

\$WIRRAL

Wirral Strategic Transport Framework

Scheme Identification and Action Plan

December 2018

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

T +44 (0)151 482 9910 F +44 (0)151 236 2985 mottmac.com

Wirral Strategic Transport Framework

Scheme Identification and Action Plan

December 2018

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
Α	Jun 17	CR	NO	CH	Draft structure
В	Jul 17	KD	NO	СН	Draft first Issue
С	Dec 18	HJ	NO	CH	Final Issue

Document reference: 389726 | 1 | C

Information class: Standard

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

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

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

Contents

Exe	cutive	e summary	1
	A Stı	rategic Transport Framework Action Plan	1
	Strat	egic Regeneration Framework (SRF)	2
	A41	(North) Corridor and Wirral Waters Strategic Transport Feasibility Studies	3
	Key	Transport Issues in Wirral	4
	Sche	eme Identification and Gap Analysis	4
	Towa	ards a Transport Strategy	13
	Next	Steps	23
1	Pur	pose of this report	25
	1.1	Introduction	25
	1.2	Why is a refresh needed?	26
	1.3	Methodology	26
	1.4	Report Structure	27
2	Stra	tegic Regeneration Framework	29
	2.1	Strategic Regeneration Framework Context	29
	2.2	Emerging Spatial Priorities	30
	2.3	Emerging Themes	33
3	Con	current Wirral Transport Projects	34
	3.1	A41 North Corridor and Wirral Waters Strategic Transport Feasibility Studies	34
	3.2	Wirral Transport Modelling and Benefits Calculation	34
4	Tow	vards a Transport Strategy	36
	4.1	Introduction	36
	4.2	A41 (North) Corridor Strategy	37
	4.3	Wirral Waters Transport Strategy	42
	4.4	Strategic Transport Framework Action Plan	49
	4.5	Remaining Sections	51
5	lder	ntification of key transport issues	52
	5.1	Introduction	52
	5.2	Issue Identification	52
6	Rev	iew of Previous Wirral Transport Pipeline	70
	6.1	Introduction	70
	6.2	Scheme Pool from Previous Work	70

6.3	Gap Analysis	75
	·	79
7.1	Introduction	79
7.2	New Scheme Identification	79
7.3	New Long List	81
Initia	al Sifting and Structuring of Long List	86
8.1	Initial Sift	86
8.2	Structuring of Schemes	87
App	raisal of Long List	93
9.1	INSET	93
9.2	Appraisal against City Region Criteria	93
9.3	Appraisal Results	95
Actio	on Plan of Schemes – Forward Investment Plan for Wirral	102
	·	
Fran	nework Action Plan	108
11.1	Introduction	108
	·	108
	•	109 110
		110
		113
		114
Con	clusions and Next Steps	116
endic	es	118
Prev	vious Scheme Alignment with SRF and Wirral Priorities- Results	119
Long	g List Structure	120
INSI	ET Results	121
Prof	ormas	122
	Reco sche 7.1 7.2 7.3 Initia 8.1 8.2 Appl 9.1 9.2 9.3 Actio Futu Fran 11.1 11.2 11.3 11.4 11.5 11.6 11.7 Con endice INSI	Recommendations for new Wirral Strategic Transport Framework schemes 7.1 Introduction 7.2 New Scheme Identification 7.3 New Long List Initial Sifting and Structuring of Long List 8.1 Initial Sift 8.2 Structuring of Schemes Appraisal of Long List 9.1 INSET 9.2 Appraisal against City Region Criteria 9.3 Appraisal Results Action Plan of Schemes — Forward Investment Plan for Wirral Future Innovation and the Impact on Wirral Strategic Transport Framework Action Plan 11.1 Introduction 11.2 Demand Responsive Transport Applications 11.3 Micro-Mobility Solutions 11.4 Autonomous Personal Vehicles 11.5 Autonomous Mass Transit 11.6 Mobility as a Service (MaaS)

Executive summary

A Strategic Transport Framework Action Plan

In 2016, Mott MacDonald produced (on behalf of Merseytravel and the Liverpool City Region District Partners) the Liverpool City Region (LCR) Transport Investment Pipeline, which covered Halton, Knowsley, Liverpool, Sefton, St. Helens and Wirral as well as an overarching City Region level pipeline undertaken for Merseytravel. This project presented a 'pipeline' of transport investments for the next 20 years in the LCR, with one pipeline for each area. The pipelines were intended to act as the investment framework for transport schemes to be developed and delivered in support of the LCR's new strategic transport vision, *A Transport Plan for Growth*.

Since the development of the first Wirral Transport Pipeline in 2016 Wirral Council has produced a number of local policy documents which set transport in the borough in the context of significant economic growth. A Strategic Transport Framework Action Plan is therefore required to enable this growth and to ensure that the transport network is fully aligned with Wirral's regeneration plans / proposals.

Wirral's ambitious aspirations for growth are outlined within the Wirral Strategic Regeneration Framework (SRF) – part of Wirral's comprehensive '2020 Vision' - which sets out the priorities and challenges for economic growth in the borough, to help guide and proactively drive investment and development activity across Wirral. The SRF focuses on strategic themes and areas of significant growth potential, identified as the spatial priorities.

The Strategic Transport Framework Action Plan will structure schemes in terms of cost, timescale and priority for the borough. The highest priority and most advantageous schemes can then be further developed to establish their feasibility, and business cases produced in order to secure appropriate funding sources.

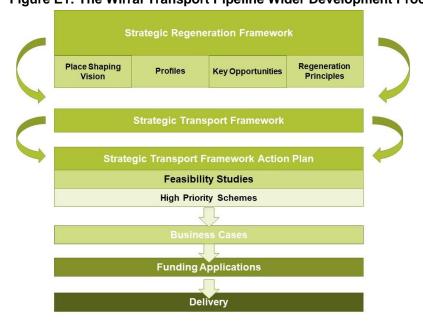


Figure E1: The Wirral Transport Pipeline Wider Development Process

An overview of the methodology used to develop the Action Plan is shown in the following figure and will be reflected within the structure of this report. This systematic approach ensures the overall strategy is cohesive and considers all previous work undertaken in the context of the Strategic Regeneration Framework.

Figure E2: Strategic Transport Framework Action Plan Methodology

Phase 1: Assess SRF and identify spatial priorities and requirements

Phase 2:

Review of current pipeline and identification of new schemes

Phase 3: Scheme prioritisation and shortlisting Phase 4: Recommendations and reporting

Source: Mott MacDonald

Strategic Regeneration Framework (SRF)

The ambitious vision for the future of Wirral anticipates large amounts of development across the borough. Such transformational changes across the borough undoubtedly present significant opportunities. However, in tandem, development on this scale also poses future challenges for the transport network in seeking to accommodate and facilitate the planned growth of Wirral. The SRF has therefore been developed to set out a clear framework to guide this regeneration and investment focusing on delivery of the above vision and how challenges may be overcome. The Growth Plan has been central to the development of the SRF providing a starting point for the SRF in defining spatial and strategic priorities.

The SRF defines the strategic context to do this and sets out the key strategies, principles and objectives across the range of inter-related economic, social and physical issues that impact on the borough. In doing this the SRF reflects relevant national, City Region and local strategies in order to maximise the opportunities to drive forward regeneration within key spatial development areas.

In order to achieve the overall vision for Wirral, the SRF identifies a number of spatial priorities to guide investment and deliver growth across the borough. These areas have been identified following analysis of employment land availability, business space and feedback from developers and investors. The spatial priorities for the SRF are:

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

These are shown on the following borough-wide plan:

New Brighton Liscard Liverpool Wirral Waters Moreton Birkenhead Hamilton Square Hoylake BIRTown Centr & Woodside West Kirby New Ferry The A41Corridor Bebington Wirral International Heswall Business Park Key Bromborough Spatial Priority Area Eastham Local Town Centre Spatial Priority Area Motorway Strategic Road Railway

Figure E3: Wirral Spatial Priorities and Development Zones Plan

Source: Strategic Regeneration Framework - Wirral Council

A41 (North) Corridor and Wirral Waters Strategic Transport Feasibility Studies

Concurrently under development with the Strategic Transport Framework Action Plan (although reporting later) are the twin studies to develop transport strategies for the A41 (North) Corridor and Wirral Waters development areas. This work looks in more detail at the schemes identified and prioritised by this Strategic Transport Framework Action Plan, providing an evidenced account of the optioneering and preliminary design processes. Although now considered to be two components of the same study, the two areas are defined as follows:

- A41 (North) Corridor this refers to the northern-most section of the A41 in Birkenhead, stretching approximately from its junction with Green Lane at the Rock Retail Park to Woodside at the northern end of the site. In addition to the highways and junctions, the site includes the large-scale development areas of: Hind Street (site of the former M53 Ford garage behind Birkenhead Central rail station) and bounded by Argyle Street South to the west, the A41 to the east and the Queensway Tunnel toll plaza to the north; and Woodside including the existing bus station and ferry terminal, the adjacent commercial area, the large gyratory and its interface with Hamilton Square;
- Wirral Waters this refers to the enterprise zone and dockland area that forms the boundary between Birkenhead and Wallasey to the north of Birkenhead Town Centre. The area is owned by Peel Holdings and is the site for the flagship regeneration project which includes new residential, commercial and leisure uses on both the east and west floats of the dock. In highway terms, it is bounded by Corporation Road and Beaufort Road to the south, A5139 Dock Road to the north, A554 Tower Road to the east and A5088 Wallasey Bridge Road to the west.

These studies will present a more detailed set of schemes, packaged and phased as per the Strategic Transport Framework but with a more detailed commentary on optioneering and plans at a suitable scale.

Key Transport Issues in Wirral

A thorough appraisal of previously identified issues, supported by discussions with stakeholders and an assessment of additional updated sources of evidence has been undertaken to ensure that the emerging STF is fully cognisant of ongoing issues. Issue identification has provided the foundations for the development of the appropriate transport intervention schemes noted in the subsequent stages of this study, which ultimately seek to provide Wirral with a world class transport system.

