald

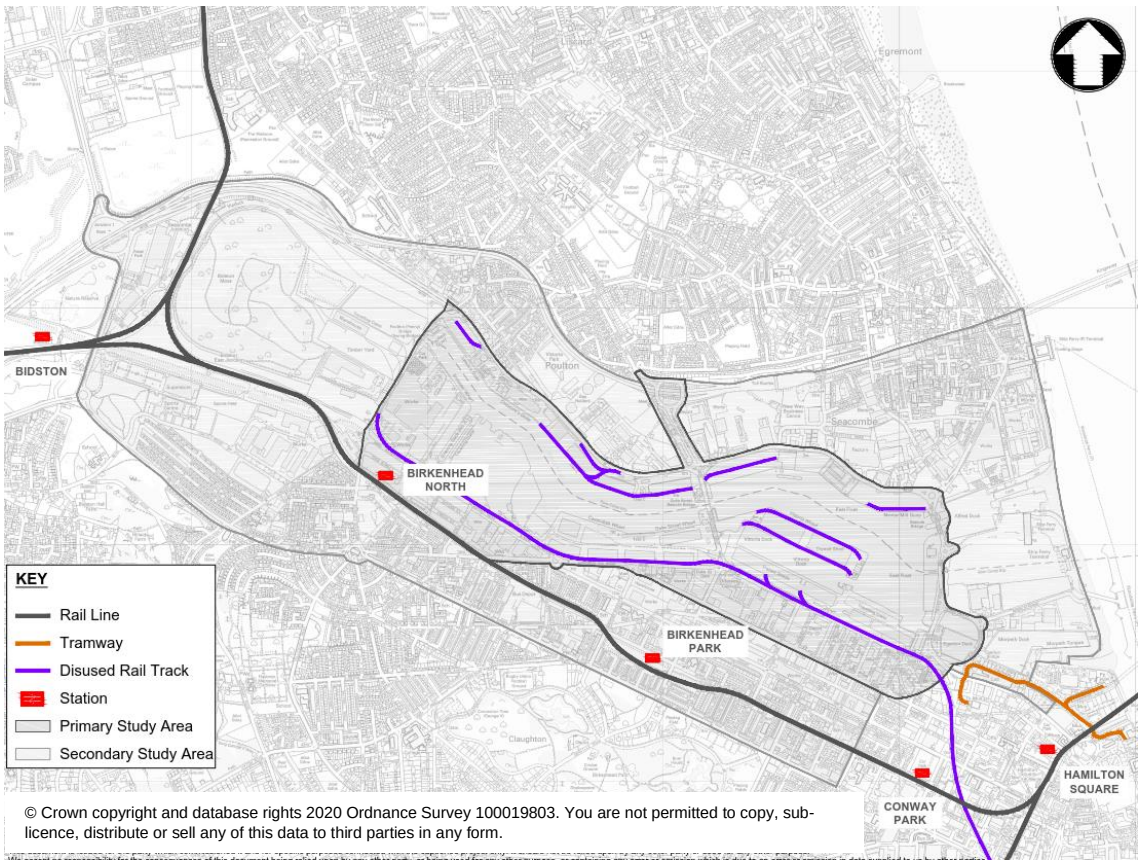
So, what does this mean for the Wirral Waters Feasibility Study?

- Bus penetration through the Wirral Waters area is limited but present with services on each of the three bridge crossings. Perhaps the best served of these is the Duke Street crossing which has 8 buses per hour in each direction between New Brighton and Birkenhead Town Centre with some buses extending beyond to the south.

2.5.3 Rail

The Wirral Waters study area is only served by rail on the southern (Birkenhead) side of the East and West Float dock. Of the two stations of relevance, only one (Birkenhead North) lies within the primary study area itself. Birkenhead Park is a little more remote and is located within the secondary study area although it has particular relevance for the south eastern section of the Wirral Waters site. The network of rail lines and stations around the study area are illustrated in the following figure. It is also noted that a number of disused rail tracks lie within the vicinity of the site, some of which have the potential to be brought back into use as part of future development in the area.

Figure 13: Rail Network within the study area



Source: Mott MacDonald

2.5.3.1 Birkenhead North

Birkenhead North station is located in one of Merseyside's most deprived wards, adjacent to a large area of previously cleared land which has been converted into a large Park and Ride site to the north, and is being developed for housing to the site. It serves the previously established

residential community surrounding Ilchester Road and Buccleuch St, and parts of the Bidston and St James districts of the town, but large amounts of former housing in these areas has been cleared in recent years, limiting the immediate population catchment. The new housing development located off Station Road (immediately adjacent to the station) will replace some of this residential population however progress is so far limited. The station's demand is largely made up of Park and Ride passengers making use of the relatively new 630 space car park located to the north of the station.

Figure 14: Birkenhead North Car Park

Source: Mott MacDonald

Birkenhead North is served by trains on the West Kirby and New Brighton branches of the Merseyrail Wirral Line as summarised in the following table:

Table 4: Birkenhead North Service Specification

Route	Frequency (trains per hour)			Operator
	Peak (in peak direction)	Weekday	Evening and Sunday	
Liverpool to West Kirby	4	4	2	Merseyrail
Liverpool to New Brighton	4	4	2	Merseyrail

Some limited bus interchange is located outside the station on Station Road, however this is formed of highly infrequent services. Instead, bus interchange primarily occurs on Stanley Road (for 10A services between New Brighton and Arrowe Park Hospital) and on Laird Street for a range of services across Wirral.

The station has secure sheltered cycle parking and a staffed ticket office. Usage at the station is relatively high despite the limited residential catchment, comprising nearly 760,000 entries and exits in 2016/17, and just over 48,000 interchanges for journeys between the West Kirby and New Brighton lines.

2.5.3.2 Birkenhead Park

Located to the south east of Birkenhead North and outside of the primary study area, is Birkenhead Park station. The station does provide the closest access to the railway for several parts of the primary site, however, including the Corporation Road industrial area and the East Float area of docklands. The station primarily serves residents of the dense grid network of streets off Duke Street, Park Road North, and Cleveland Street and also serves as the closes station to the Birkenhead Park area of the town.

Access to Birkenhead Park station is undertaken from Duke Street with key desire lines from both north and south. There is no off-street car parking at the station but there is secure sheltered cycle parking for up to 32 bicycles. Bus interchange is available at stops immediately outside the station on Duke Street, and from nearby stops on Park Road North. A wide variety of high frequency buses pass directly adjacent to or nearby the station with destinations all over Wirral and to Liverpool (see the Bus Section for more information).

Birkenhead Park is served by trains on the West Kirby and New Brighton branches of the Merseyrail Wirral Line as summarised in the following table:

Table 5: Birkenhead Park Service Specification

Route	Frequency (trains per hour)			Operator
	Peak (in peak direction)	Weekday	Evening and Sunday	
Liverpool to West Kirby	4	4	2	Merseyrail
Liverpool to New Brighton	4	4	2	Merseyrail

The station currently caters for just under 700,000 annual entries and exits and is therefore one of the better used local stations in Merseyside.

In general, however, much of Wirral Waters is not well served by rail at present with no usable stations to the north of the docks and some parts of the secondary site outside the 800m distance threshold from a rail station. This includes parts of Seacombe and the area around Seacombe Ferry Terminal.

So, what does this mean for the Wirral Waters Feasibility Study?

- Rail provision is limited to the south side of the docks and is located peripherally to the primary study area at Birkenhead North and Birkenhead Park Stations. Birkenhead North serves the south west of the site, and Birkenhead Park serves the south central area.
- There is no useable rail provision north of the docks, however Birkenhead North station has a large car park providing Park and Ride access to Liverpool, West Kirby and New Brighton;
- Going forward, there will be a need to better connect the rail stations with the centre of the Wirral Waters study area around the East and West Floats to give residents and businesses an improved choice of travel.

2.5.4 Ferry

The secondary Wirral Waters boundary is also served by public passenger ferry services from Seacombe ferry terminal to the north west of the site. Seacombe has a large 200 space car park and has a regular commuter service in the morning and evening peaks as well as the longer River Explorer Cruise during the daytime. At the peaks, services for Liverpool's Pier Head

depart Seacombe every 20 minutes with an approximate 10-minute journey time. The River Explorer Cruise during the daytime departs every hour.

The Ferry represents a useable public transport alternative for those accessing the Seacombe area given the lack of bus or rail services between this area and Liverpool. Nonetheless, the ferry terminal is rather peripheral to the primary study area and of use only to those within the north east of the secondary site.

Figure 15: View of Seacombe Ferry Terminal

Source: Mott MacDonald

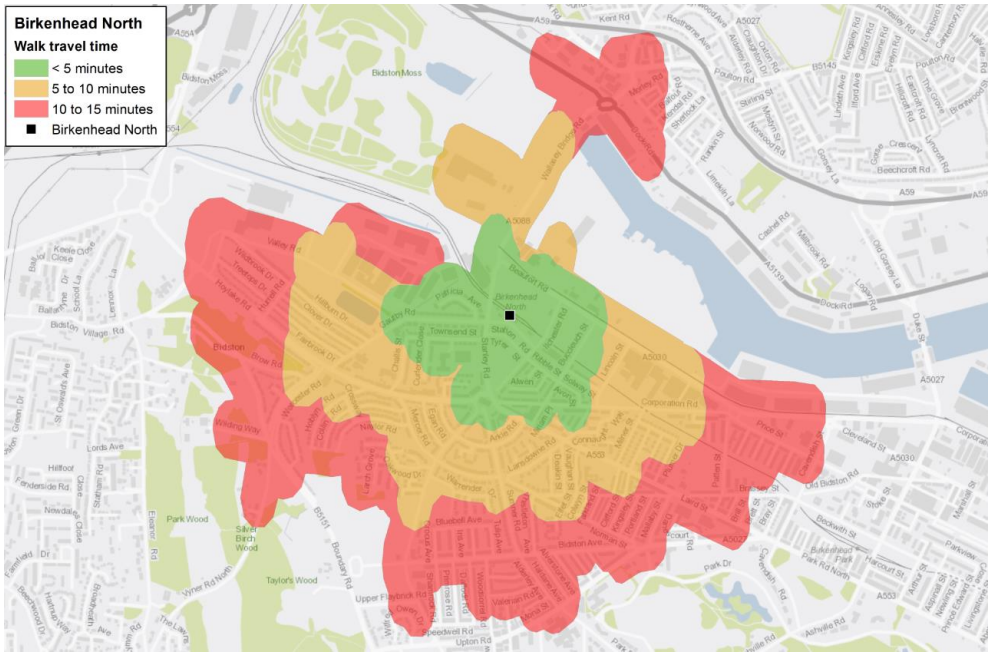
So, what does this mean for the Wirral Waters Feasibility Study?

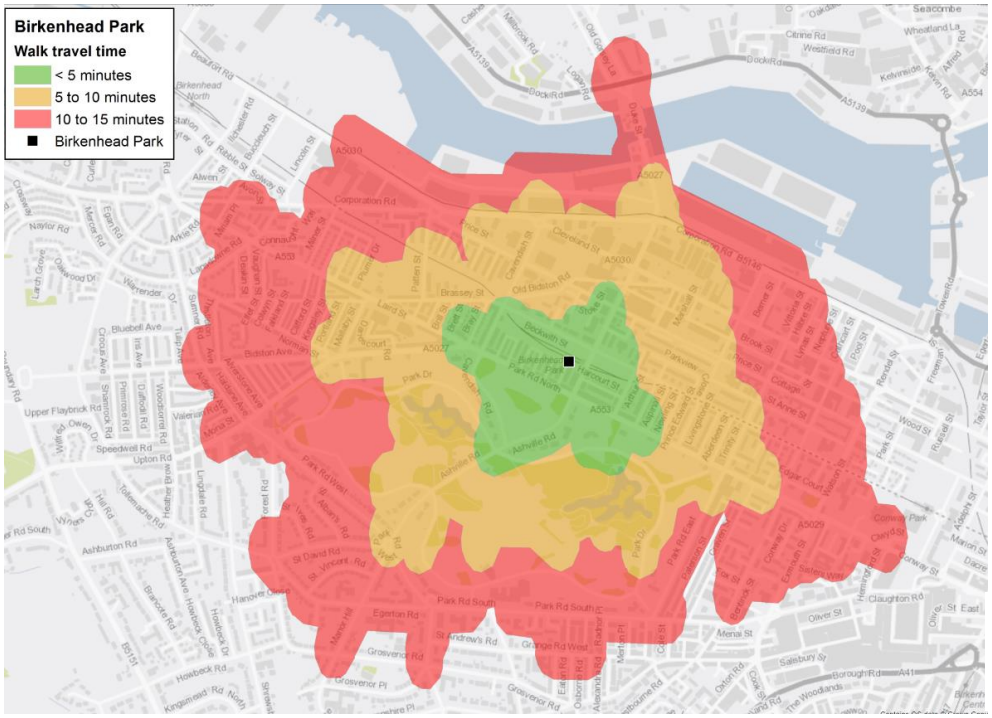
- The north east of the study area is poorly served by cross-river services with neither bus or rail services available. The Ferry can provide a slight mitigation to this but is unlikely to offer a comprehensive solution;
- Generally, high frequency cross-river services run peripherally to the site on both the A553 corridor to the south or on the Wallasey Tunnel Approach road to the north with limited interface with Wirral Waters.