Issues were identified from a number of sources including:

- The 2016 Wirral and City Region Pipeline studies;
- Baseline work for the A41 (North) and Wirral Waters Transport Feasibility Studies;
- Recent Analysis of the Wirral Transport Model (Saturn);

A list of 89 transport interventions was compiled from these sources and categorised into one of 15 groups.

Scheme Identification and Gap Analysis

Concurrently, potential improvement schemes from a variety of sources were identified. These sources included:

- The 2016 Wirral and City Region Pipeline studies;
- East Wirral Transport Study by Kellogg Brown and Root (2016).

The 69 schemes from these studies were subjected to a gap analysis to identify which spatial priorities, strategic themes and priorities from the SRF and draft Strategic Transport Framework had been satisfied by the schemes in the list and which required additional schemes. It was determined that, of the fifteen priorities and themes tested, the following nine ranked the lowest in terms of coverage from the previous pipeline of schemes:

- Wirral Waters EZ
- Hamilton Square

- Birkenhead Town Centre
- Woodside
- Wirral International Business Park
- Encourage healthy active travel
- A41 Corridor
- New Brighton
- High Quality Housing

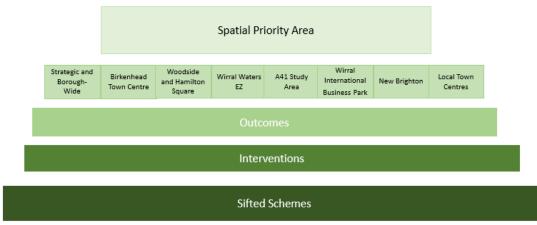
This corresponds to most of the SRF's spatial priorities (all aside from the Local Town Centres priority), and also highlights a deficiency in schemes that help to improve healthy active travel, and housing quality.

To address these gaps, additional schemes were conceived and added to the list. Further schemes were also added as a result of internal workshops and meetings, and from the ongoing scheme development work from the A41 (North) and Wirral Waters Feasibility Study work. In total a long list of 155 schemes was compiled and taken forward to the appraisal stage of the study.

Scheme Sifting and Appraisal

To further develop the Action Plan and aid the appraisal process, the sifted schemes were organised into themes which can be packaged together for use in the final strategy. All schemes were placed within a hierarchy as demonstrated in the image below.

Figure E4: Long List Structure



Source: Mott MacDonald

Distinct appraisal criteria were developed to ensure the schemes which were best positioned to enable growth were taken forward into the Strategic Transport Framework Action Plan. Therefore, policy context, ability to address key issues and deliverability were key to the development of criteria. The three main goals of the Liverpool City Region *'A Transport Plan for Growth'* form the overarching themes through which the various criteria were developed. These are:

• **Growth** – supporting economic growth through increasing employment, levels of productivity and investment;

- Low Carbon using a range of sustainable energy sources, having the option to use vehicles powered by alternatives to fossil fuels, and having increased levels of walking and cycling;
- Access to opportunity improving access to employment, training and education and wider opportunities such as healthcare, leisure and recreation.

A number of sub-themes were developed under each of these which take into account the priorities and themes of the Strategic Regeneration Framework and the key actions that Wirral want to deliver through the Strategic Transport Framework Action Plan as identified within the initial brief and rationale of this work.

Table E1: Assessment Criteria- Theme 1: Growth

Assessment Criteria	Description	Sub-criteria	Source/Key Issue		
Economic Growth	The extent to which the scheme supports economic growth through job	Supporting Access to Regeneration and Development	Ambition in SRF to deliver 5,000 new jobs, 250 new		
	creation and GVA uplift.	Supporting Birkenhead Town Centre	businesses and £250m of new inward investment by		
		Opening up new land for development	2020.		
		Improving investment and job creation	Birkenhead Town Centre identified in SRF as spatial priority area for delivering growth.		
Supporting Visitor Economy	The extent to which the scheme promotes the key attractions in the	Improving facilities and services at Woodside Ferry Terminal	Tourism and Cultural offera key strategic theme of		
	borough and enhances accessibility for visitors.	Improved wayfinding and legibility	the SRF for driving growth.		
	violitoro.	Building on key assets			

Source: Mott MacDonald

Table E2: Assessment Criteria- Theme 2: Low Carbon

Assessment Criteria	Description	Sub-criteria	Source/Key Issue
Environmental	The extent to which the scheme creates high quality environments with	Maintain low levels of noise and pollution	STF Strategic theme: High quality environment
	minimal environmental impacts.	Protecting or enhancing landscapes	STF Environmental Pledge
		Creating new green spaces	
		Enhancing townscapes	
Local access and	The extent to which the scheme improves access by sustainable modes	Increased attractiveness of walking and cycling routes	Wirral Transport Strategy: Connecting Wirral- Key
connectivity	and reduces the dominance of vehicles on the local highway network.	Reducing the number of vehicles	priorities: Reliable and affordable public transport,
	on the local highway network.	Making better use of the highway network	encourage healthy active travel, Inclusive integrated
		Making better use of public transport	transport that supports our resident's needs.
		Improved transport interchange	Tesidetit s fieeds.
		Removing barriers to movement	

Source: Mott MacDonald

Table E3: Assessment Criteria- Theme 3: Access to opportunity

Assessment Criteria	Description	Sub-criteria	Source/Key Issue
Social Impacts	The extent to which the scheme	Better connected communities	Wirral Waters Supporting
	improves quality of life creating attractive places to live and work.	Increased access to jobs / opportunities/ training	Road Infrastructure Feasibility Study and A41 Corridor Study
		Reducing the number of accidents	specification/ STF
		Enhanced pedestrian / cycle safety	Business and People Pledge
Deliverability	The extent to which the scheme will be	Public Approval	Department for Transport
	socially accepted and delivered within realistic financial and logistical	Stakeholder Approval	analysis guidance: WebTAG
	boundaries.	Barriers / Constraints	— WCDIAO
		Land ownership / acquisition	
		Relative difficulty / cost	<u> </u>

The total score for each of the six assessment criteria was added together to produce an overall score that enabled schemes to be ranked. Each scheme was assigned a rank position between 1 and 155 where 1 was the highest scoring intervention. The approximate top 80% (122 schemes) were then taken forward into the short list of schemes to be packaged and phased into the final action plan.

Phasing and Packaging

A total of 17 packages have been put together, based on the previously noted interventions, which each contain a number of the 122 short listed schemes alongside indicative order of magnitude costs and timescales.

Schemes have been phased according to timescale with 3 key phases for each package as defined below:

- Phase 1: Short Term up to 2025
- Phase 2: Medium Term 2025-2030
- Phase 2: Long Term beyond 2030

The structure of packages and phasing of schemes is set out in Table E4, full details of schemes and packages can be found in Appendix D.

Table E4: Scheme Packages and Phasing

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
1	Expanding Active Travel	1.2.1.3	A553 Fender Lane to A553 / A554 roundabout cycle lane	1	£3m-£10m	Wirral Council
		1.4.1.1	Wirral Circular Trail improvements - Coastal Cycle Strategy	1	£3m-£10m	
		1.4.1.2	Implementation of Birket Scheme - Pasture Road to Reeds Lane, Moreton	1	£1m-£3m	
		1.4.1.3	Wirral CityBike Scheme	1	£3m-£10m	
		1.4.1.4	Active Travel Routes across the M53	1	£3m-£10m	
		1.4.1.5	Cycle Route to Arrowe Park and the Hospital	1	£1m-£3m	
		1.4.1.6	Wirral Cycle Route Network - Connecting the Dots (previously SUDs)	1	£1m-£3m	
		8.3.2.1	Active Travel Connectivity to Local Centres	1	£1m-£3m	
		8.3.2.2	Residential Road Streetscape	1	£1m-£3m	
Total Cost					£20m-£50m	
2	Removing Highway Constraints	1.3.1.1	A540 Heswall Pinch Point Improvements	1	£3m-£10m	Wirral Council
		1.4.2.2	Clatterbridge to Mersey Waterfront Corridor Improvements (A5137/B5137)	2	£3m-£10m	
		1.6.2.1	Port Wirral Road Improvements and Signage Strategy	2	£1m-3m	
		1.6.3.1	Airport Accessibility and Signage Strategy	2	£1m-£3m	
Total Cost					£10m-£20m	
3	Wirral Line Enhancements	1.5.1.1	Station facilities and waiting environment enhancements	1	£10m-£20m	Merseytravel
		1.5.1.2	Wirral Line Park and Ride Enhancements	1	£1m-£3m	
		1.5.1.3	Town Meadow/Ledsham New Stations	2	£3m-£10m	
		1.5.1.4	Green Lane Station Refurbishment	1	£3m-£10m	
		1.5.1.5	Park and Ride at Birkenhead Central (inc new forecourt and access route from east)	1	£3m-£10m	
		1.5.1.6	Meols Station Accessibility	1	£3m-£10m	
		2.1.3.1	Improvements to Bus Infrastructure at Birkenhead Park and Conway Park	1	£1m-£3m	
		2.1.3.3	Hamilton Square-Bus/Rail Interchange Improvements	1	£1m-£3m	
		2.1.3.4	Bus / Rail Interchange at Birkenhead North	1	£1m-£3m	
		2.1.3.5	Bus / Rail Interchange at Birkenhead Central	1	£1m-£3m	
		7.1.1.1	Bus / Rail Interchange at New Brighton	1	£1m-£3m	
		8.3.1.1	Bus / Rail Interchange at West Kirby	1	£1m-£3m	
Total Cost					£20m-£50m	
4	Borderlands Line	1.5.2.1	Introduce New Borderlands (Wrexham - Bidston) Line Stations	2	£20m-£50m	
	Transformation	1.5.2.2	Extend Borderlands (Wrexham - Bidston) Line to Birkenhead North	2	£20m-£50m	

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
		1.5.2.3	Borderlands (Wrexham-Bidston) Line Frequency Increase	1	n/a	Network Rail /
		1.5.2.4	Borderlands (Wrexham - Bidston) Line Electrification (Extension of Merseyrail)	2	n/a	Merseytravel / Merseyrail
		8.3.1.4	New rail spur and station – Heswall	3	£50m-£100m	
		8.3.1.2	Heswall Station Bus / Rail Interchange, Linkage and Parking	1	£3m-£10m	
Total Cost					£100m-£500m	
5	Cross-River Strategy	1.6.1.1	Queensway Tunnel closure to general traffic	3	£20m-£50m	Liverpool City
		1.6.1.6	Use of Queensway Service Tunnel for Rapid Transit	3		Region CA
		1.6.1.12	Queensway Tunnel Resilience Measures	1		
		1.6.1.2	Re-purposing of Queensway Tunnel for Public Transport Only	3		
		1.6.1.3	Kingsway Capacity Increase	1	£10m-£20m	
		1.6.1.4	Kingsway Toll Plaza Re-modelling / Removal	1		
		1.6.1.9	Wirral Line Connectivity - Wirral Line to Northern Line Link	3	£10m-£20m	
		1.6.1.10	New Mersey Crossing e.g. Bromborough – Aigburth	3	£500m-£1bn	
		6.1.1.1	New access link into WIBP from Liverpool	3	£3m-£10m	
		1.6.1.13	Mersey Tunnel Flood Resilience	1	£10m-£20m	
Total Cost					£600m- £1.1bn+	
6	Birkenhead Town Centre	2.1.1.1	A41 Chester Street highway realignment	1	£10m-£20m	Wirral Council /
	Gateways	2.1.1.5	Chester Street Junction Improvements	1		Wirral Growth Company
		2.1.1.6	Signage improvement to Birkenhead Priory and Tranmere Docks	1		Company
		2.1.1.7	Electric charging points across borough	1	<u> </u>	
		2.1.1.8	Signage/ better entrance to retail core	1	<u> </u>	
		2.1.1.9	Birkenhead - local access road improvements	1	<u> </u>	
Total Cost					£10m-£20m	
7	Birkenhead Town Centre	2.1.2.1	Improved Public Realm in retail core	1	£10m-£20m	Wirral Council /
	Streetscape	2.1.2.2	Improved Public Realm Argyle Street	1	_	Wirral Growth Company
		2.1.2.3	Cleveland Street / Market Street / Price Street Public Realm	1		Joinparty
		2.1.2.4	Public Realm improvements: Conway Street	1	<u> </u>	
		2.1.2.5	Improved pedestrian crossing facilities along Argyle Street	1	_	
		2.1.2.6	Pedestrian overbridge of Borough Road, Whetstone Lane	2	_	
		2.1.2.7	Conway Park - Market Improved route	1		

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
		1.5.1.7	Re-modelling and Public Realm Improvements: Conway Park and Europa Boulevard	1		
Total Cost					£10m-£20m	
8	Regenerating Woodside	3.1.1.1	Woodside Ferry Terminal Enhancements - new Pontoon	2	£10m-£20m	Wirral Council /
	and Hamilton Square	3.1.1.2	Reconfigure / Redevelop Woodside Gyratory roundabout	2	£10m-£20m	Wirral Growth Company /
		3.1.1.3	Reconfigure / Redevelop Woodside Bus Station and relocate Bus Terminus	2		Peel Holdings
		3.1.1.4	Access Road to Rosebrae Development Site	2		
		3.1.2.1	Hamilton Street two-way outside Station	1		
		3.1.2.2	Remove mini-roundabouts at Hamilton Square	1		
		3.1.2.3	Remove Hamilton Street / Duncan Street road closure	1		
		3.1.2.4	Improved Public Realm outside Hamilton Square rail station	1		
		3.1.2.6	Improved Public Realm at Hamilton Square	1		
		3.1.2.7	Improved walk route between Woodside and Hamilton Square	1		
		3.1.2.8	Improve Argyle Street south approach to Hamilton Square	1		
Total Cost					£20-£50m	
9	Gateways to Wirral Waters	4.1.2.1	A5139 Dock Road / A5088 Wallasey Bridge Road junction	1	£10m-£20m	Wirral Council / Peel Holdings
		4.1.2.3	Duke St / Dock Road / Gorsey Lane junction	1		
		4.1.2.4	A5027 Dock Road / A554 Tower Road / A554 Birkenhead Road junction	1		
		4.1.2.5	Duke St / Corporation Road junction	1		
		4.1.2.6	Relocate Wirral Waters Industrial Uses to remove severance	3		
		4.1.2.8	Rendel Street / Corporation Road junction	1		
		4.1.2.9	Duke Street / Corporation Road junction	1		
Total Cost					£10m-£20m	
10	Wirral Waters Cross-	4.1.1.1	Replacement of Poulton Bridge with a Fixed Structure	3	£20m-£50m	Wirral Council /
	Dock Connectivity	4.1.1.2	Replacement of Duke Street Bridge	2		Peel Holdings
		4.1.1.4	New north-south link and bridge	3		
Total Cost					£20m-£50m	
11	Wirral Waters Supporting	4.1.3.1	Wallasey Bridge Road Improvements	1	£20m-£50m	Wirral Council /
	Highways	4.1.3.2	Beaufort Road and Wallasey Bridge Road (City Boulevard)	2		Peel Holdings
		4.1.3.3	A5030 Beaufort Road / A5088 Wallasey Bridge Road junction improvements	3		
		4.1.3.4	Corporation Road / Cavendish Street / Cleveland Street junction improvements	3		
		4.1.3.7	New development access from Beaufort Road and Wallasey Bridge Road	3	_	

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
		4.1.3.8	A5027 Gorsey Lane / Kingsway Tunnel junction improvements	1		
Total Cost					£20m-£50m	
12	Wirral Waters Active	4.1.4.1	City Boulevard (green transport corridor Corporation Road and Beaufort Road)	2	£3m-£10m	Wirral Council /
	Travel	4.1.4.2	Tower Road / Birkenhead Road pedestrian / cycle link	1		Peel Holdings
		4.1.4.3	Footbridge on Dockside Route	3		
		4.1.4.4	A5027 Duke Street Public Realm	2		
		4.1.4.5	Wallasey Bridge Road cycle route	2		
		4.1.4.6	Dock Road cycle route	2		
		4.1.4.7	Pedestrian crossings on Tower Road	1		
		4.1.4.8	Toucan crossings on Wallasey Bridge Road	3		
		4.1.4.9	River Birket route into West Float	3	_	
		4.1.4.10	Cycle Route along Canning Street	1		
		4.1.4.11	Wirral Waters Pedestrian wayfinding strategy	1		
		4.1.4.13	Extend Victoria Park to Dock Road	2		
		4.1.4.14	Duke Street Active Travel Improvements	2		
		4.1.4.15	Green Link: Wirral Waters to Birkenhead Park	2		
Total Cost					£3m-£10m	
13	World-Class Public	1.5.4.1	Integration of Merseyside ticketing with Deeside and Cheshire West	1	£3m-£10m	Merseytravel /
	Transport	1.6.3.2	Access to Deeside (PT)	1	£100-500k	Mersey Dee Alliance
		2.1.3.2	Relocation of Birkenhead Bus Station	1	£10m-£20m	/ illiarioc
		4.1.5.1	Rapid Transit - Wirral Waters to Liverpool	3	£20m-£50m	
		4.1.5.2a	Rapid Transit - New Brighton to Rock Ferry via Wirral Waters - Phase 1	1	£3m-£10m	
		4.1.5.2b	Rapid Transit - New Brighton to Rock Ferry via Wirral Waters - Phase 2	2	£3m-£10m	
		4.1.5.3	Bus routes diverted via Wirral Waters (410, 411, 413, 414)	1	n/a	
		7.1.1.2	New Brighton Accessibility Improvements (Parking Review/Land Train)	1	£1m-£3m	
		8.3.1.3	Brimstage Bus Connectivity	1	£1m-£3m	
		8.3.2.3	Improved and integrated Taxi and DRT Coverage	1	£1m-£3m	
Total Cost					£50m-£100m	
14	A41 North Site Access	5.1.1.1	Access to Hind Street - Mollington Link Road	2	£10m-£20m	Wirral Council
	Improvements	1.6.1.7	Queensway Toll Plaza Re-modelling / Removal	1	£10m-£20m	_
		5.2.2.2	Green Lane Roundabout capacity improvements	1	£3m-£10m	

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
		5.2.2.4	Ivy Street jnc capacity improvements	1	£1m-£3m	
		5.2.2.5	Campbeltown Road capacity improvements	1	£1m-£3m	
		5.2.2.6	Improve ped linkage to B'head town centre from south	1	£1m-£3m	
		5.2.2.7	A41 / A552 / flyover area re-modelling	1	£10m-£20m	
		5.2.2.9	A41 Southern Bus Access Improvements	1	£1m-£3m	
Total Cost					£50m-£100m	
15	A41 North Sustainable	5.2.3.1	Green link: Rock Ferry to Seacombe via Former Rail Corridor	2	£3m-£10m	Wirral Council
	Connectivity	5.2.3.2	Green Link: Woodside to Seacombe via waterfront	2	£3m-£10m	
		5.2.3.3	Use of former Dock Railway for Rapid Transit	2	£10m-£20m	
Total Cost					£20m-£50m	
16	Hoylake Golf Tourism	8.2.1.1	Saughall Massie Link Road - New Infrastructure	1	£3m-£10m	Wirral Council
	Access	8.2.1.2	Saughall Massie Road- Infrastructure Upgrade	1	£3m-£10m	
		8.2.1.3	Heron Road Improvements	1	£3m-£10m	
		8.2.1.4	Other local access road improvements	2	£3m-£10m	
Total Cost					£20m-£50m	
17	Regenerating New Ferry	8.1.1.1	Downgrading New / Rock Ferry Bypass	3	£50m-£100m	Wirral Council
Total Cost					£50m-£100m	

Towards a Transport Strategy

Wirral is demonstrating leadership in the Liverpool City Region through developing their Strategic Transport Framework of which this Action Plan is a key component. It is doing so ahead of Merseytravel's ongoing refresh of the City Region pipeline of schemes. As a result, the ongoing work being undertaken for Wirral Council presents a significant opportunity to influence the direction of the future strategy for City Region-wide investment. As is becoming clear, several of the schemes that are likely to be required in the SRF to better connect and support the development of the spatial priority areas identified in 2.2, are transformational on a City Region level too and could form the basis of a new Spatial Framework and Transport Strategy for the whole Combined Authority.