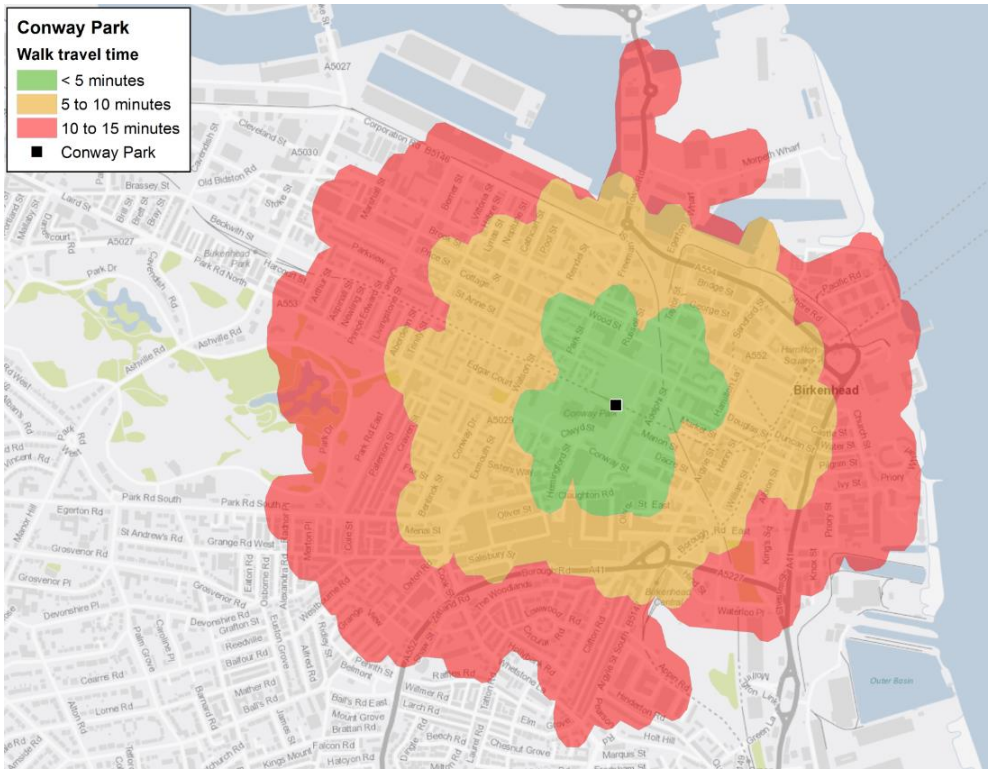
2.5.5 Walking and Cycling

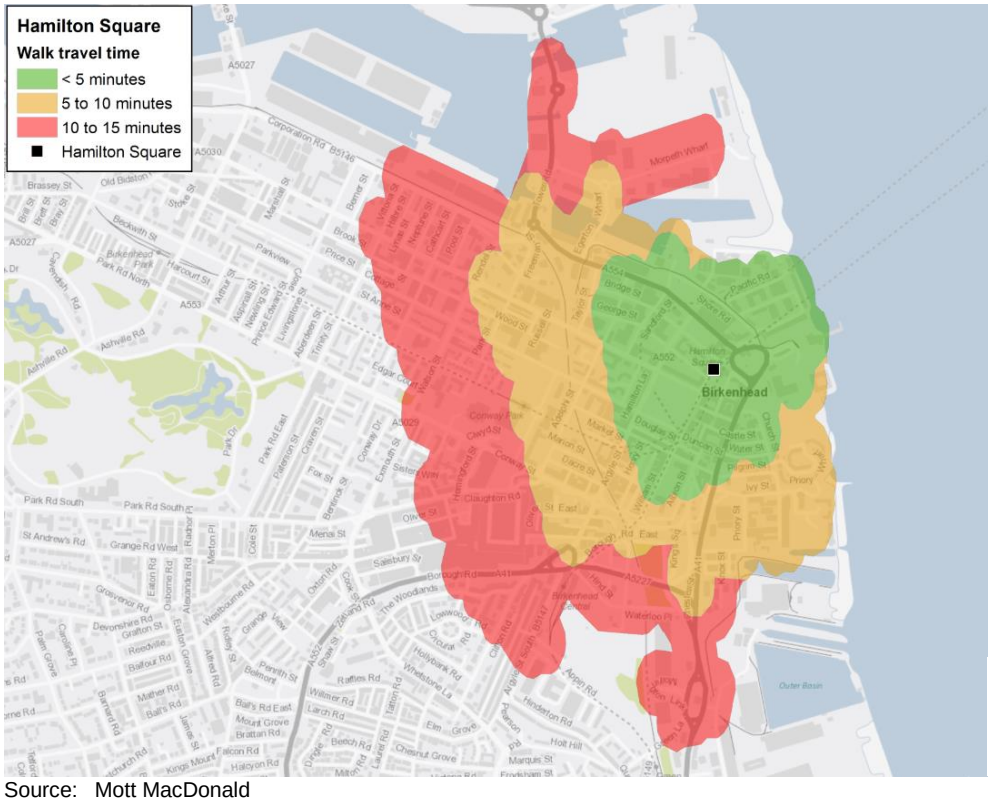
The following figures demonstrate the areas which are accessible from each rail station around the study area within 5, 10 and 15 minutes walking time.

Figure 16: Walking isochrones from key Wirral Waters stations









Source: Mott MacDonald

These walking isochrones show a relatively low level of pedestrian accessibility towards the north of stations with few areas to the west of the study area accessible within 15 minutes

walking time. Therefore, it is important to consider how highway improvements identified in this scheme improve connectivity for pedestrians particularly from the west and north to encourage active travel and sustainable modes of transport. Pedestrian and cyclist infrastructure will therefore need to be considered carefully as this study progresses.

Figure 17: Poor quality foot way at Wallasey Bridge Road

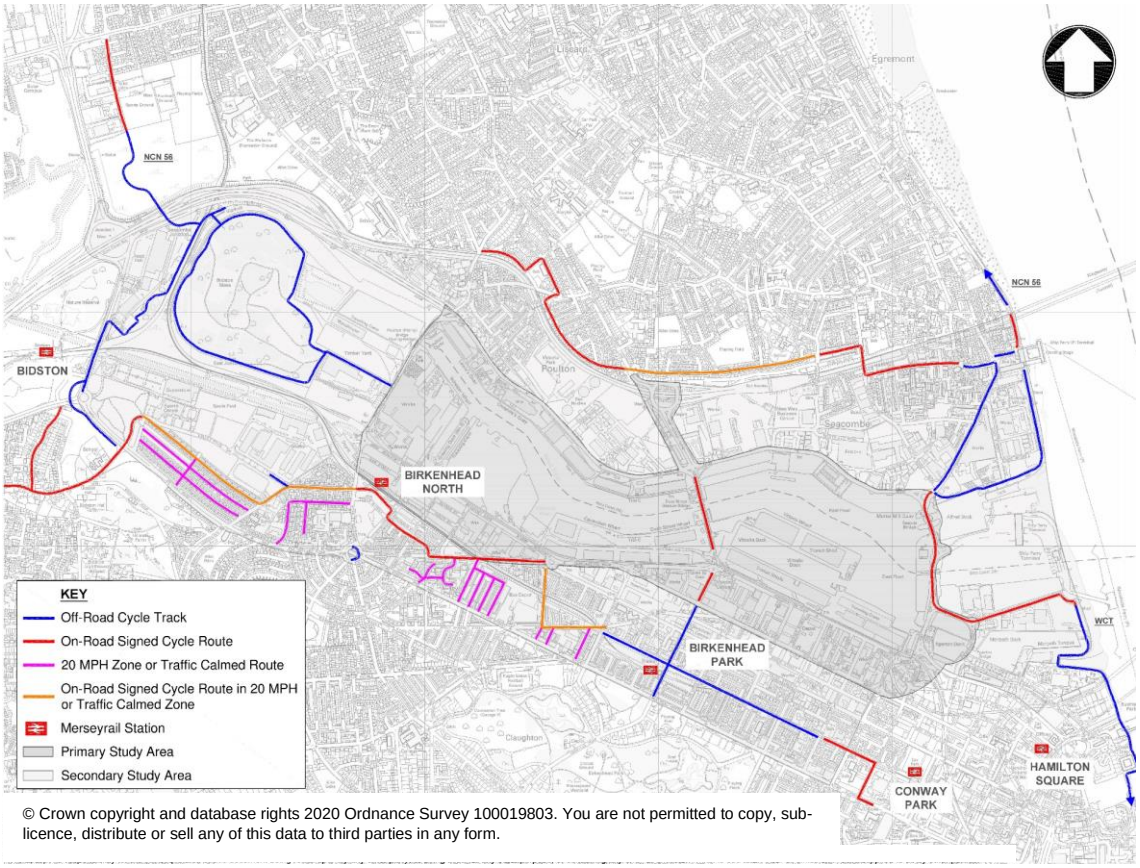
Source: Mott MacDonald

Figure 18: Degraded pedestrian crossing at Poulton Bridge Road

Source: Mott MacDonald

Figure 19 illustrates the location of on and off-road cycle routes around the study area and 20mph zones which aim to create more cycle friendly environments. Until very recently there was a complete lack of north-south connectivity across the centre of the study area. Whilst this was in part indicative of the dominance of industrial rather than residential land uses in the area, north-south as well as east-west connections will need to be enhanced to increase the attractiveness of the area for new investment.

Figure 19: Cycle Provision within the study area



Source: Mott MacDonald

Although the current provision for pedestrians and cyclists is limited there are number of schemes which have been identified to address this issue and enhance connectivity. Walking and cycling improvements which are currently taking place around the study area are summarised in the subsequent section.

So, what does this mean for the Wirral Waters Feasibility Study?

- Review of walk time isochrones for the four stations that serve the Wirral Waters study area indicates that access from the north of the study area towards the rail stations is poor. It will be particularly important to investigate how this access can be improved.
- To increase the overall attractiveness of the area for investment, it is likely that walk and cycle routes through and in and the area will need to be further improved..

2.5.6 Active Travel Improvements

A number of improvements to walking and cycling connections have recently been delivered, are currently being delivered or proposed for future delivery within the Wirral Waters study area.

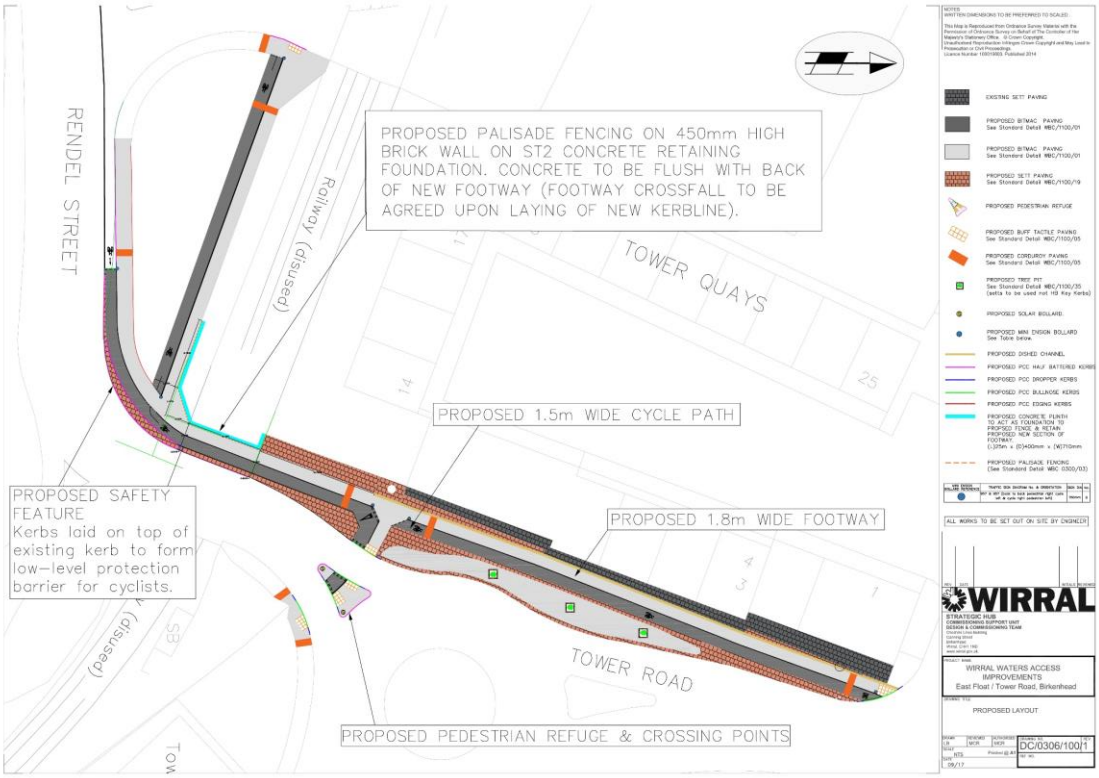
2.5.6.1 East Float/Tower Road Scheme

A number of interventions have been completed along Tower Road to increase provision for pedestrians and cyclists. This scheme has seen the implementation of wide footways and cycle

paths and an enhanced crossing point to facilitate pedestrian movements across the highway network.

A number of safety improvements have also been delivered as a result of this scheme including fencing to the north of Tower Road and raised curbs to separate pedestrians and cyclists.

Figure 20: East Float/Tower Road Improvements



Source: Wirral Council

The following images show how this scheme has been completed to a high standard providing safer and more attractive infrastructure.