As noted earlier in the document, Liverpool City Region's overarching spatial framework guiding future development is under development, and a complimentary Transport Strategy is required to provide a challenging but achievable future endpoint. It is considered that the emerging concepts discussed in this document could provide the basis for such a Transport Strategy, tying in neatly with aspirations for Liverpool and other City Region partners.

A41 North - Phase 1 (to 2025)

The strategy for the A41 North area is based around the comprehensive re-modelling of both the Queensway Tunnel Toll Plaza and the network of flyovers. The opportunity afforded by Automatic Number Plate Recognition (ANPR) and other technologies could potentially allow the total removal of the toll plaza (or significant reduction in size), and it is further recommended that the flyovers are removed completely and replaced with an at-grade highway layout (largely remaining from prior to the construction of the flyovers). This would open up the Hind Street site as a major development opportunity, with at-grade access provided from the remodelled highway network, and a new eastern entrance at Birkenhead Central Station which would also provide a major enabling scheme for the Hind Street development.

In parallel, many of the highway dominated roads in the area would be substantially improved for pedestrians and cycles. These include Argyle Street, Conway Street and Europa Boulevard which would become key links in a new walkable Birkenhead Town Centre. The scheme for Europa Boulevard would also aid the opening up of a large development site to the north and west of Conway Park station being taken forward by the Wirral Growth Company as the Civic Campus development. The large gyratory between Argyle Street and the A552 Borough Road would be totally remodelled after the removal of the flyovers with a focus on accessibility for active travel modes into the town centre.

Connected with this is the improved Birkenhead Central Station. The redevelopment of Hind Street could allow the station to be accessed from the east and it is recommended that a new eastern forecourt be created to facilitate this, alongside enhanced public transport linkage.

The first phase of a new 'transit' system could also be implemented during Phase 1 which would coincide with Peel Holdings' aspirations for a 'Street-Car' system to enhance accessibility to Wirral Waters. Although envisaged as a 'feeder' system to connect key new destinations within the study areas, there is also a clear need for the network to fill in the gaps in the existing transport network and to connect new areas of demand together.

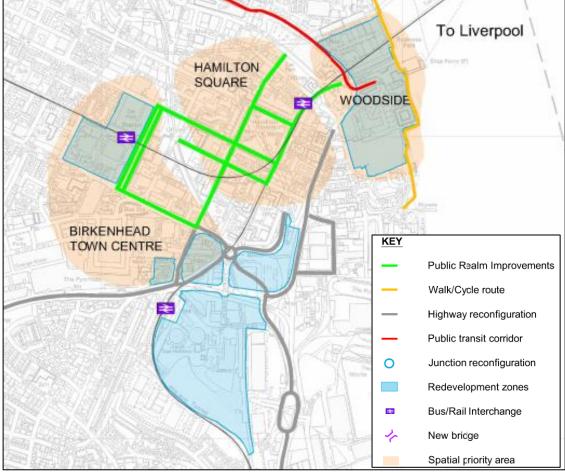


Figure E5: A41 North Strategy - Phase 1

A41 North Corridor - Phase 2 (2025 - 2030)

Phase 2 of the strategy constructs a new link road to connect the A41 directly with the Borough Road / Argyle Street junction. This would further open up the Hind Street area for development and enhance access to and from Birkenhead Central station. The site could then be directly connected to the town centre and ultimately Wirral Waters via re-use of the former Dock Railway alignment to provide a dedicated walking, cycling and transit corridor from Birkenhead Central (and potentially beyond to Rock Ferry) to Corporation Road at the north of the town centre.

Concurrently, Phase 2 proposes significant regeneration of the Woodside area of the town. Remodelling of the large-scale gyratory and redevelopment of the bus interchange (in favour of the enhanced bus-rail interchange now provided at Hamilton Square) would significantly aid in opening up the adjacent Woodside Business Park and commercial area to the south (with a new link road to Rose Brae).

Further access improvements to the town centre from the south could be achieved by substantial improvements at the junction of Borough Road and Whetstone Lane.

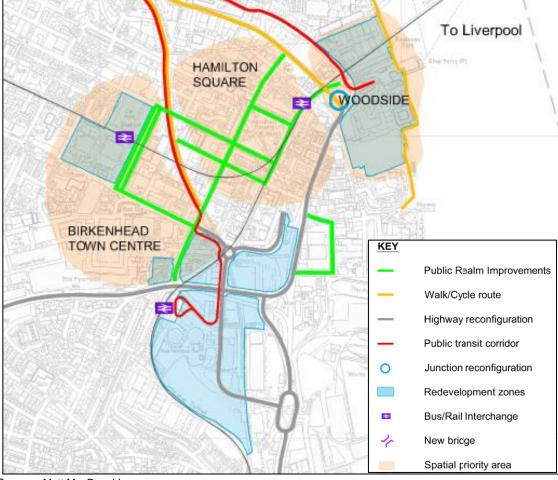


Figure E6: A41 North Strategy - Phase 2

A41 North Corridor - Phase 3 (2030 - 2040)

Phase 3 involves a further major change to movement in the area made possible by a major scheme to be described later. The main change affecting the A41 is the removal of general traffic from the Queensway Tunnel, reserving it for public transport (both regular buses and the enhanced transit concept discussed previously). The removal of traffic would significantly reduce the amount of through-traffic in this part of the town centre and would allow appreciably more space for enhanced Public Realm and public transport accessibility.

In a further potential innovation, the former Queensway service tunnel from Rendel Street in the north of the town centre could provide a dedicated transit access corridor allowing the mode to access the tunnel directly from Wirral Waters and link into schemes on the Liverpool side of the Mersey (this will be discussed further in subsequent sub-sections). This would represent a significant new use of an existing underused asset and help to further cement the Queensway Tunnel as a public transport conduit. Depending on the mode chosen for transit system, this could integrate directly with systems on the Liverpool side of the river or could at least provide highly efficient interchange with potential future networks.

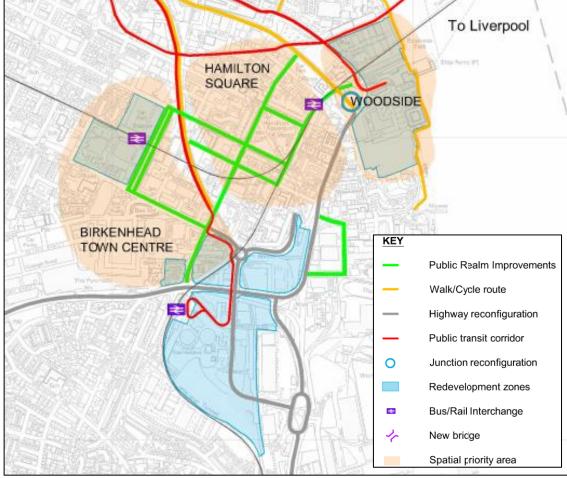


Figure E7: A41 North Strategy - Phase 3

Wirral Waters - Phase 1 (to 2025)

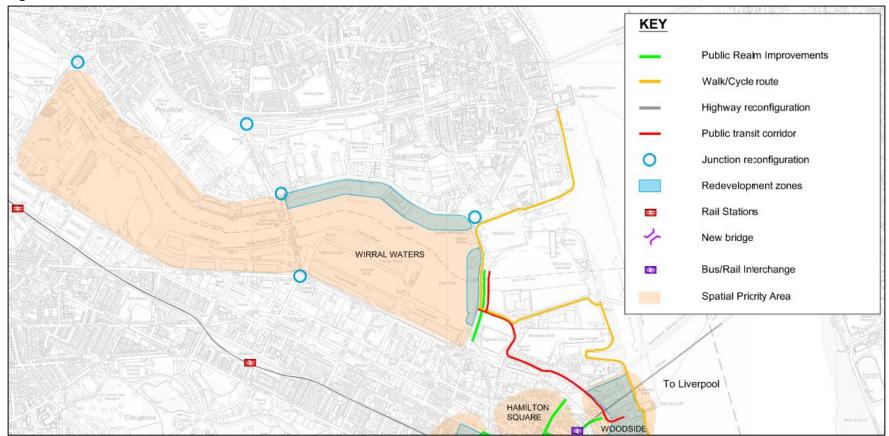
Phase 1 of Peel's Wirral Waters development is focussed on the north east and east of the site on Dock Road and Tower Road. To facilitate this immediately, the majority of the proposed effort is required to bring the existing network up to required standards of capacity and accessibility. In this way road and junction improvements are required at the junctions of:

- Dock Road / Gorsey Lane;
- Dock Road / Birkenhead Road;
- Duke Street / Corporation Road;
- Wallasey Bridge Road / Dock Road

Peel's aspiration is to construct a light rail 'Street-Car' system between Woodside Ferry Terminal and Tower Road using much of the heritage tram alignment. This route is therefore proposed as the first phase of the enhanced transit network serving Wirral Waters, however the system may ultimately need to be higher capacity than is possible using the heritage tram alignment and it is recommended that Wirral Council and Growth Company work co-operatively with Peel to identify the optimal solution for this system.

In addition, walking and cycling routes to access Wirral Waters from the south are required. As part of this, significant route improvements on Tower Road itself extending northwards along Birkenhead Road are proposed, connecting into Wirral Circular Trail.

Figure E8: Wirral Waters - Phase 1



Source: Mott MacDonald

Wirral Waters - Phase 2 (2025-2030)

In Phase 2, the major proposal is a significant expansion of the transit network around the East Float of the docklands making use of the preserved dock railway alignment on the south side of the dock and potentially running on-street on the northern (Dock Road) side. The transit network would be accompanied as elsewhere by adjacent walking and cycling routes (and the width is clearly available for this on the former rail alignment). This would also incorporate the replacement of the Duke Street bridge (which is approaching life expiry and is likely to need replacing in the medium term) and could be replaced with a more suitable structure to cater for multiple modes of transport.