Figure 21: Tower Road

Source: Mott MacDonald

Figure 22: Rendel Street

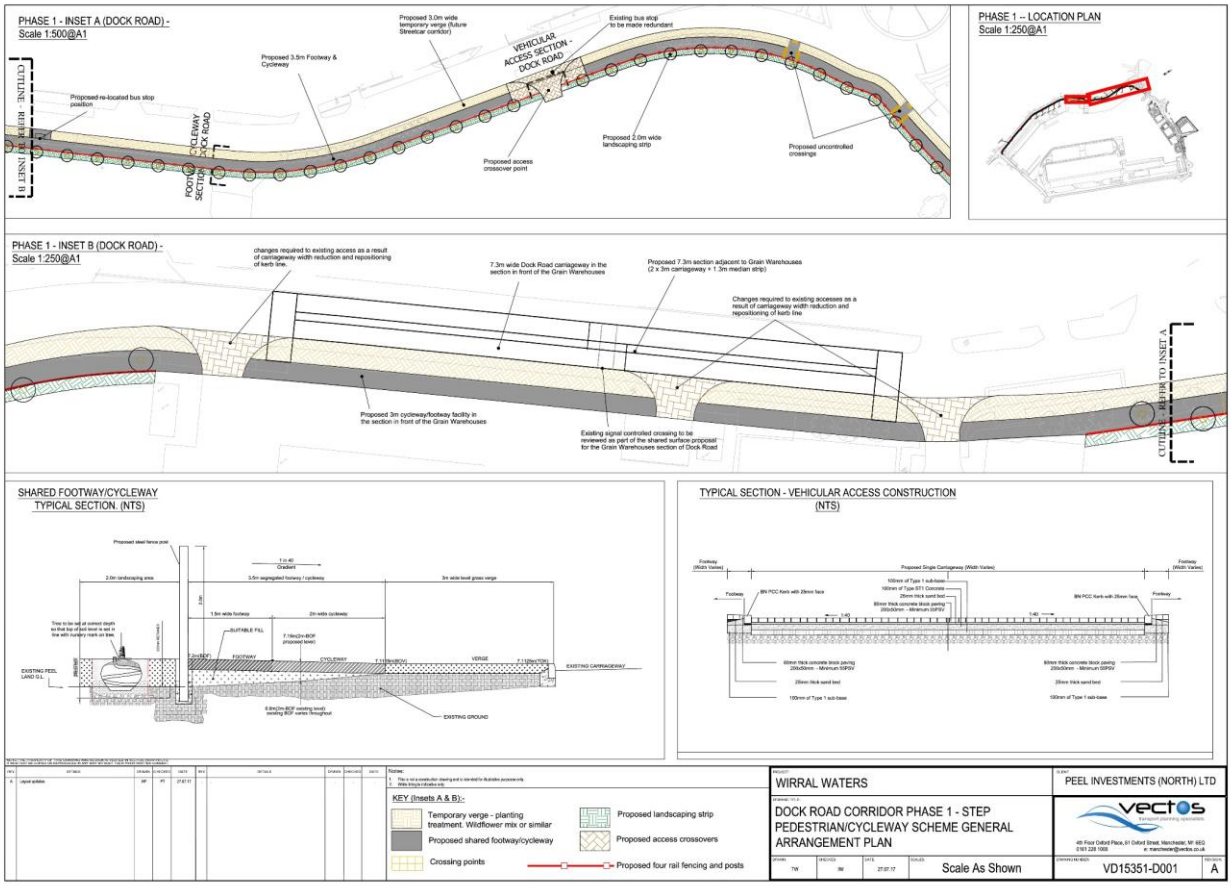
Source: Mott MacDonald

2.5.6.2 Dock Road Corridor

This scheme will see the implementation of a 3m wide shared cycleway/footway along the corridor. This scheme will also preserve the possible future alignment of the Wirral Waters tram route.

Phase 1 of the scheme is currently underway, details of which are set out in the following plan.

Figure 23: Dock Road Corridor Phase 1



Source: Vectos

Figure 24 illustrates the construction of the new cycleway/footway along the corridor.

Figure 24: Dock Road Scheme

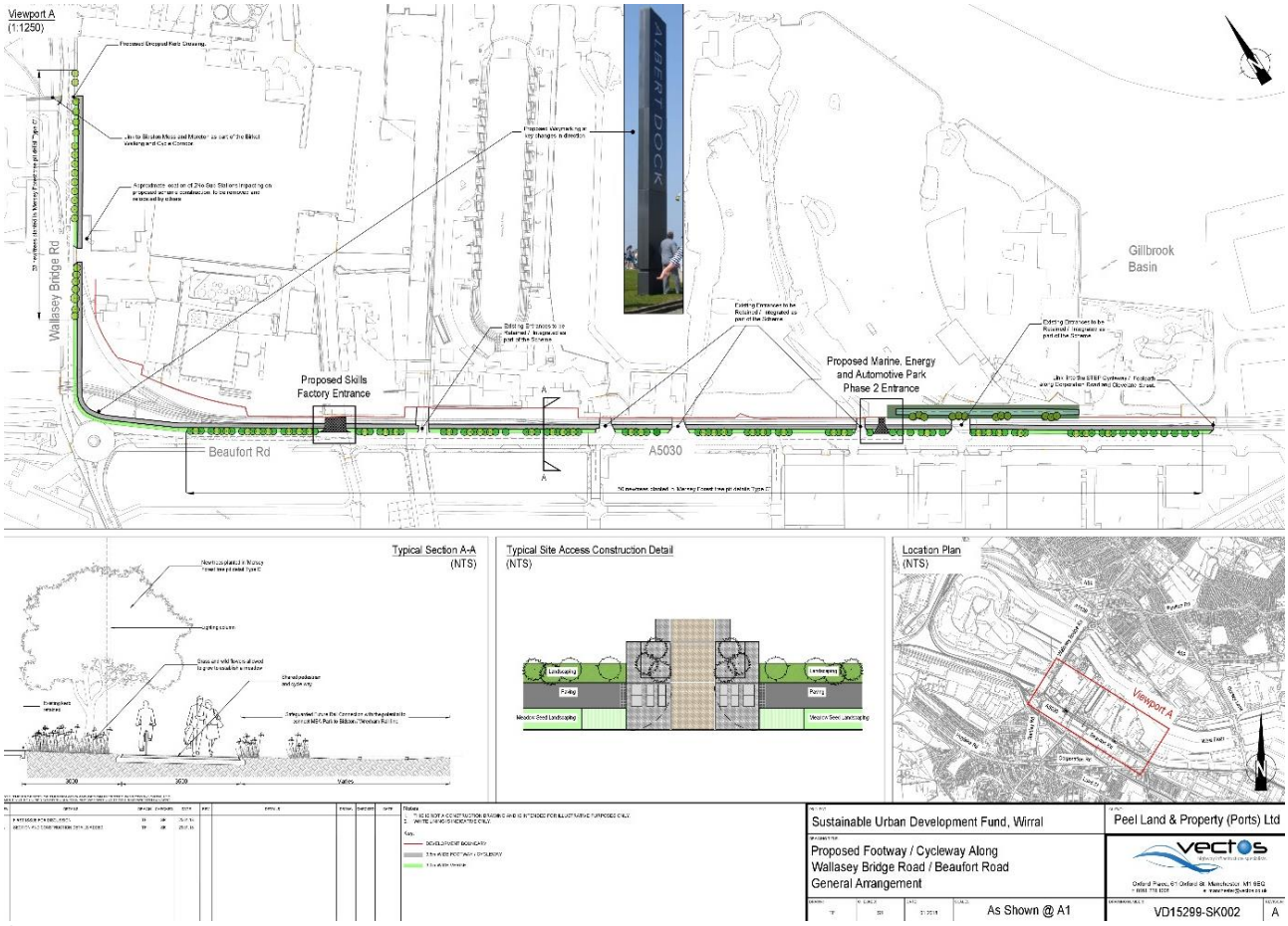
Source: Mott MacDonald

2.5.6.3 Sustainable Urban Development Fund Scheme

Further interventions are outlined within the Sustainable Urban Development Fund Scheme which proposes improvements along the A5030 from its junction with Corporation Road to the middle section of Wallasey Bridge Road.

Figure 25 illustrates the proposals identified within this scheme which include improved signage and wayfinding, dropped kerbs and crossings to ease mobility and landscaping to increase the attractiveness of the route to pedestrians and cyclists.

Figure 25: Sustainable Urban Development Fund Scheme, Wirral Waters



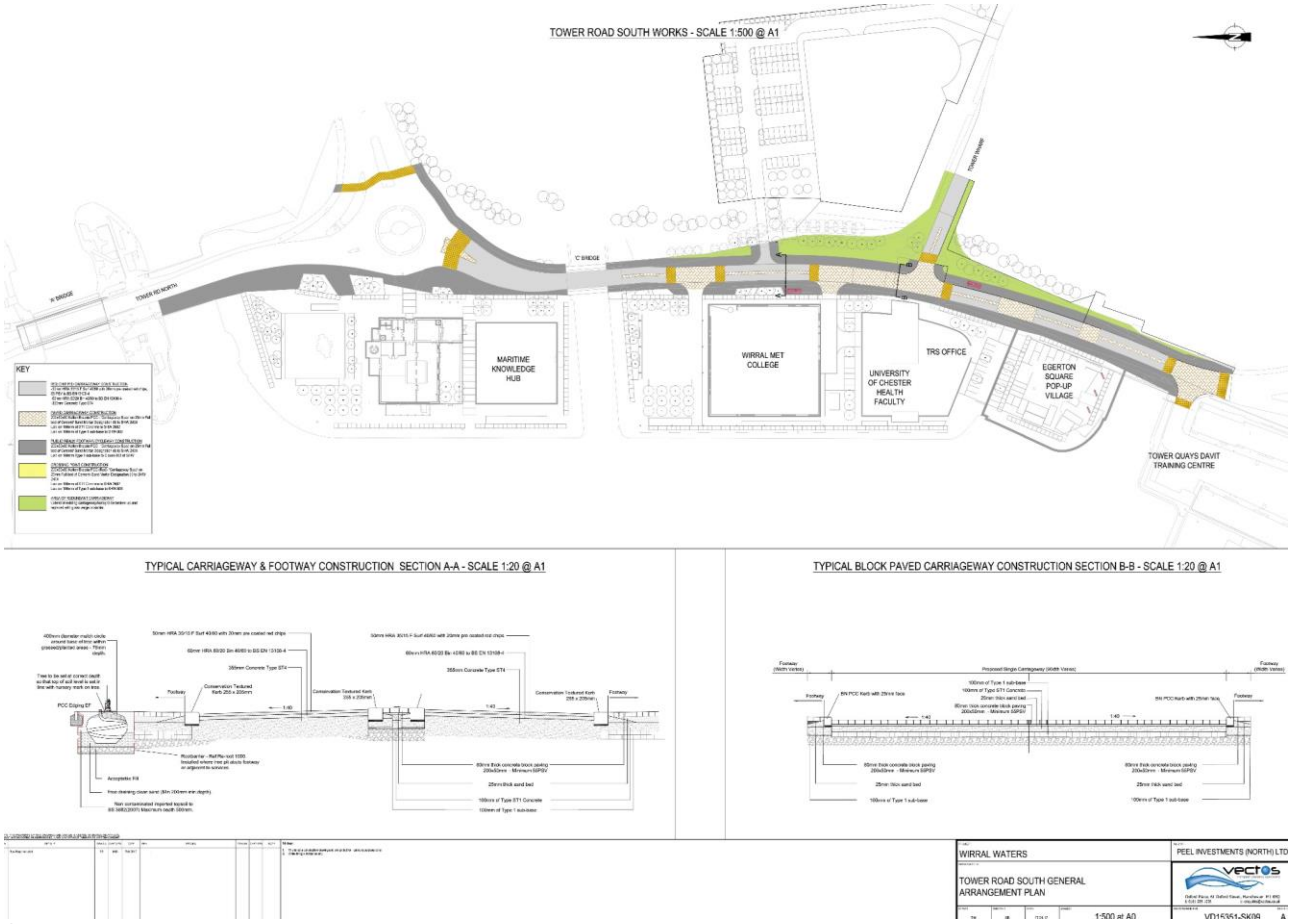
Source: Vectos

2.5.6.4 Tower Road

Pedestrian and cyclist environments will also be improved along Tower Road where a new footway/cycleway will be constructed between its junction with the A5209 and Alfred Dock.

New crossing points will also be constructed along the route to facilitate pedestrian movements across the highway and at key junctions.

Figure 26: Tower Road Scheme



Source: Vectos

So, what does this mean for the Wirral Waters Feasibility Study?

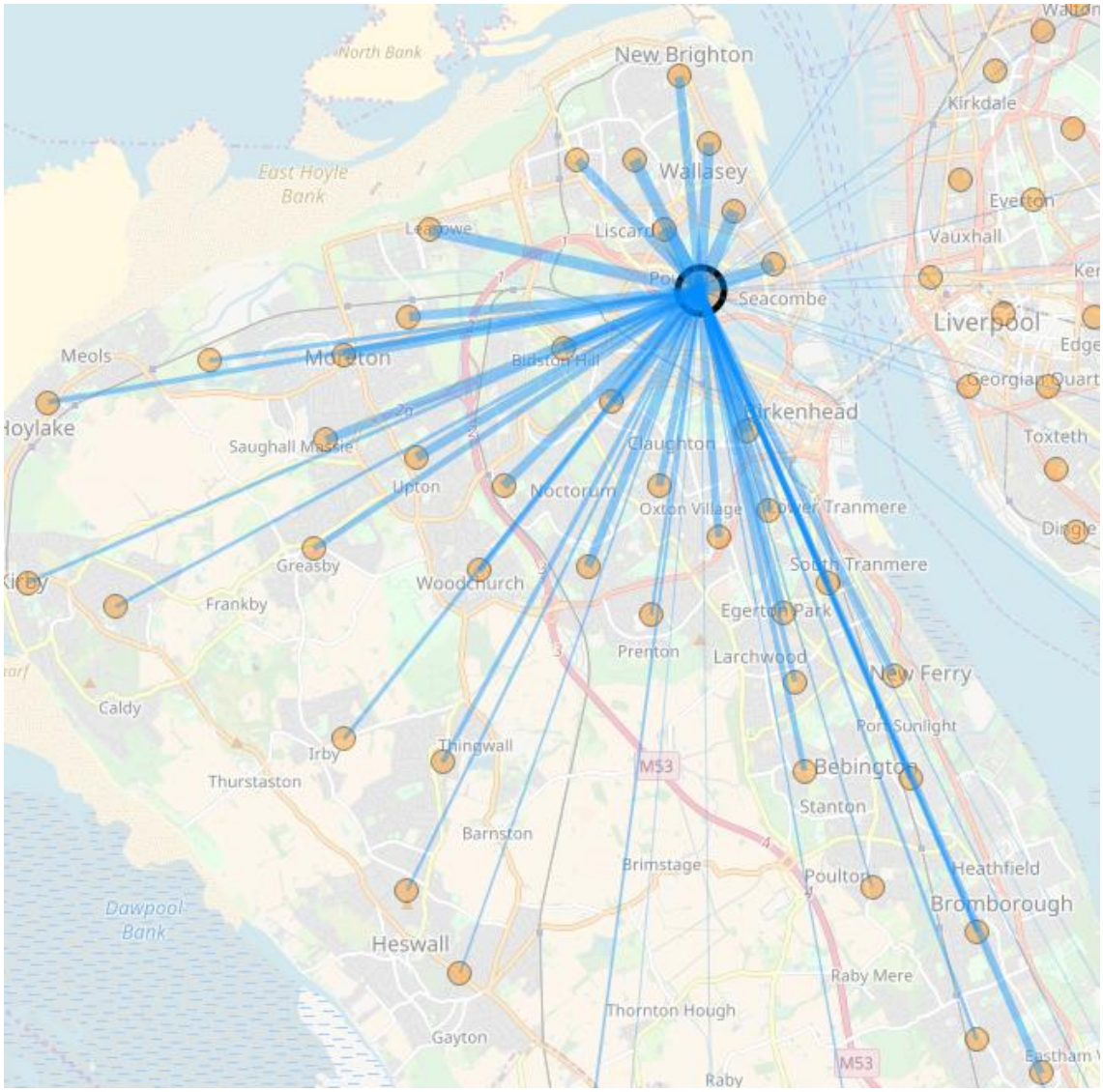
- A number of schemes to improve walking and cycling routes either within or in the vicinity of the Wirral Waters study area are either underway or proposed. These schemes will help improve the quality of the overall environment in the area, helping to attract new investment.
- New access and movement investment in Wirral Waters will need to be mindful of the ongoing and proposed investment in the area, particularly to ensure that schemes are complementary in terms of design to enhance sense of place across the area.

2.5.8 Travel to Work

Figure 27 and Figure 28 summarise the number of commuter trips to and from the study area to demonstrate where people are frequently travelling to and from.

This shows that the majority of people working around the study area are travelling from surrounding areas within the Wirral, highlighting the importance of local connectivity.

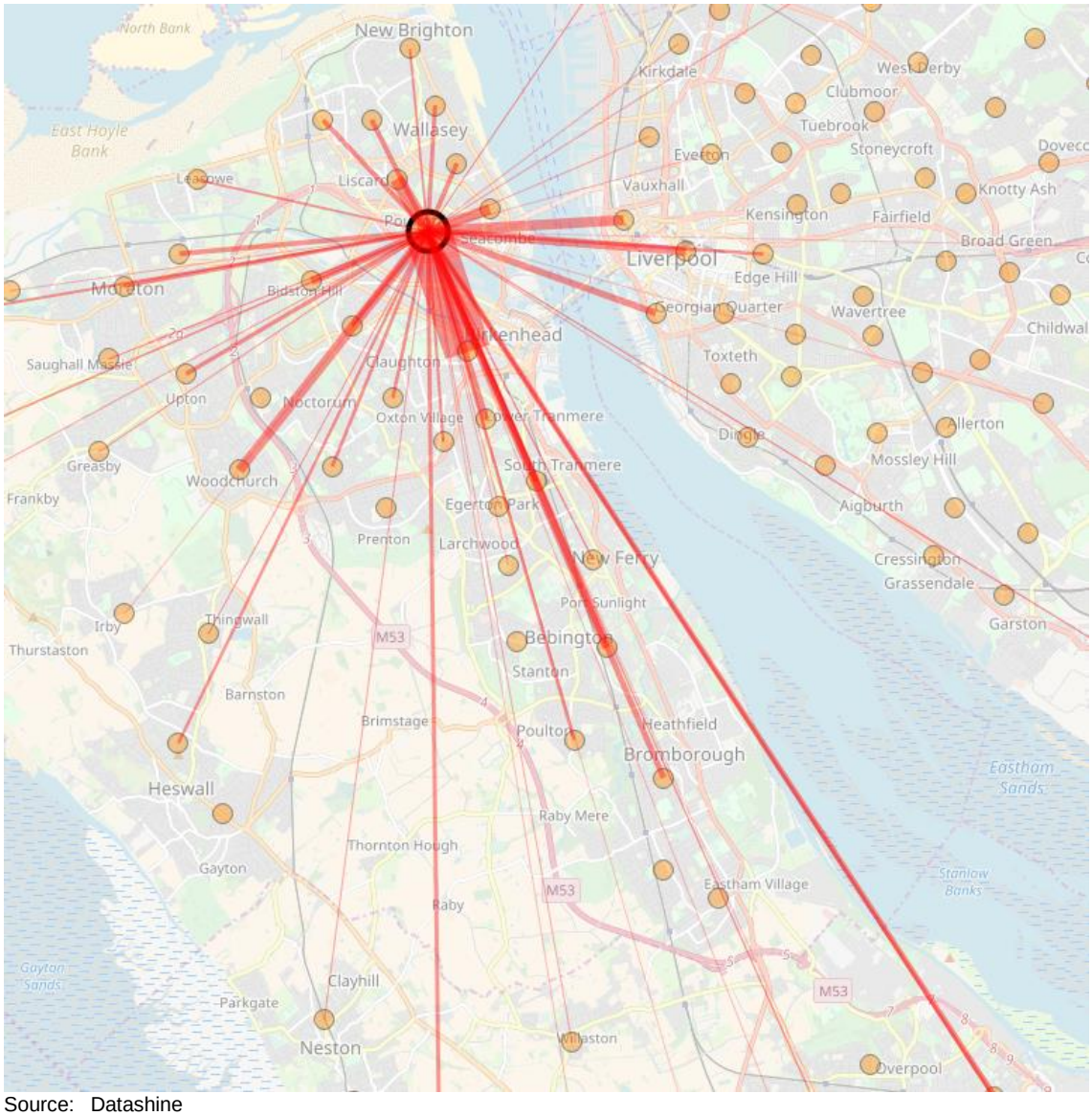
Figure 27: Inward Commuter Trips



Source: Datashine

Figure 28 illustrates that the majority of people living in the area are also working in Birkenhead, with a significant number of people also travelling to areas around Liverpool City Centre for employment.

Figure 28: Outward Commuter Trips



Source: Datashine

There will be a significant increase in the number of available jobs and dwellings within the study area as Wirral Waters growth comes forward. On this basis, the current travel demand patterns for the area in terms of both commuter and leisure trips are likely to change.

So, what does this mean for the Wirral Waters Feasibility Study?

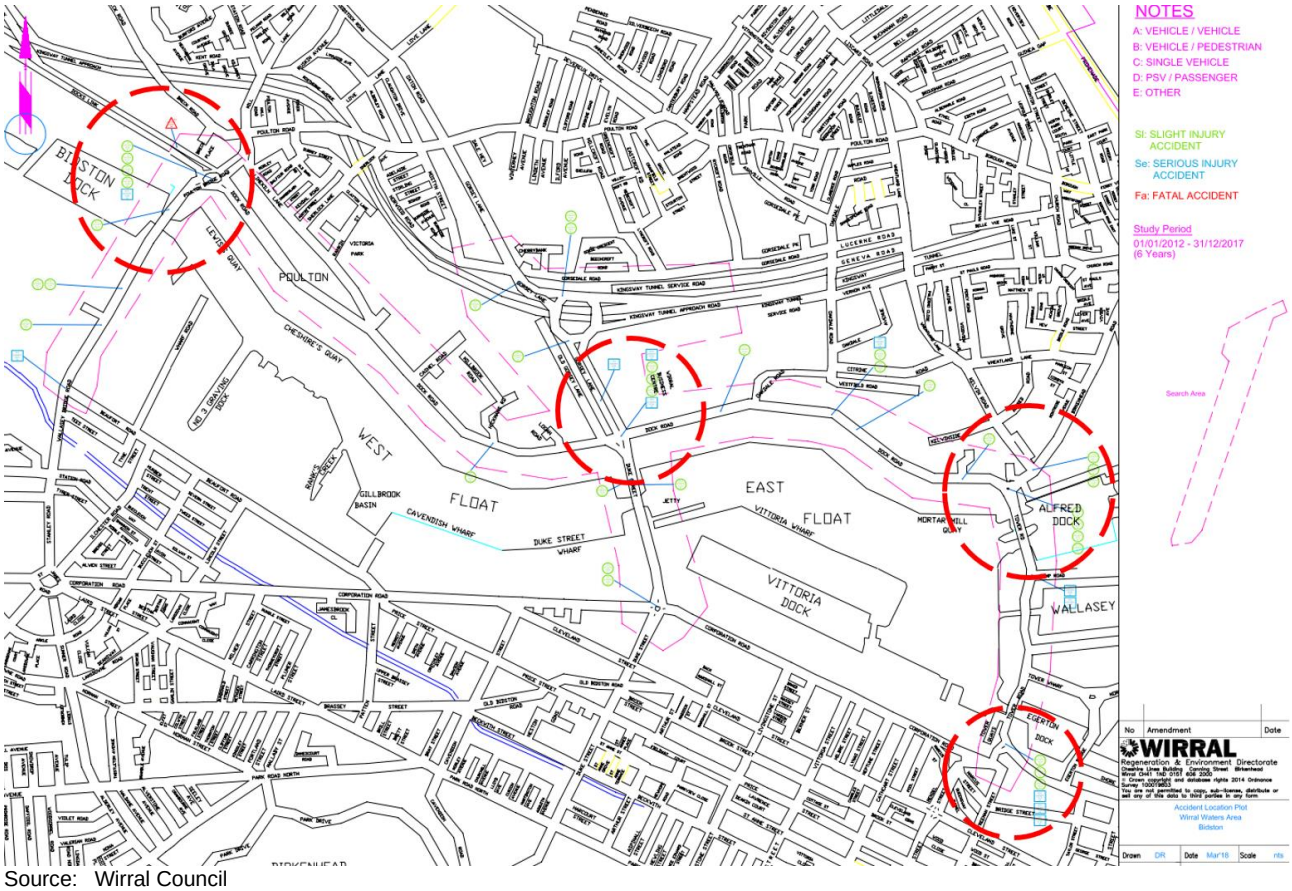
- Job creation and housing development in Wirral Waters is likely to generate an increase in trips to and from the north of Wirral. Key routes such as the A5030 and A59 will become increasingly important corridors and there will be a need to ensure that junctions can accommodate this likely increase in movements to enable reliable journey times with minimal congestion, particularly in the AM and PM peak periods.

2.5.9 Accident Analysis

Figure 29 demonstrates the number of recorded collisions resulting in slight, serious or fatal injury within the study area between 2012 and 2017. This shows clusters of accidents predominantly around the key junctions within the study area as highlighted within the red circles in Figure 29.

At the A5139/Poulton Bridge Road/Wallasey Bridge Road junction, 7 accidents have occurred in the last 5 years including one resulting in serious injury and one resulting in a fatality. The majority of accidents in this area were vehicle collisions occurring on the roundabout; the fatal accident on the approach from Docks Link involved a police officer and a vehicle that had failed to stop and was therefore highly (and tragically) unusual. Therefore, it is important that proposals identified within the scope of this study consider improvements to pedestrian safety to increase connectivity to the Wirral Waters development.

Figure 29: Recorded Accidents in Wirral Waters Area (Jan 2012 to Dec 2017)



Source: Wirral Council

There is also a group of 6 accidents at the junction of Dock Road, Duke Street and Gorsey Lane 3 of which resulted in serious injury. This junction is a large yellow box junction with the majority of incidents occurring within the yellow box.

A further 7 vehicle accidents have occurred at the Tower Road/Dock Road/Birkenhead Road junction between 2012 and 2017. These incidents occurred on the approach to the roundabout from to/from Tower Road and Birkenhead Road. To the south of the study area, a number of slight and serious accidents have also occurred at the A554/A5029 junction.

As the majority of incidents occurring within the study are vehicle collisions at junctions, it is important that this study aims to improve the layout and operation of junctions to ensure they are user friendly and promote road safety.