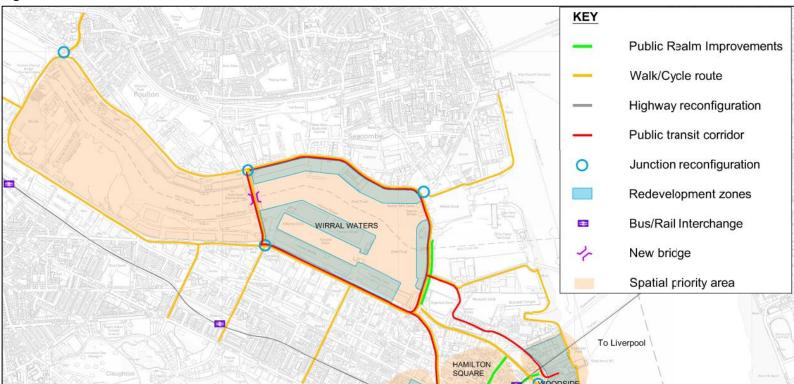


Figure E9: Wirral Waters - Phase 2

Source: Mott MacDonald

Enhanced public realm and walking and cycling routes are proposed to tie the area better into the residential areas to the south of the site as well as Birkenhead Park. As part of this, an improved bus-rail interchange at Birkenhead Park station is recommended alongside an increased number of bus services penetrating further into the Wirral Waters site via Duke Street.

Wirral Waters - Phase 3 (2030-2040)

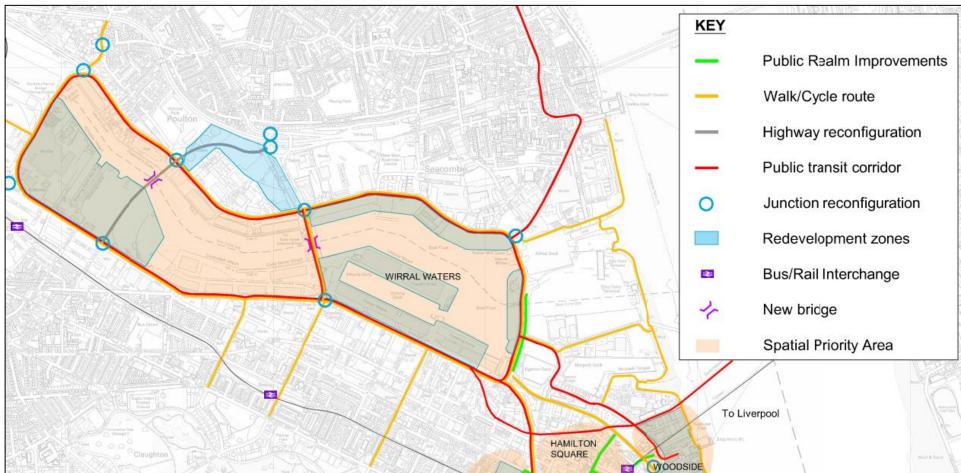
With the third phase of the strategy for Wirral Waters comes the proposed extension of the transit system in three parts. Firstly, the system is extended around West Float to open up this part of the site for development, secondly the system is extended to the north serving Seacombe and New Brighton via the A554, and thirdly the system is extended to Liverpool via the Queensway service tunnel and the newly public-transport-only Queensway tunnel. It is envisaged that the Liverpool-bound route would leave the dockside route via Corporation Road and Rendel Street, accessing the service tunnel and travelling to Liverpool via Queensway.

This route runs alongside an improved City Boulevard corridor (Corporation Road / Beaufort Road) which provides highway access but with significantly enhanced Public Realm. In addition, Wallasey Bridge Road will require significant Public Realm improvements and the replacement of the existing bridge with a new fixed structure.

To further improve accessibility to the east of the site, a new multi-modal link (walking, cycling, highway) is created to connect the Wallasey Tunnel Approach junction with the new City Boulevard via a new bridge over the dock. This link further opens development land in the West Float area and ensures that the site is fully accessible by all modes.

Finally, the waterfront active mode route could be extended into Seacombe by providing access across the Ro-Ro terminal avoiding the longer route around via the roads. This would significantly enhance the attractiveness of walking and cycling as a means of accessing Seacombe from the south.

Figure E10: Wirral Waters - Phase 3



Emerging City Region Transport Strategy

The following components form the basis of the proposed longer-term transport strategy for Wirral and could form key elements of an overarching transport strategy for the City Region:

- Queensway Tunnel for Public Transport Only As part of the third phase of the A41
 North and Wirral Waters transport strategies, it is proposed to close the Queensway Tunnel
 to general traffic and retain it for public transport only (bus and new transit);
- 2. Kingsway Tunnel Capacity Upgrade As a part mitigation to the closure of Queensway to general traffic, it is proposed that the Kingsway Tunnel be upgraded in capacity. The first and potentially easiest phase of this would be replacing the toll plaza with a technological tolling solution e.g. utilising ANPR which would dramatically speed up traffic accessing and egressing the tunnel;
- 3. **New Transit Routes Introduced** By phase 3 of the A41 North and Wirral Waters strategies, the transit network would extend from New Brighton in the north to Birkenhead Central and potentially extending to Rock Ferry in the south. It would serve Wirral Waters comprehensively and provide direct links to Woodside and across the river to Liverpool via Queensway tunnel. Given noted aspirations on the Liverpool side of the Mersey to create transit across the City Centre, eastwards to the Knowledge Quarter via Brownlow Hill, and north to Liverpool Waters via the waterfront¹, there is the potential to tie the Wirral transit network into a wider City Region network operating on both sides of the river and allowing the costs, benefits and risks to be better distributed between City Region partners;
- 4. Borderlands Line and Links to Heswall There are long-standing proposals to increase the level of service on the Borderlands (Wrexham Bidston) line and to incorporate it into the Merseyrail network to run trains direct from Wrexham to Liverpool business case work for this is already under development. With the latest franchise commitments from Abellio (the new Wales and borders franchisee) and Merseyrail, it seems likely that this could be achieved without expensive electrification but instead utilising battery power (with recharging at either end). Significant benefit could be gained, however, by creating a better connection to Heswall town centre potentially even providing a new rail spur and interchange close to the retail centre.
- 5. A41 Downgraded North of Bromborough The closure of Queensway to general traffic would significantly reduce the amount of through-traffic on the A41 north of Bromborough. Select Link Analysis from the Liverpool City Region Transport Model highlight that much of Queensway's traffic is not heading for either Birkenhead or Liverpool City Centres but is instead travelling between Wirral and the M62 / South Liverpool from a wide catchment area including Chester, Ellesmere Port and North Wales. As such there would be less reason to travel on the A41 to complete these journeys and the route could be downgraded. Nowhere would this be more beneficial than at New Ferry and Rock Ferry whose town centres were effectively severed from their residential populations when the bypass was constructed.
- 6. New Cross-Mersey Link and Tidal Barrage In order to facilitate the above components, there will need to be a major alternative route for traffic accessing Liverpool from Wirral, but which avoids the city centre and links better to the motorway and South Liverpool networks. The Mayor of Liverpool City Region has strong aspirations for a tidal barrage on the Mersey estuary to generate power and provide a degree of sustainable energy independence. The proposal is to link these two projects and create a new bridge and tidal barrage across the Mersey, potentially from the Bromborough area to Otterspool in Liverpool. This would tie in with the South Liverpool corridor improvement which is currently ongoing and which could potentially be linked into the Queens Drive ring road route to the M62. The bridge would

Ī

See Knowledge Quarter Vision Document for details of the Lime Line concept at https://www.kqliverpool.co.uk/wp-content/uploads/2017/10/7203_KQ_Transport_Vision-AW_WEB.pdf

provide a high capacity route which effectively bypasses much of the most sensitive parts of the network whilst facilitating the changes described earlier in this section. By linking the scheme with the tidal barrage, deliverability could be increased albeit requiring a solution which allows the Mersey to remain navigable. If rail were also to make use of the new structure, new route potential could be opened up between South Wirral and Liverpool Airport, and between the Northern Line and the Wirral Line destinations with direct journeys possible from Southport to Chester via Liverpool City Centre.

The strategic components of the strategy are shown in the plan overleaf: In addition to these more strategic components of the strategy, a number of additional interventions are proposed throughout the borough to address other key transport shortfalls and to complete the Strategic Transport Framework Action Plan. These include:

- A new access to Wirral International Business Park this could potentially be delivered directly from the proposed New Cross-Mersey Link;
- Saughall Massie Link Road new infrastructure to support the development of golf tourism in the Hoylake area;
- Heron Road improvements further improvements to the accessibility of Hoylake and West Wirral;
- Bus / Rail interchange improvements at New Brighton and West Kirby stations to improve accessibility and integration; and
- A new transport hub in Heswall town centre providing multi-modal interchange and integration.

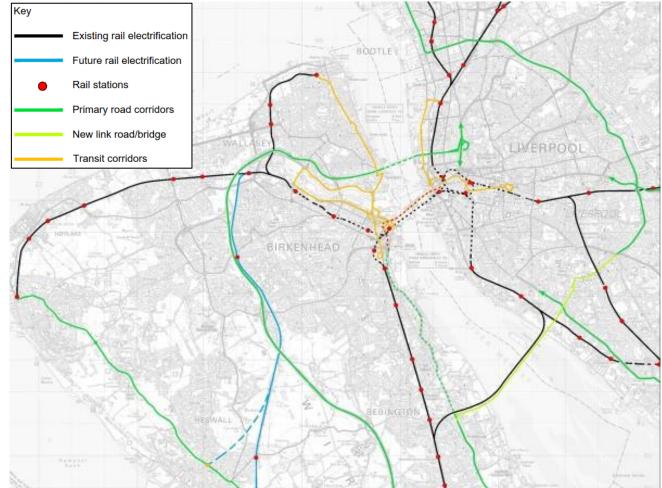


Figure 1: Wirral Strategic Transport Framework - Strategic Interventions

Next Steps

The Action Plan of schemes identified during this work is based upon the schemes put forward in 2016 for the Wirral Transport Pipeline but goes much further than this previous document in ensuring the schemes are consistent with:

- The priorities of Wirral Council and Wirral Growth Company through the Strategic Regeneration Framework;
- The emerging strategies for the A41 North and Wirral Waters development areas;
- The refreshed list of issues that the action plan must tackle in terms of transport provision across the borough; and
- Further work undertaken since the publication of the previous pipeline including the East Wirral Transport Study (by KBR) and the latest information on Wirral Waters, Woodside and Hind Street developments.