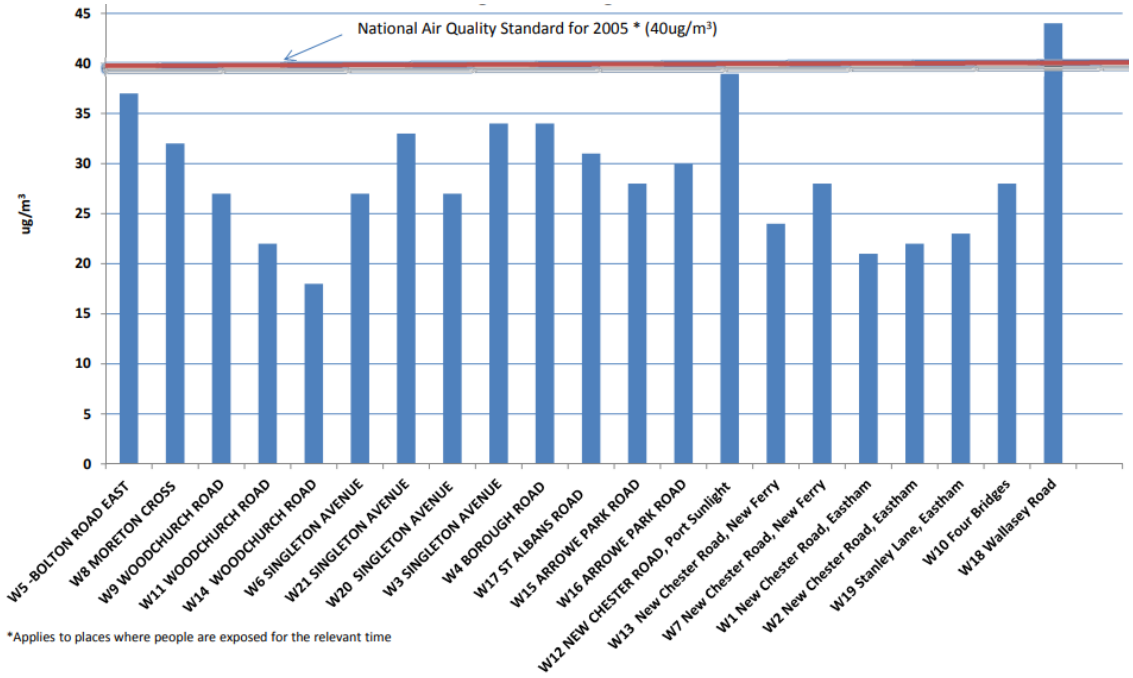
So, what does this mean for the Wirral Waters Feasibility Study?

- Clusters of injury accidents can be observed at key junctions within the Wirral Waters study area. All three major junctions of Dock Road have been identified as accident hotspots and safety improvements for the junctions on this corridor in particular should be considered within the later phases of this study.

2.5.10 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 in 2016 is outlined in the figure below.

Figure 30: 2016 Annual Average NO_2 Levels in Wirral



Source: Wirral Council

This type of pollution is primarily associated with road traffic and congestion. Therefore, it is important that this study considers schemes which aim to minimise congestion as levels of traffic and the number of HGVs will increase as a result of the Wirral Waters development.

So, what does this mean for the Wirral Waters Feasibility Study?

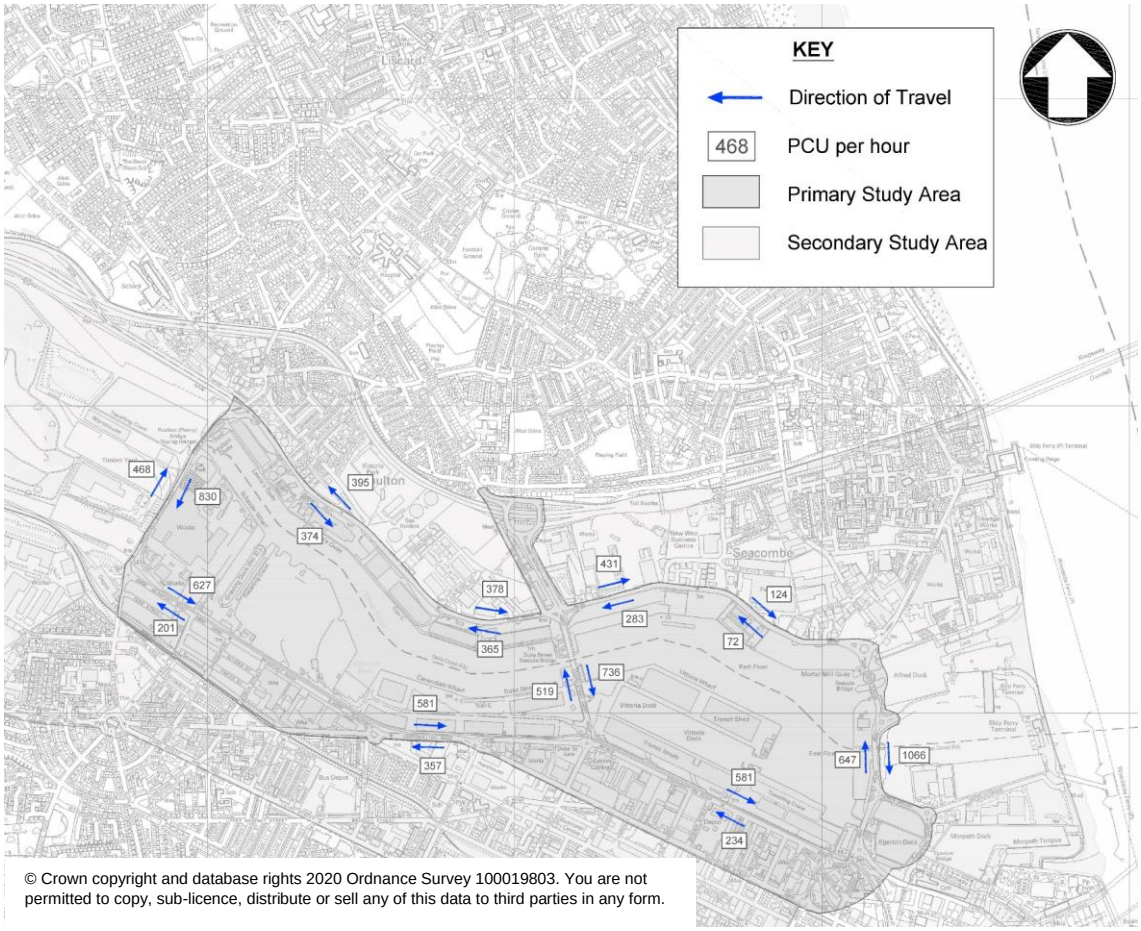
- Whilst the study area has no existing air quality concerns, given the significant growth proposals for the study area, it is important that particulate levels are closely monitored as new development comes forward and that investment in sustainable transport is delivered to help reduce levels of emissions associated with road traffic.

2.5.11 Traffic Modelling

The Wirral SATURN model has been used to present the current traffic flows on key routes within the study area. The flows for the AM and PM peak periods are noted along key roads within the study area within Figure 31 and Figure 32.

In terms of the AM peak, Wallasey Bridge Road and Tower Road, to the far west and east of the study area respectively, have the highest traffic flows. On both of these routes, southbound flows are also significantly higher than northbound flows and this is likely to reflect the residents of Wallasey, New Brighton and Seacombe travelling towards Birkenhead and further south for access to employment opportunities.

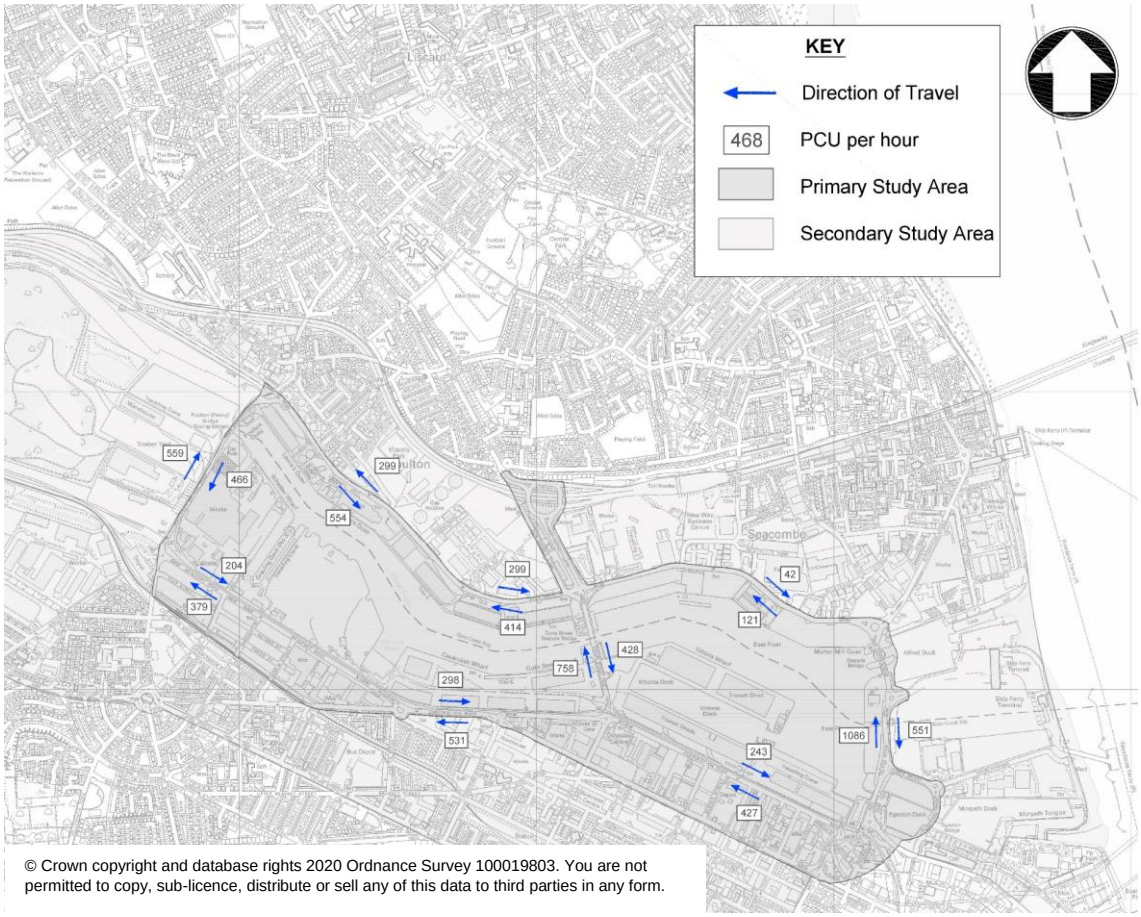
Figure 31: Baseline AM Peak Link Flows



Source: Mott MacDonald

With respect to the PM peak flows shown in Figure 32, flows are again highest on Tower Road and Wallasey Bridge Road however this time the northbound flows are notably higher than the southbound flows. Similarly, it is thought that this is indicative of commuters from the Wallasey Tunnel, Wallasey, New Brighton and Seacombe travelling home from work.

Figure 32: Baseline PM Peak Link Flows

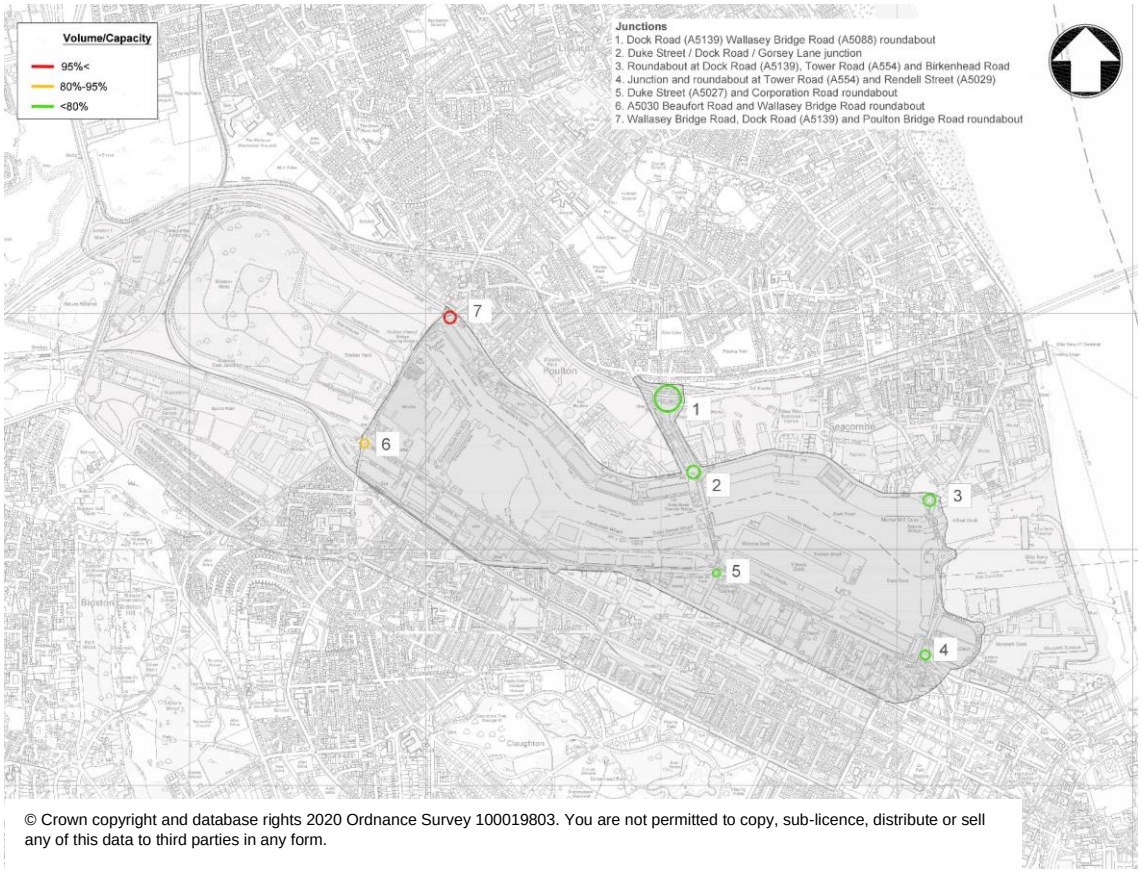


Source: Mott MacDonald

In terms of overall flows at key junctions across the study area within the AM peak, Figure 33 indicates that with the exception of the Beaufort Road/Wallasey Bridge Road and the Wallasey Bridge Road/Dock Road/Poulton Bridge Road junctions, all junctions are operating at less than 80% capacity and therefore unlikely to be suffering from any notable congestion during the period. The Beaufort Road/Wallasey Bridge Road roundabout is operating at between 80-95% capacity during the AM peak, whilst congestion at the Wallasey Bridge Road/Dock Road/Poulton Bridge Road roundabout is greater still and the junction operates above 95% capacity. The significant junction congestion at the two junctions of Wallasey Bridge Road is indicative of the higher flows seen on this route during the period.

It is also noted that localised junction congestion occurs when the dock bridges lift, and can take some time to clear – especially when then occur during peak periods. Also, congestion occurs regularly when the Belfast ferry disembarks at the Stena Line terminal between the port and the Wallasey Tunnel / A59.

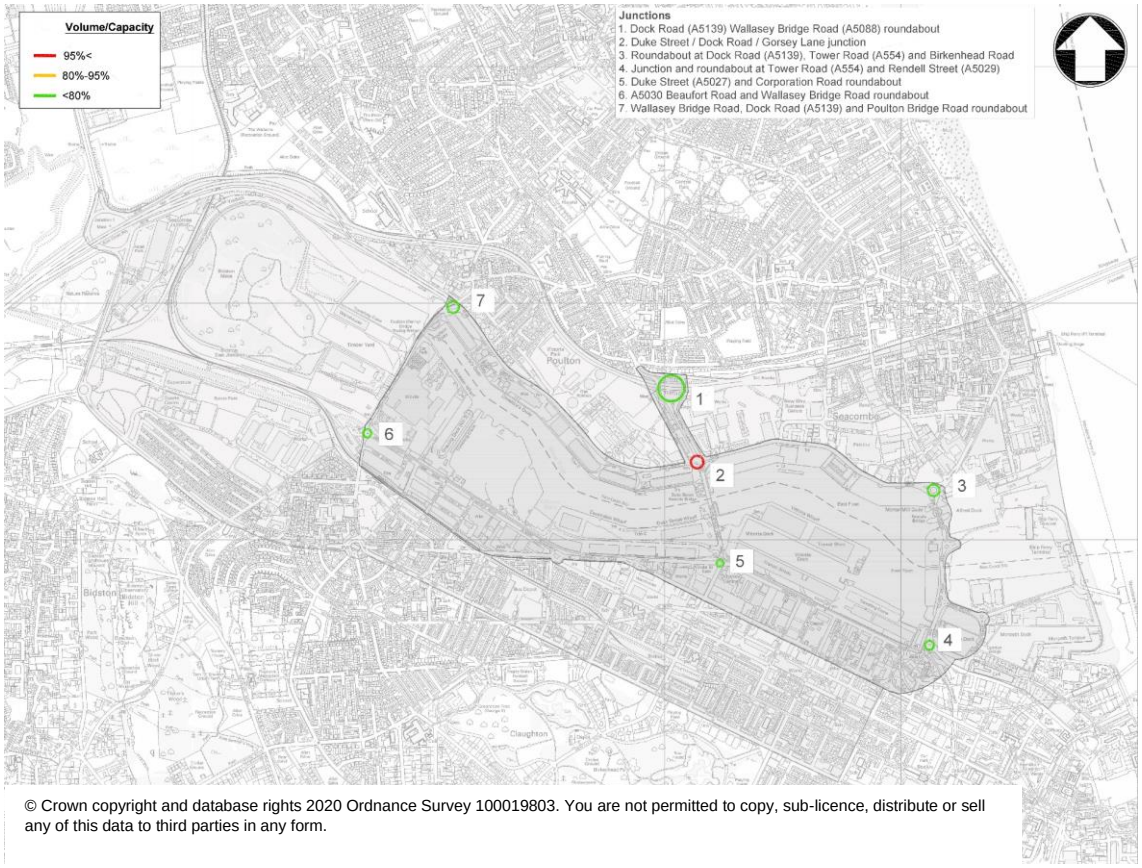
Figure 33: Baseline AM Peak Junction Capacity



Source: Mott MacDonald

With regard to the PM peak, junction capacity issues are slightly less widespread, with only the Duke Street/Dock Road/Gorsey Lane junction showing any signs of congestion above 80% volume over capacity. This junction is however operating at 95% of capacity in the PM peak and this is likely to be reflected by notable queues on all four arms of the junction during the period.

Figure 34: Baseline PM Peak Junction Capacity



Source: Mott MacDonald

So, what does this mean for the Wirral Waters Feasibility Study?

- In general terms, with the exception of a few isolated junctions, there are few congestion and network capacity issues across the study area. However, as major development at Wirral Waters comes forward it is likely that some of the spare capacity on the network will be used and this could lead to the need for intervention.
- Also, occurrences such as the dock bridges lifting and ferries disembarking cause localised congestion.

3 Development Proposals and Opportunities

3.1 Regeneration Strategies and Studies

3.1.1 Wirral Growth Plan

Wirral's 2020 Growth Plan outlines an ambitious vision for the future of Wirral. Vast amounts of development are anticipated across the borough, including nationally significant economic development projects such as the Wirral Waters Enterprise Zone. Such transformational changes across the borough undoubtedly presents significant opportunities for the Borough. However, in tandem, development of this scale also poses future challenges for the transport network in seeking to accommodate and facilitate the planned growth of Wirral.

Figure 35: Wirral Growth Plan

Source: Wirral Council

3.1.2 Wirral Strategic Regeneration Framework

Building on the Wirral Growth Plan Wirral Strategic Regeneration Framework (SRF) provides further detail on our spatial priorities for investment:

- Birkenhead Town Centre- including Hamilton Square and Woodside

- Wirral Waters Enterprise Zone
- The A41 employment corridor- including Wirral International Business Park
- New Brighton
- Local town centres

The SRF notes that the overall ambition for Wirral Waters is that it:

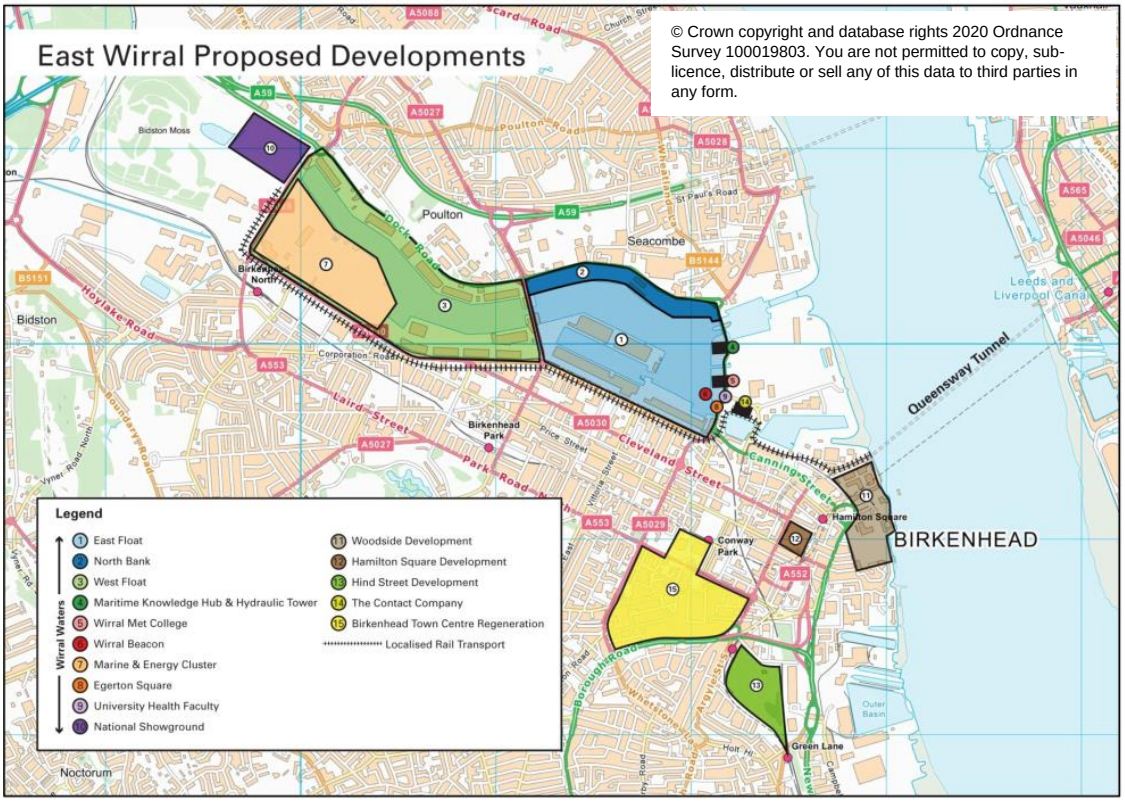
"will be a new place to live, work and play and a place for all. It is centred on the Wirral Dock system on the banks of the River Mersey, overlooking Liverpool's world-class, city waterfront. At its heart the project seeks to use the unique water assets of the city to drive growth across all sectors; for trade, for jobs, for energy, for transport, for play and for 'placemaking'."

3.1.3 Wirral East Wirral Transport Scoping Report

In 2016 an East Wirral Transport Scoping Report was produced by KBR. This report reviewed a range of studies that have been completed across Wirral over the past decade, outlining the need to be refreshed into a co-ordinated programme of activity.

The key recommendation was to review the current lists of projects, pin-pointing and prioritising gaps to identify and direct work, and importantly aligning them with regeneration timescales in order to ensure that the basis of scheme development is benefits led. The proposed East Wirral regeneration sites identified in the report are shown in Figure 36 below.

Figure 36: East Wirral Proposed Developments



Source: Mott MacDonald

The recommendations of East Wirral Transport Scoping Report were as follows:

- Develop a 'Strategic Transport Framework for East Wirral' in order to identify a priority list of projects to support the regeneration ambitions for East Wirral. This is essential to underpin the Strategic Regeneration Framework with the development of specific transport packages to be linked to place shaping profiles/spatial plans for regeneration.
- Progress the development of options, business cases and funding applications as appropriate to reflect the agreed spatial priorities;
- Review current governance and programme delivery arrangements to ensure efficient decision making, accountability and efficiency.

3.1.4 Wirral Strategic Transport Framework

The Wirral Strategic Transport Framework provides the context for delivering transport to enable the Strategic Regeneration Framework. It sets out the ambition and opportunities for transport within, and linking to, spatial priority areas.

Specifically, in terms of Wirral Waters, the Transport Framework highlights that a new Investment Fund has been created to support development at Wirral Waters and a number of overarching transport investments for Wirral Waters are identified:

A) Wirral Waters Supporting Road Infrastructure

Improvements to the immediate roads that circulate the Wirral Waters site which include Wallasey Bridge Road; Beaufort Road, Dock Road and Corporation Road including the creation of City Boulevard. *These improvements are being investigated through the scope of this study.*

B) Gateways to Wirral Waters

The scheme will improve the junctions at the key arrival gateways for Wirral Waters. The scheme will help improve access into Birkenhead Town Centre from both East and West floats. *Again, these improvements are being investigated through the scope of this study.*

C) Wirral Waters Active Travel Connectivity

The package will improve accessibility to the Enterprise Zone through the creation of an improved public realm through walking and cycling routes into and around the Wirral Waters site to ensure that the site is accessible to all. This will also improve cross dock routes for active travel from Wallasey to Birkenhead Town Centre. *Where relevant, this study will identify potential active travel improvements for the Wirral Waters area.*

D) Wirral Waters Streetcar (Mass Transit System)

Hamilton Square is a key hub station for the Merseyrail Electrics Network with connections to Liverpool, West Kirby, New Brighton, Ellesmere Port and Chester. It has the potential to act as a key gateway to Wirral Waters. A mass transit system has the potential to be extended to link Wirral Waters with Birkenhead Town Centre.

E) Wirral Waters Public Transport Accessibility

This is a package of measures to improve the public transport offer to Wirral Waters. A high-quality bus service running at a high frequency with modern low emission buses with Wi-Fi would provide an enticing offer to employees, students and visitors to the area connecting the enterprise zone with Birkenhead Town Centre.

F) Coastal Cycling Strategy and Bike Hire

Improvements to the Wirral Circular Trail, including maintenance and lighting will help to improve the access to Wirral Waters. Strategically placed bike hire docking stations could

encourage residents to cycle the short journey between Hamilton Square and Birkenhead Town Centre, also connecting the area with Woodside and Wirral Waters.

G) Rail Freight Links to Wirral Waters

The Wirral Waters development will result in a significant manufacturing presence around the Western Float section of the development. This would require support from a considerable level of freight movements, which at present could only be via the local road network between Wirral Waters and M53 Junction 1. The scheme would re-open a disused rail line between Bidston and Wallasey Bridge Road that would enable a direct rail access for Wirral Waters and West Float and therefore deliver rail freight accessibility to Wirral Waters.

3.1.5 Wirral Strategic Transport Framework Action Plan

The aim of Wirral's Strategic Transport Framework Action Plan is to place future transport schemes in to a prioritised list in line with regeneration plans. The Strategic Transport Framework and its Action Plan will give the Council a strategic vision for when transport schemes need to be developed and enable the Council to seek funding to enable the development of the appropriate business cases. Mott MacDonald are currently working with Wirral Council to develop an updated Wirral Strategic Framework Action Plan.

3.2 Wirral Waters

Wirral Waters forms part of Mersey Waters Enterprise Zone, 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 was expected 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;
- 250,000 sqm B2/B8 consent.