As noted earlier, this Strategic Transport Framework Action Plan is just one component of the suite of work currently being undertaken on behalf of Wirral Council and Wirral Growth Company. Concurrently work is being undertaken on the business case for Saughall Massie

Road improvements, and the transport strategies for the A41 North and Wirral Waters development zones. Further to these, modelling work is also being undertaken to understand the impacts of the schemes proposed within this and the other noted studies.

More immediately, the packages and schemes contained within this document will need to be fed into the ongoing City Region Pipeline Refresh being undertaken by Merseytravel, particularly the more strategic schemes which will require multiple partner organisations to support and deliver. The structures to ensure this happens are already in place through existing City Region governance (and the Transport Advisory Group – TAG) and should therefore be readily achievable.

In time there will be a need for more detailed design of the measures proposed in this action plan. Alongside this is the need to identify future funding sources and to apply for this via the traditional business case process. This will be an important next step but it should also be noted that significant amounts of the proposed workload will be of great importance and significance to key third parties such as Peel Holdings, Ion Developments and the Wirral Growth Company partners and there may, therefore, be a substantial amount of third party funding available to help to deliver these schemes. Early engagement with these parties is considered to be crucial to ensure a beneficial outcome for all concerned.



1 Purpose of this report

1.1 Introduction

Mott MacDonald has been commissioned by Wirral Council to develop Stage 2 (the Action Plan) of a Strategic Transport Framework (STF) for Wirral, with Stage 1 of this process (undertaken by Wirral Council) being the development of the strategic narrative for the framework.

Stage 2 is a critical refresh of the current Wirral Transport Investment Pipeline, including a high-level options appraisal of the infrastructure required to support the Council's regeneration proposals. As well as refreshing the existing/current schemes, there is an opportunity to identify any additional or new schemes which could be considered within the final Framework. The outcome of this stage of work is this Action Plan of future schemes to support the implementation of the Framework. Figure 2 shows how these elements relate to one another.

Strategic Regeneration Framework

Place Shaping Vision Profiles Key Opportunities Regeneration Principles

Strategic Transport Framework

Strategic Transport Framework Action Plan

Feasibility Studies

High Priority Schemes

Business Cases

Funding Applications

Delivery

Figure 2: The Wirral Transport Pipeline Wider Development Process

Source: Mott MacDonald

In 2016, Mott MacDonald produced (on behalf of Merseytravel) the Liverpool City Region (LCR) Transport Investment Pipeline, which covered Halton, Knowsley, Liverpool, Sefton, St. Helens and Wirral as well as an overarching City Region level pipeline undertaken for Merseytravel. This project presented a 'pipeline' of transport investments for the next 20 years in the LCR, with one pipeline for each area. The pipeline was intended to act as the investment framework

for transport schemes to be developed and delivered in support of the LCR's new strategic transport vision, *A Transport Plan for Growth*.

1.2 Why is a refresh needed?

Since the development of the first Wirral Transport Pipeline in 2016 Wirral Council has produced a number of local policy documents which set the borough in the context of significant economic growth. The Strategic Transport Framework Action Plan is therefore required to enable this growth and will ensure that the transport network is fully aligned with Wirral's regeneration plans / proposals.

Wirral's ambitious aspirations for growth are outlined within the Wirral Strategic Regeneration Framework (SRF) – part of Wirral's comprehensive '2020 Vision' - which sets out the priorities and challenges for economic growth in the borough, to help guide and proactively drive investment and development activity across Wirral. The SRF focuses on strategic themes and areas of significant growth potential, identified as the spatial priorities. These are discussed further in Section 2 which introduces the SRF and outlines the key components that feed into the Strategic Transport Framework. The Wirral Strategic Regeneration Framework provides the context for delivering the outcomes of the Wirral's Growth Plan including existing and new initiatives that will accelerate delivery of physical, economic and social change in a co-ordinated way.

To aid this acceleration in economic growth Wirral Council has created a joint venture partnership with Muse Developments forming the Wirral Growth Company. This 10-year investment deal aims to fast track economic growth in Wirral through 'new expertise, new ideas and new investment in Wirral. It will allow the Council to share in the risks but reap the rewards of the regeneration of key sites across the whole borough.' Amongst other projects being progressed by the Growth Company is a new Commercial District in Birkenhead centred around Europa Boulevard and Conway Park, and a new Market and leisure development in the town centre.

Wirral Council has also produced a draft Strategic Transport Framework which defines what the transport network must offer to enable the aspirations identified within the SRF with a vision to improve transport for all residents, businesses and visitors; creating a joined up and efficient transport system. This Action Plan of transport schemes will support the development of the STF, as a means to achieve its ambitions and therefore enable the overarching aims of the SRF.

The Strategic Transport Framework Action Plan will structure schemes in terms of cost, timescale and priority for the borough. The highest priority and most advantageous schemes can then be further developed to establish their feasibility and business cases produced in order to secure appropriate funding sources.

The Strategic Transport Framework Action Plan will therefore be central to allowing Wirral to achieve the aims of the Strategic Transport Framework and fast track the growth set out in the SRF.

1.3 Methodology

This report primarily describes the process undertaken to develop the Strategic Transport Framework Action Plan. An overview of the methodology is demonstrated in the following figure and will be reflected within the structure of this report. This systematic approach ensures the

_

² Cllr Phil Davies, Leader of Wirral Council.

overall strategy is cohesive and considers all previous work undertaken in the context of the Strategic Regeneration Framework.

Figure 3: Strategic Transport Framework Action Plan Methodology

Phase 1:
Assess SRF and identify spatial priorities and requirements

Phase 2:
Review of current
pipeline and identification
of new schemes

Phase 3:
Scheme prioritisation and shortlisting

Phase 4: Recommendations and reporting

Source: Mott MacDonald

The methodology undertaken is summarised as follows:

- Phase 1: The Strategic Regeneration Framework and draft Strategic Transport Framework document were reviewed to identify key spatial priorities, development aspirations and objectives, and to provide guidance over the Council's vision for the future of Wirral;
- Phase 2: The priorities identified in the previous phase were used to test the alignment of the previous 'pipeline' of transport schemes with the vision for Wirral. This provided an understanding of the suitability of the previous schemes and helped to determine gaps in its coverage which required filling. In parallel, a full list of transport, access and movement issues for Wirral was identified from a variety of sources including previous reports, stakeholder workshops and baseline work for the A41 North and Wirral Waters feasibility studies. This facilitated the emergence of new schemes for consideration for addition to the long list;
- Phase 3: The new long list of schemes was initially sifted to remove scheme duplication, schemes already being progressed, and schemes poorly aligned with the Strategic Regeneration Framework's priorities. Following this a fuller INSET³ appraisal was undertaken to score each scheme according to a set of agreed criteria. This reduced the list of schemes considered for progression to a more manageable level and ensured the quality and efficacy of the progressing schemes;
- Phase 4: In the final phase of the study, the shortlisted schemes were packaged and phased into 'bundles' to be developed further, the components within each of these bundles following a common theme. This resulted in a total of 17 packages for Wirral Council to consider further and progress; these were summarised in proforma form. The process and results of the study were then comprehensively described in this final report.

1.4 Report Structure

This report sets the Strategic Transport Framework Action Plan in the context of regeneration across the borough and demonstrates how the list of schemes has been developed, appraised and structured. The remainder of this report is structured as follows:

³ To be described in more detail later in the document – a sifting and appraisal tool for strategic transport work.

- Section 2: Strategic Regeneration Framework- this section reviews the Strategic Regeneration Framework demonstrating how its key components feed into the Strategic Transport Framework and its Action Plan to enable its aspirations.
- Section 3: Concurrent Wirral Transport Projects- this section outlines how this piece of work fits in with other ongoing transport studies across Wirral.
- Section 4: Towards a Transport Strategy- this section sets out how this piece of work will
 progress into the final transport strategy and discusses the next stages for Wirral towards
 implementation of transport schemes.
- Section 5: Identification of Key Transport Issues- this section describes how the list of key issues were developed and categorised in order to generate ideas for potential schemes.
- Section 6: Review of Previous Wirral Transport Pipeline- this section focuses on the schemes listed in the previous transport pipeline in order to identify gaps where new schemes may be required due to the changing context across the borough and to reflect the latest development ambitions.
- Section 7: Recommendations for New Wirral Strategic Transport Framework
 Schemes- this section highlights the new schemes which have emerged during the refresh of the pipeline as a result of the gap analysis and consultation with key stakeholders. The new long list is then presented at the end of this section.
- Section 8: First Sift and Structuring of Long List- section 8 outlines the steps taken to
 organise schemes for appraisal and then carry out a high-level initial sift.
- Section 9: Appraisal of Long List- this section provides detail on how the long list of schemes has been appraised including the specific criteria used and the appraisal results.
- Section 10: Packaging and Phasing of Schemes- this section illustrates the various ways in which appraised schemes have been packaged together and how they will be phased throughout the pipeline period.
- Section 11: Innovation
- Section 12: Conclusions and Next Steps the final section provides an overview of the
 outcomes of this piece of work and discusses the next steps involved in delivering them.

2 Strategic Regeneration Framework

The Strategic Regeneration Framework (SRF) has been produced by Wirral Council to identify the priorities and challenges for economic growth in the borough and drive investment across Wirral. It focuses on the areas of significant growth potential identified and agreed in the Wirral Plan- A 2020 Vision; these are Birkenhead Town Centre (including Woodside and Hind Street), Birkenhead Hinterland, Wirral Waters Enterprise Zone (EZ) and the A41 North corridor.

2.1 Strategic Regeneration Framework Context

A combination of the Northern Powerhouse agenda, the historic devolution agreement and the development of a world class business offer will create significant change across Wirral transforming its economy for its current and future residents.

In addition, Wirral is home to nationally significant economic development projects such as Wirral Waters EZ and key growth sectors including advanced manufacturing, maritime, visitor economy and the opportunity to generate sustained renewable energy. Wirral are now in a position to accelerate the delivery of development opportunities across the borough in order to drive forward the Growth Plan vision of sustainable growth where:

"Wirral will be a place where employers want to invest, business thrives, and high-quality jobs are provided and where all our residents are able to contribute to and benefit from sustained prosperity and a good quality of life in a high-quality environment."

This ambitious vision for the future of Wirral anticipates substantial amounts of development across the borough. Such transformational changes undoubtedly present significant opportunities. However, in tandem, development on this scale also poses future challenges for the transport network in seeking to accommodate and facilitate the planned growth of Wirral.

The SRF has therefore been developed to set out a clear framework to guide this regeneration and investment focusing on delivery of the above vision and how challenges may be overcome. The Growth Plan has been central to the development of the SRF providing a starting point for the SRF in defining spatial and strategic priorities.

Figure 4: Strategic Regeneration Framework Development



The SRF defines the strategic context to do this and sets out the key strategies, principles and objectives across the range of inter-related economic, social and physical issues that impact on the borough. In doing this the SRF reflects relevant national, City Region and local strategies in order to maximise the opportunities to drive forward regeneration within key spatial development areas. Key strategies and other documents include:

- The Government's Industrial Strategy Green Paper – HM Government – Jan 2017⁴
- Liverpool City Region Growth Strategy -Liverpool City Region LEP and Combined Authority - 2016⁵
- Liverpool City Region Devolution Deal HM Treasury and Liverpool City Region Combined Authority – November 2015⁶
- The Northern Powerhouse Strategy HM Government – November 2016⁷

- Mersey Dee Alliance: Unlocking our true potential – Mersey Dee Alliance – March 2017⁸
- The Wirral Plan A 2020 Vision Wirral Council – June 2015⁹
- Wirral Core Strategy Local Plan Wirral Council – Wirral Council - Forthcoming¹⁰
- The Wirral Growth Plan The Wirral Partnership¹¹
- Atlantic Gateway Strategic Plan Atlantic Gateway Partnership – January 2018¹²

A review of key policies has shown that there is a robust higher-level framework in place within which the opportunities and needs of Wirral can be considered and which has informed the development of the SRF.

2.2 Emerging Spatial Priorities

In order to achieve the overall vision for Wirral, the SRF identifies a number of spatial priorities to guide investment and deliver growth across the borough. These areas have been identified following analysis of employment land availability, business space and feedback from developers and investors. The spatial priorities for the SRF are:

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

⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/611705/building-our-industrial-strategy-green-paper.pdf

⁵ https://www.liverpoollep.org/wp-content/uploads/2016/06/SGS-Final-main-lowres.compressed.pdf

⁶https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/477385/Liverpool_devolution_deal_unsigned.pdf

⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/571562/NPH_strategy_web.pdf

⁸ http://www.merseydeealliance.org.uk/wp-content/uploads/Unlocking-Our-True-Potential/Final%20Doc%201617-01408%20MDA%20-%20Unlocking%20Our%20True%20Potential%20-%2016.03.17.pdf

https://www.wirral.gov.uk/sites/default/files/all/About%20the%20council/Wirral%20Council%20Plan%20-%20a%202020%20Vision.pdf

¹⁰ https://www.wirral.gov.uk/planning-and-building/local-plans-and-planning-policy/local-plans/core-strategy-local-plan

¹¹ https://www.wirral.gov.uk/sites/default/files/all/About%20the%20council/Wirral%20Plan/Wirral%20Growth%20Plan.pdf

¹²https://static1.squarespace.com/static/5b6afb252971149434f91ae5/t/5b6d88b90e2e723be240365e/1533905086018/Atlantic+Gateway +Strategy+2018.pdf

The first three of these are shown on the following plan which highlights how the spatial priority areas in Birkenhead relate to each other spatially. The remaining spatial priorities are shown within Figure 5.

Seacombe

Seacom

Figure 5: Central Spatial Priority Areas

Source: Strategic Regeneration Framework – Wirral Council

When the strategic borough-wide area is added to this list, we arrive at a total of 8 spatial priorities for the Strategic Transport Framework to focus on. The identification of these spatial priorities has directly informed the development and appraisal of transport schemes in order to ensure they are the most appropriate solution to help deliver growth across the borough.

Note that the A41 Corridor is not to be confused with the A41 North Strategic Transport Feasibility Study Area referred to within this document as A41 (North) which is centred on the section of Birkenhead at the northern end of the A41 and includes Woodside and Hind Street development areas.

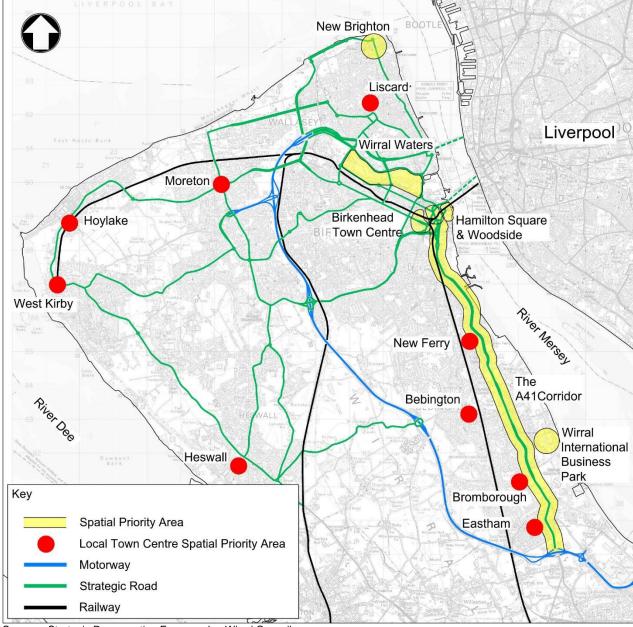


Figure 6: Wirral Spatial Priorities and Development Zones Plan

Source: Strategic Regeneration Framework – Wirral Council

2.3 Emerging Themes

In addition to identifying spatial priorities the SRF also sets out as number of key strategic themes which will support the delivery of physical, economic, social and environmental change in a co-ordinated and cohesive way and deliver wider regeneration. These are:

- High Quality Housing
- Employment, Skills and Economic Development
- Excellent Connectivity transport and digital
- The Tourism and Culture offer
- Sustainable development and a high-quality environment
- A great place to live and work healthier lifestyles and safer neighbourhoods

These themes have been considered at all stages during the option development process to examine where the previous pipeline needs updating and to identify the need for any new schemes required to support the Strategic Regeneration Framework objectives and was therefore a key component in the gap selection process.

These emerging themes are directly aligned with the wider aims of the Liverpool City Region. The Liverpool City Region Growth Strategy sets out the strategy for growth for the City Region and identifies key priority sectors for growth – Low Carbon Energy, Advanced Manufacturing, Digital and Creative, Finance and Professional Services, Health and Life Sciences, Maritime and Logistics and the Visitor Economy. Focussing on these growth sectors will maximise the impact of investment and opportunities over the coming years.

Wirral's growth sectors of advanced manufacturing, energy, maritime and visitor economy have been identified by City Region research as underpinning these key priority sectors.

The Strategic Transport Framework has been produced to identify how transport improvements can enable the growth set out within the SRF. This document has been developed in line with the transport priorities of the Combined Authority which are set out in the Liverpool City Region Transport Plan for Growth. These include:

- Growth supporting economic growth through increasing employment, levels of productivity and investment;
- Low Carbon using a range of sustainable energy sources, having the option to use vehicles powered by alternatives to fossil fuels, and having increased levels of walking and cycling;
- Access to opportunity improving access to employment, training and education and wider opportunities such as healthcare, leisure and recreation.

The delivery of the Strategic Transport Framework will therefore support the Transport Plan for Growth (LCR CA – March 2015)¹³ and aim to deliver a co-ordinated and efficient transport network.

https://www.merseytravel.gov.uk/about-us/local-transport-delivery/Documents/8375%20Plan%20for%20growth%20WEB%20FINAL.pdf

3 Concurrent Wirral Transport Projects

Wirral's Strategic Transport Framework (STF) Action Plan is the first of a suite of documents being produced by Mott MacDonald on behalf of Wirral Council. It outlines why investment in transport infrastructure and enhanced accessibility is vital to deliver the aims and aspirations of the Council, as expressed within the Strategic Regeneration Framework. It then presents a set of defined packages to be considered for further development and progression within the borough over the coming years. In this section, the other Wirral-commissioned work that is ongoing will be briefly discussed, providing a fuller picture of the Council's wider work programme for transport as progress is made towards achieving the strategic vision.

3.1 A41 North Corridor and Wirral Waters Strategic Transport Feasibility Studies

Concurrently under development with the Strategic Transport Framework Action Plan (although reporting later) are the twin studies to develop transport strategies for the A41 (North) Corridor and Wirral Waters development areas. This work looks in more detail at the schemes identified and prioritised by this Strategic Transport Framework Action Plan, providing an evidenced account of the optioneering and preliminary design processes. Although now considered to be two components of the same study, the two areas may be defined as follows:

- A41 (North) Corridor this refers to the northern-most section of the A41 in Birkenhead, stretching approximately from its junction with Green Lane at the Rock Retail Park to Woodside at the northern end of the site. In addition to the highways and junctions, the site includes the large-scale development areas of: Hind Street (site of the former M53 Ford garage behind Birkenhead Central rail station) and bounded by Argyle Street South to the west, the A41 to the east and the Queensway Tunnel toll plaza to the north; and Woodside including the existing bus station and ferry terminal, the adjacent commercial area, the large gyratory and its interface with Hamilton Square;
- Wirral Waters this refers to the enterprise zone and former dockland area that forms the boundary between Birkenhead and Wallasey to the north of Birkenhead Town Centre. The area is owned by Peel Holdings and is the site for the flagship regeneration project which includes new residential, commercial and leisure uses on both the east and west floats of the dock. In highway terms, it is bounded by Corporation Road and Beaufort Road to the south, A5139 Dock Road to the north, A554 Tower Road to the east and A5088 Wallasey Bridge Road to the west.