Since securing planning permission in May 2012, a number of barriers to development have been resolved and now collaborative delivery of Wirral Waters can be accelerated in earnest. Wirral Metropolitan College compromising 38,000 sqft 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 focus now on Wirral Waters is the creation of a desirable 'place' that is complementary to Liverpool for new occupiers and investors. This stance has been clear with lots of development interest sparked at MIPIM, to deliver residential, commercial and leisure opportunities. Current activity is being concentrated in two 'cluster' areas at MEA Park and Northbank/Four Bridges, details of which are outlined below.

3.2.1 MEA Park

MEA Park (Marine, Energy and Automotive Park) is a proposed new, multi-unit 1m sqft waterside manufacturing, logistics, research and development (R&D) and assembly campus within Wirral Waters. Future phases for the area would be to develop additional floorspace to provide a range of high grade advanced manufacturing/distribution units. This would include a

new Skills Factory and Module Development Centre, a new Government backed centre focused on modular construction and digital design.

3.2.2 Four Bridges/Northbank

The Four Bridges and Northbank cluster would include a range of modern, high quality residential, leisure and commercial space at Wirral Waters. This includes the Kingsgate, Northbank and Egerton village developments to deliver high density housing, attractive office spaces and additional jobs, and leisure facilities to stimulate tourism in the area.

A new Maritime Knowledge Hub and Offshore Training Centre is also to be delivered as part of Wirral Waters to provide a national significant education, R&D, innovation and commercial hub focused on the marine and maritime sector. This can provide Wirral with a key sectoral strength that can form a 'centrepiece' to attract investment and spur growth in the area.

3.2.3 Wirral Waters Masterplan

The plans for the Wirral International Trade Centre (ITC) have been superseded within the latest Wirral Waters Masterplan (Figure 37). The masterplan seeks to help bring forward £220 million investment between now and 2021 and is now centred around the new £20m Maritime Knowledge Hub and Offshore Training Centre, as a national significant attraction to the area. In addition, the Wirral Beacon will contribute to the inward investment and growth of Wirral Waters, to provide a unique sense of place, with the 80m high viewing tower creating a new dimension to the tourist offer of the area.

Additional facets to the Wirral Waters project include the urban design of the area, with aspirations outlined to deliver high quality public realm and open space, serviced by efficient and attractive travel links. Proposals outlined include the Wirral Streetcar that can provide a unique and localised streetcar system that acts as a delivery catalyst for Wirral Waters, and creating more sustainable approaches, cycleways and pedestrian links into Wirral Waters utilising street trees and green infrastructure.

There are also aspirations within Wirral to drive growth in the student accommodation market in Birkenhead. A new recently approved development close to Wirral Waters at Hamilton Square will deliver 300 student units, driving growth in the knowledge economy of the area, and also stimulating wider growth in the evening economy of the area. Development of the evening economy will help make Birkenhead and Wirral Waters an attractive place for university students as well as young professionals with disposable income.

Figure 37: Wirral Waters Masterplan

Source: Peel

3.3 Wider Development Opportunities

3.3.1 Wirral Growth Partnership

Wirral Council is currently going through a tender process to create a Limited Liability Partnership between the council and a private sector investor/developer as a joint venture. The formal selection and launch of the joint venture company is expected in Spring 2018. The Wirral Growth Company Prospectus outlines a number of growth opportunities on top of Wirral Waters that Wirral Council is looking for partners to engage with them to develop:

- Hamilton Square

  Potential for a £60m transformation to include boutique hotels, offices and 36,000 sqft of leisure space. Birkenhead Town Hall can become a destination hotel and wedding venue, an arts space or theatre complex.
- Woodside Waterfront;

  A prime waterfront site with outstanding views to Liverpool's World Heritage waterfront. A 500,000 sqft mixed use scheme with a GDV in excess of £300m and scope for hotels, leisure, offices and high-end residential.
- Birkenhead Civic Hub

  A 290,000 sqft office requirement for Wirral Council and several other public-sector covenants, with scope for additional leisure development of up to 25,000 sqft on adjacent sites.
- Birkenhead Town Centre

  The council is developing a regeneration plan for Birkenhead's historic core and has brought numerous properties in to its ownership so it can work with joint venture partners. There is scope for almost 350,000 sqft of commercial development, 200 residential units and car parking.
- Birkenhead Market

  A transformation of the market to create a unique and highly differentiated food and leisure dining offer capable of drawing in tourists and visitors from a wide area.

3.3.2 Masterplans, Completed and Committed Development

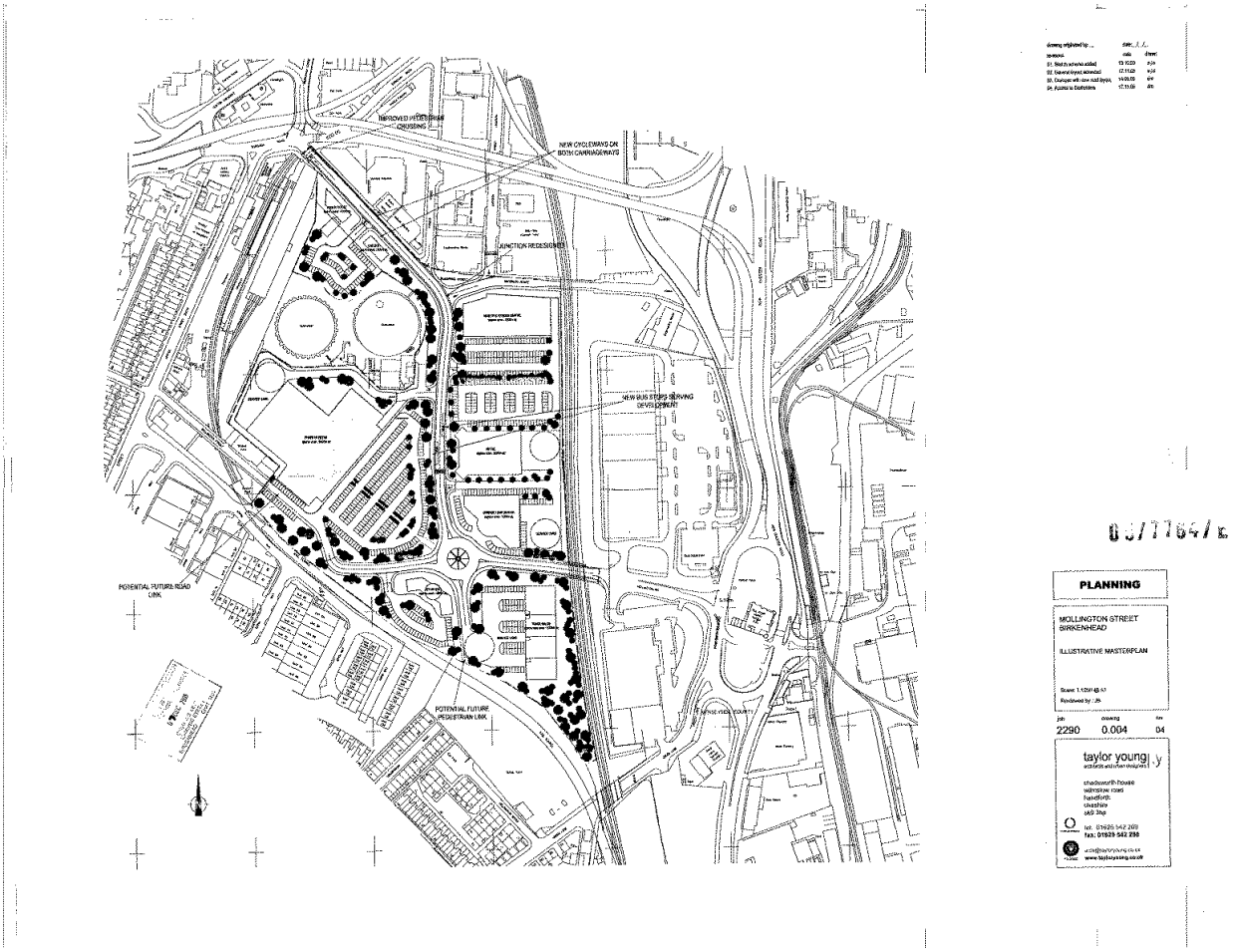
3.3.2.1 Woodside

In 2003 Wirral Council commissioned BDP to undertake a master planning exercise for Woodside refreshed in 2010 on behalf of Peel Holdings. Peel Holdings are currently looking to refresh this masterplan again.

3.3.2.2 Hind Street

In 2012 National Grid Property Holdings LTD and Homes and Communities Agency an application to replace an extant planning permission 2005/07764 was approved by Wirral Council for the erection of non-food retail, office, trade sales, restaurant/public house, car showroom and creche (Outline). This includes the implementation of a new road from Mollington Link at the Rock Retail Park on the A41 to the roundabout at Borough Road/ Argyle Street/ Hind Street. Work is currently taking place on site to dismantle the gas holders and ION Developments are responsible for master planning the new site. In total, the project has the capacity to deliver over 1 million sqft of accommodation for both commercial and residential uses.

Figure 38: Hind Street Development



Source: APP/11/01118 Wirral Council Planning Application

3.3.3 Transport Scheme Progress

Working with Merseytravel and Wirral Council Mott MacDonald identified a Pipeline of Wirral Transport Investment Schemes in 2015. These schemes are now currently being reviewed and prioritised in the Strategic Transport Framework against the Strategic Regeneration Framework priority areas for investment.

A number of schemes identified in the 2015 pipeline have been completed or have obtained funding for implementation as shown in the Table 6 below.

Table 6: Funded or Implemented Transport Schemes to support development in development areas influenced by Wirral Waters

Location	2015 Pipeline Scheme	Progress
Birkenhead	Wirral Waters Cross Dock Connectivity	A costed proposal for the replacement of the Poulton Bridge Road bridge has been developed.
Birkenhead	Gateways to Wirral Waters	Feasibility Fund money has been awarded to Wirral Council to undertake some preliminary feasibility work.
Birkenhead	Wirral Waters Supporting Road Infrastructure	Supporting road infrastructure is included in the Feasibility funding award above. Design for Tower

		Road Civilised Street has been progressed and an NPIF bid has been successful to complete a phase 1 from Canning Street roundabout to the RoRo roundabout.
Birkenhead	Wirral Waters Active Travel Connectivity	Funding has been secured for elements of the scheme. Work has been undertaken on Beaufort Road phase 1, Duke Street phase 1, Rendel Street. Work on Northbank East is about to go to tender.
Birkenhead	Wirral Waters Streetcar	Trampower have produced a feasibility report for phase 1a and Vectos have produced a capital expenditure report.
Birkenhead	Wirral Waters Transport Accessibility	Merseytravel improve bus access to Wirral Waters, specifically around the Tower Road / Tower Wharf sites but this has been delayed due to the bridge work on Tower Road

Source: Wirral Council

4 Site Analysis

An in-depth walk over of the Wirral Waters site and surrounding areas was undertaken on Wednesday 14th March 2018. This section of the report highlights some of the key issues identified at gateways and along the key corridors within the study area during the site visit and outlines potential opportunities to consider as part of this study.

4.1 Overview

During the site visit the following transport themes were considered in terms of supporting development at Wirral Waters;

- Strategic Connectivity;
- Local movements of goods and people;
- Creating high quality environment;
- Multi-modal transport accessibility; and
- Interaction with other regeneration initiatives.

4.2 Issues and Opportunities

Table 7 illustrates the key issues and opportunities identified at the gateways and key corridors.

Table 7: Site Analysis by corridor

Location	Issues	Opportunities
Dock Road 	• Established businesses operating from warehouses along Dock Road. We need to ensure that these are incorporated within rather than isolated from the wider Wirral Waters vision.	• Already thriving, independent businesses in the area – these could help attract inward investment.
Tower Road 	• Public transport links from the wider area limited. • Variety of travel and shift patterns associated with college, Ferry terminal and call centre, increasing the need to deliver attractive public transport connectivity during the peak and off-peak periods. • Local amenities also limited.	• Activity varied. • Mix of new and established occupancies. • Opportunities to link to existing, recently enhanced cycle infrastructure. • Contact Company and other recently established businesses helping to regenerate the area, enhancing the aesthetic appeal of the area for new investment.

Wallasey Bridge Road  	• Carriageway in poor condition. • Sterile environment, not welcoming. • Pedestrian accessibility poor. • Negative personal safety perception. • Direction signs inadequate. • Junctions with both Dock Road and Beaufort Road are poorly surfaced.	• Opportunities to link to Birkenhead North Train station. • Opportunities to link to existing public footways and cycleway linking to Junction 1 Retail Park. • Close proximity to M53, opportunities to utilise port side warehouses as distributions centres. • As indicated in **Figure 25**, an indicative design has been prepared for a new scheme at Wallasey Bridge Road/Beaufort Road to improve signage and wayfinding, deliver dropped kerbs and crossings to ease mobility, and landscaping to increase the attractiveness of the route to pedestrians and cyclists.
Corporation Road / Beaufort Road (City Boulevard)  	• Dilapidated environment with a number of redundant plots of land and blocked off roads. • Disused railway tracks adding to the sense of abandonment. • Public transport links from the wider area are limited. • Parts of Corporation Road are very narrow, increasing the difficulty with which a new high quality City Boulevard might be able to be delivered.	• Opportunity to provide bus / train interchange at Birkenhead North Station providing links to Hamilton Square train station Woodside Ferry / Bus terminus. • Capacity to support potential Tram line. • Potential to introduce City bike stations for both recreational use and to access transport interchanges. • Opportunity to introduce finger posting to key attractions and information boards on what sections of Wirral Waters may look like to help keep the public engaged and informed on development proposals. • Introduce a walking trail that can be adapted as and when more development comes forward. Improve pedestrian accessibility and make trail a theme i.e. the temporary mermaids trail at New Brighton. • Scope to develop some area as green space / nature reserve. Introduce trees to soften the bleak environment that can be incorporated into wider scheme later.

Duke Street 	• Existing bridge structure and street clutter including the disused rail tracks and rail crossing signal lights are not fit for purpose within the proposed high-quality setting of Wirral Wates. r	• Should explore opportunities to deliver a new bridge crossing similar to what is being delivered to replace the lifting bridge on Tower Road. • Carriageway is wide, increasing the feasibility of rationalising the carriageway and delivering new high-quality footways and cycleways.
Dock Road (A5139) and Wallasey Bridge Road (A5088) roundabout 	• No prominent gateway feature as vehicles exit M53. • Pedestrian access poor. • Inadequate direction signs. • Lane markings worn off, reducing overall junction safety. • Unsightly Gas works on both sides of carriageway. • Road safety concerns.	• Potential to create a gateway feature at existing roundabout • Improved direction signs and sign posting to key attractions and public transport facilities. • Potential to screen Gas infrastructure above carriageway and utilise as a gateway feature. • Introduce high quality street lighting, aesthetic and safety benefits.
Wallasey Bridge Road (A5088) and Beaufort Road (A5030) 	• Roundabout lacks deflection, reducing overall junction safety. • Bidston Water Control house reduces the overall quality of the environment at the junction.	• As indicated in **Figure 25**, an indicative design has been prepared for a new scheme at Wallasey Bridge Road/Beaufort Road which could include wayfinding to Wirral Waters at this junction. • Redesign and resurfacing of the carriageway should help to improve junction safety.
Junction at Duke Street / Dock Road (A5139) and Gorsey Lane (A5027) including Gorsey Lane roundabout. 	• Poor pedestrian access and limited safe crossing points • Poor connectivity for pedestrians along Dock Road towards Birkenhead Park train station. • Two serious accidents on Gorsey Lane in the last five years, indicating safety issues with this stretch of carriageway. • Queueing on a number of arms of this junction in the PM peak.	• Potential to link to existing cycle infrastructure in wider area, connecting Birkenhead Park and Birkenhead Park Train station. • Potential to provide a key gateway feature at Gorsey Lane roundabout as exit from Mersey Tunnel. • Introduce finger posts providing directions to key attractions and public transport hubs. • Strategic location for access to Liverpool via the tunnel.

Junction and roundabout at Tower Road (A554) and Rendell Street (A5029), including the junction with Corporation Road. 	• Visible evidence that the roundabout is being damaged by large vehicles exiting the Ferry Terminal. • Poor wayfinding for the Ferry Terminal.	• Links to Hamilton Square train station and Woodside Ferry / Bus terminal. • Potential to make into a gateway feature at roundabout and to provide a 'welcome' feature to the Wirral Waters site. • Expand existing cycle infrastructure. • Introduce City bike stations in the area for use into and out of City Centre retail areas, college area, transport interchanges and City Boulevard.
The roundabout of Duke Street (A5027) and Corporation Road 	• Redundant rail infrastructure adds to sense of neglect of area. • Carriageway surfacing poor but better than at other key junctions within the study area.	• Opportunities to widen and improve accessibility through the junction • Expand existing cycle infrastructure along Corporation Road and wider area.
Roundabout at Dock Road (A5139), Tower Road (A554) and Birkenhead Road  	• Number of different vehicles using this junction including ferry users, HGVs and cyclists using the cycle route which is currently being constructed. • Pedestrian accessibility poor.	• Expand existing cycle infrastructure along Corporation Road and wider area. • Introduce gateway feature incorporating the new bridge as a feature. • Extend cycle infrastructure along Dock Road and to Seacombe Ferry terminal / bus interchange. • Opportunities to change the junction layout and introduce more pedestrian links from the harbour side to the Wirral Water site. • Introduce bespoke lighting at all gateways as a running theme of Wirral Waters entry points.

Twelve Quays Ferry Terminal 	• Ferry terminal severs the walking and cycling route along the coast, reducing the overall attractiveness of the corridor.	• Redesign ferry access to enable the delivery of a continuous coastal path between the Wirral Coastal Trail and National Cycle Route 56 between Birkenhead and Seacombe, increasing use of the coastal path amongst all users.

Source: Mott MacDonald

5 Stakeholder Engagement

It is important to ensure that all key stakeholders are engaged throughout the process of this study to enable all the key issues to be captured and the most appropriate solutions developed. This section outlines details of consultation which has been carried out to date and how stakeholders will be engaged going forward.

5.1 Workshop

A workshop was held on the 21st of March 2018 with various stakeholders, including Wirral Council and consultants representing Peel, to establish the context for growth and transport investment at Wirral Waters. The key points from the discussion in relation to this study are summarised below:

- Wirral Waters is key for the overall growth of the borough. It was highlighted that there was lots of interest in Wirral Waters as an investment opportunity at MIPIM 2018.
- Cammell Laird's role in the Birkenhead economy cannot be underplayed – they are looking to expand their operations into the Civil Nuclear sector and a recent supply chain event organised between WMBC and Cammell Laird attracted over 200 businesses. The borough needs to maximise opportunities for these companies to locate in Wirral.
- The new Maritime Knowledge Hub and Offshore Training Centre to be delivered as part of Wirral Waters will give local residents the skills they need to work in the maritime industry, a key sectoral strength for Wirral.
- Wirral are aspiring to drive growth in the student accommodation market in Birkenhead. 300 units at Hamilton Square are expected to be approved at a planning committee in Spring 2018. Wirral needs to exploit the fact that it is quicker for students to get to the main university campuses via Merseyrail from Birkenhead than it is from Anfield or Kensington by other modes.
- Overall, there is a relative lack of public transport connectivity for Wirral Waters given the distances between Merseyrail stations and the heart of the study area as well as the overall lack of efficient bus services serving the study area.
- There needs to be a focus on key sites and a more collaborative approach to development between the public and private sectors.

6 Issues and Opportunities

Table 7 summaries the key issues and opportunities identified through the analysis of baseline evidence, discussion with stakeholders and on-site observations. These issues and opportunities will be used to inform the next stages of the study and identify the most appropriate solutions and proposals across the study area.

Table 7: Summary of key Issues and Opportunities

Issues	Opportunities
Context	
• Some of the key Wirral Waters development land is occupied by existing businesses and maritime operations which will reduce the short-term deliverability of some key parcels of land. • Existing development is of relatively low density across the study area, reducing the overall efficiency of space. • A number of environmental constraints have been identified within the study area and within 500m of the study boundary which may restrict options for transport improvements.	• Large amount of land available for development. • The private sector has shown strong appetite for investment in the Wirral Waters area, including at MIPIM and through ongoing work being progressed by key players including ION and most notably Peel. • The Wirral Waters Investment Fund and recently formed Wirral Growth Company bring the public and private sector together to drive forward growth within Wirral Waters. • There are few listed buildings within the study area which should help development to come forward more quickly.
Vehicle Access	
• The Wirral Waters development will see an increasing number of vehicles and HGVs through the area creating a need to ensure the highway network remains suitable and appropriate • Key junctions within the study area are of poor quality and present unattractive gateways into development areas. • Occurrences such as the dock bridges lifting and ferries disembarking cause localised congestion.	• Good position within the strategic transport network which will be key to supporting economic development and future trips to the site from the wider region. • The Wirral Strategic Transport Framework recognises that enhancing key junctions and links that serve Wirral Waters is crucial for bringing forward investment at Wirral Waters and the commissioning of this study represents a key step in delivering investment on the local highway network. • This study creates the opportunity to improve the local gateways to Wirral Waters creating positive first impressions for visitors.
Public Transport	
• Rail access is generally limited with no stations to the north of the site and poor walking and cycling links from other stations in proximity to the study area • Infrequent bus services at Birkenhead North provides limited interchange facilities • Bus penetration through the Wirral Waters area is limited • The north east of the study area is poorly served by cross-river services with neither bus or rail services available	• Merseyrail through Birkenhead does represent a high frequency and attractive rail network in the area; we must now focus on enhancing 'last mile' journeys between the stations and the Wirral Waters study area • Good bus connectivity along the three bridge crossings in Wirral Waters. Particularly along Duke Street with up to 8 buses per hour in each direction between New Brighton and Birkenhead Town Centre. • A number of disused stretches of rail track lie within the vicinity of the site. Some of these have potential to come forward as part of the route for the potential new Wirral Waters tram network. • Make better use of Ferry services to improve public transport connectivity in the north east.
Active Travel	
• Poor walking and cycling connectivity with few areas accessible from rail stations within 15 minutes walking time and limited infrastructure	• There are a number of schemes at various stages of delivery across the study are including at Dock Road

• A number of the key junctions within the study area have poor or no pedestrian and cyclist facilities, reducing the overall attractiveness of the environment for active travel.	and Tower Road which will offer improved facilities for pedestrians and cyclists. • Proximity to Birkenhead Park offers attractive walking and cycling links to the wider area.
Safety and Environment	
• Clusters of accidents exist at key junctions within the study area, including one fatal incident, presenting issues of road safety.	• There are no Air Quality Management Areas in the study area or the borough which should be maintained following development and regeneration

Source: Mott MacDonald

7 Next Steps

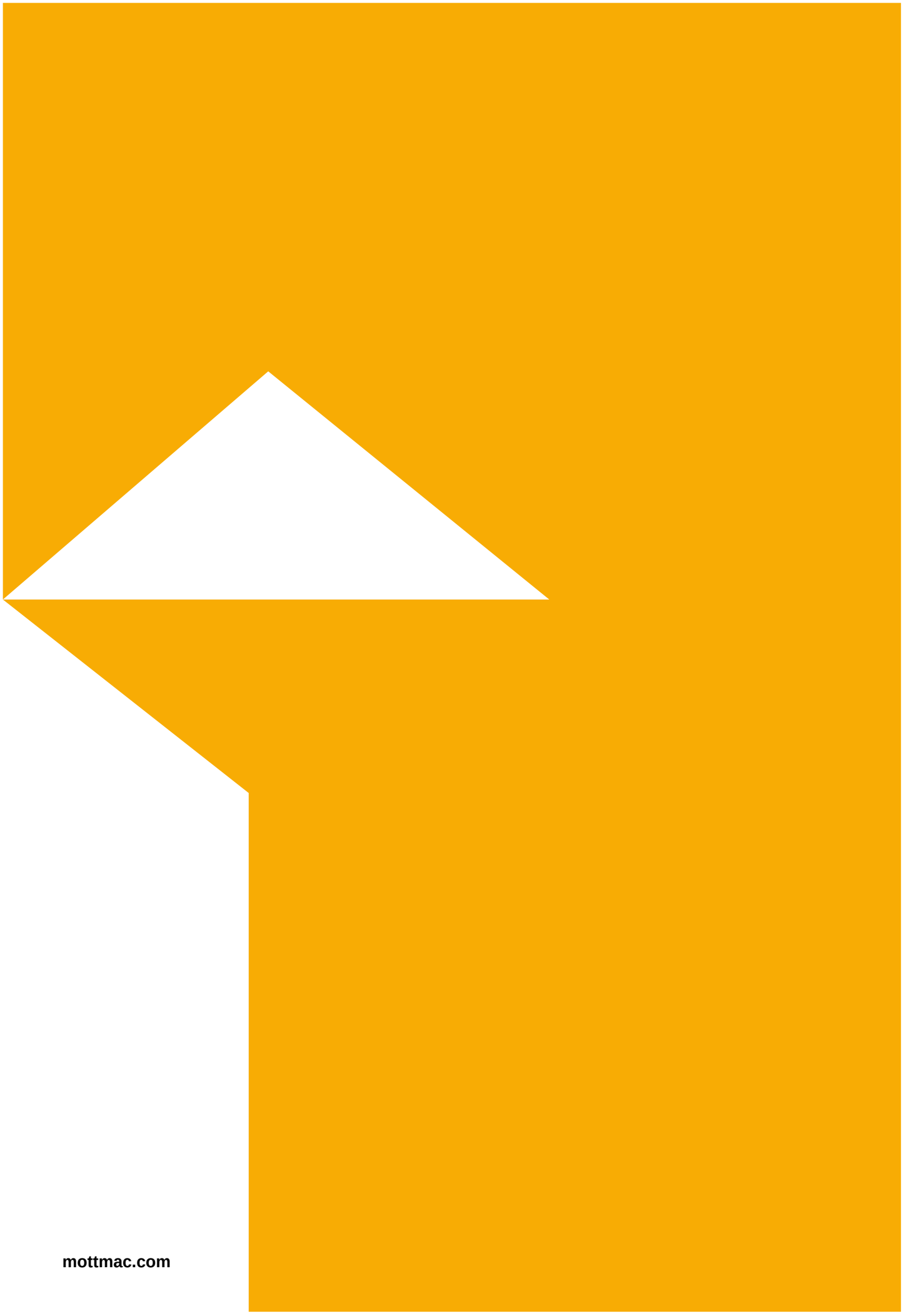
Following this review of the baseline evidence, the next stages of this study will be to identify a long list of improvements options in response to the baseline issues focusing on the five gateway junctions and key corridors. The long list of options will then be subject to a robust appraisal process to support the initial sifting of schemes into a shortlist. To aid this appraisal process, Mott MacDonald's INSET (Investment Sifting and Evaluation Tool) will be used to assess scheme options against a number of objectives and criteria identified specifically for this study.

Figure 39: Mott MacDonald's Investment Sifting and Evaluation Tool (INSET)

Source: Mott MacDonald

A further workshop will also be held with stakeholders during this stage to discuss potential options and stimulate innovative thinking.

Following the use of modelling tools and discussions with stakeholders, a short list of schemes will be proposed and set out in an Options Appraisal Report for further development into a comprehensive transport strategy for the area.



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