These studies will present a more detailed set of schemes, packaged and phased as per the Strategic Transport Framework but with a more detailed commentary on optioneering and plans at a suitable scale. They are expected to report over the coming weeks during late 2018.

3.2 Wirral Transport Modelling and Benefits Calculation

To support the above commissions, Mott MacDonald have embarked on a process of modelling the changes recommended by the suite of studies. In particular, the modelling focusses on the two core areas of A41 North and Wirral Waters and studies the impact on the highway network that the schemes will engender in the short (prior to 2025), medium (2025 to 2030) and longer terms (2030+). The modelling will also take a more strategic look at the entire Wirral transport network with all recommended schemes in place to provide a long term understanding of

network operation with the most strategically important elements of the Strategic Transport Framework implemented.

The impact on the highway network is, of course, not the whole story in establishing the impact and value of the recommended schemes. Of great importance are the schemes that will benefit the public by transforming public spaces and creating a more pleasant, healthy and accessible place to live by transferring highway space to more active and sustainable modes of transport. In addition, the economic benefit of opening up developable land as a result of transport schemes will need to be understood. These benefits are difficult to capture with a traditional highway model and instead, require the input of our Economic and Social Development team. Using their expertise in captured land value and valuing schemes from a societal perspective, the true benefit of the recommended work in Wirral can and will be fully understood and assessed.

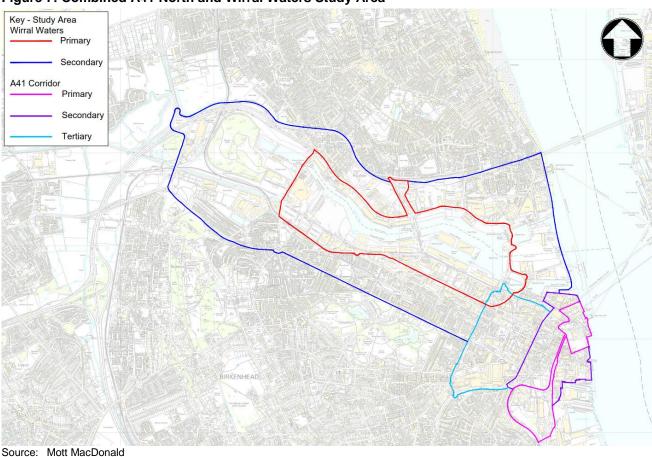


Figure 7: Combined A41 North and Wirral Waters Study Area

4 Towards a Transport Strategy

Sections 5 onwards present the process by which the Wirral Strategic Trabsport Framework Action Plan schemes have been identified, prioritised and pacaked. Prior to that, this section explores the ultimate end-point of this work – namely a comprehensive Transport Strategy for Wirral which ties into a wider strategy for the entire City Region to guide development and investment over the coming years.

4.1 Introduction

The development of the previous investment pipeline was undertaken as part of a wider strategy to develop pipelines for all six districts in the Liverpool City Region, and for the City Region itself. This time around, Wirral is one of the leading authorities in developing their transport framework and is doing so ahead of Merseytravel's ongoing refresh of their City Region pipeline of schemes.

As a result, the ongoing work being undertaken for Wirral Council presents a significant opportunity to influence the direction of the future strategy for City Region-wide investment. As is becoming clear, several of the schemes that are likely to be required in the SRF to better connect and support the development of the spatial priority areas identified in Section 2.2, are transformational on a City Region level too and could form the basis of a new Spatial Framework and Transport Strategy for the Combined Authority area. As such a whole range of additional schemes may be added to the previous pipeline list that address these strategic considerations and shortfalls, as well as those which address more localised and less strategic considerations.

In this section, the most strategically important of the shortlisted schemes identified and developed in the following sections, are described in the context of a comprehensive Transport Strategy for Wirral and, ultimately, the wider Liverpool City Region. As noted earlier in the document, Liverpool City Region's overarching spatial framework guiding future development is under development, and a complimentary Transport Strategy is required to provide a challenging but achievable future endpoint. It is considered that the emerging concepts discussed in this document and placed in context within this section could provide the basis for such a Transport Strategy, tying in neatly with aspirations for Liverpool and other City Region partners.

The emerging phased strategy for the A41 North and Wirral Waters areas are discussed first to provide background for the wider proposals which could have an impact at a City Region level, with the major schemes examined following this. Finally, areas of interface with major schemes being progressed in other City Region authorities are discussed, linking the STF for Wirral into a potential wider City Region Transport Framework.

Whilst this section essentially 'jumps the gun' in terms of presenting the schemes prior to discussing their identification and shortlisting, it is considered necessary to fully understand the context and emerging strategy associated with the suite of Wirral work currently underway so as to appreciate the holistic thinking behind the emerging STF Action Plan.

4.2 A41 (North) Corridor Strategy

4.2.1 Issues to overcome

Key localised issues in the Hind Street / Woodside area are discussed in more detail in following sections, however the main issues that will need to be addressed by the STF are summarised as follows:

- Significant severance is present throughout the A41 (North) area. This is caused by a number of factors including:
 - The flyovers located around the Queensway Tunnel entrance;
 - Historic rail corridors including the former Dock Railway;
 - The Tunnel Toll Plaza and the large land-take this requires;
 - The large number of A-roads; and
 - A generally complicated highway layout in the area.
- Public transport access issues due to limited bus-rail interchange at stations (notably Birkenhead Central and Hamilton Square but with Conway Park only slightly outside of the primary study area and offering very little direct interchange);
- Over-provision of space for bus termination and layover at Woodside given the demand, ageing ferry terminal infrastructure, and limited interchange with active modes;
- Ferry access and accessibility issues due to the age and condition of the Woodside Ferry pontoon; and
- Active mode access issues due to limited infrastructure, poor quality routes, severance particularly from the south, and unattractive Public Realm.

As has been noted previously, there is also a need to create better linkages and integration to, from and between the spatial priority areas of most importance to the A41 (North). These include Birkenhead Town Centre, Hamilton Square and Woodside and the A41 Corridor itself.

4.2.2 Emerging Solutions

The solutions to these issues will need to include a significant change to the priority and feel of the streetscape within the area. If we are to encourage significant and sustainable mode shift, currently highway dominated streets (which are overdesigned given the relatively light volumes of traffic using them) should be replaced by multi-modal corridors capable of better catering for pedestrians, cyclists and high quality public transport. Examples below highlight from continental Europe in which a road can be made much less car focussed whilst still providing capacity for vehicles, and a street adapted to provide a significantly enhanced experience for pedestrians and cyclists with green infrastructure.

In addition, the solutions will need to provide a sustainable forward vision for the Hamilton Square and Woodside area and will include improvements to the Ferry offer (including the pontoon) and the area immediately adjacent.

Figure 8: Streetscape examples from Continental Europe





Source: Mott MacDonald Library

Enhanced public transport may also form a significant part of the solution as long as it is integrated into the existing network. Whilst no preference is expressed for mode at this stage in its development, the new 'transit' system should ideally run fully or partially segregated to ensure reliable journey times and could run alongside other modal corridors such as a converted Dock Railway alignment raised to street level and dedicated for walking, cycling and transit use:

Figure 9: Future Transit Corridor running alongside walking and cycling modes



Source: Mott MacDonald Library

4.2.3 A41 North - Phase 1 (to 2025)

The strategy for the A41 North area is based around the comprehensive re-modelling of both the Queensway Tunnel Toll Plaza and the network of flyovers. The opportunity afforded by Automatic Number Plate Recognition (ANPR) and other technologies could potentially allow the total removal (or significant reduction in size) of the toll plaza, and it is further recommended that the flyovers are removed completely and replaced with an at-grade highway layout (largely remaining from prior to the construction of the flyovers). The access route to the tunnel from the south would be altered to create a uniform access route for all routes from the south simplifying the network substantially. The benefit of this would be in the opening up of the Hind Street site as a major development opportunity, with at-grade access provided from the remodelled highway network, and a new eastern entrance at Birkenhead Central Station which would also provide a major enabling scheme for the Hind Street development.

In parallel, many of the highway dominated roads in the area would be substantially improved for pedestrians and cycles. These include Argyle Street, Conway Street and Europa Boulevard which would become key links in a new walkable Birkenhead Town Centre. The scheme for Europa Boulevard would also aid the opening up of a large development site to the north and west of Conway Park station being taken forward by the Growth Company. The large gyratory between Argyle Street and the A552 Borough Road would be totally remodelled after the removal of the flyovers with a focus on accessibility for active travel modes into the town centre – this remodelled junction could become the centrepiece for the area and dramatically improve the accessibility of the town centre from the south.

Connected with this is the improved Birkenhead Central Station. The redevelopment of Hind Street could allow the station to be accessed from the east and it is recommended that a new eastern forecourt be created to facilitate this, alongside enhanced public transport linkage. Improved bus-rail interchange areas are also proposed at Hamilton Square (on Hamilton Street which could be made two-way for buses only) as part of a comprehensive package of measures designed to improve access and connectivity to this important station, and at Conway Park on Europa Boulevard as part of a major Public Realm improvement. The later reflects the aspirations to incorporate Conway Park and surrounds into the wider the civic campus development, potentially closing one side of Europa Blvd and opening it up to public realm.

Finally, it is suggested that the first phase of a new 'transit' system be implemented during Phase 1 which would coincide with Peel Holdings' aspirations for a 'Street-Car' system to enhance accessibility to Wirral Waters. Although envisaged as a 'feeder' system to connect key new destinations within the study areas, there is also a clear need for the network to fill in the gaps in the existing transport network and to connect new areas of demand together.

In common with Streetcar aspirations, Phase 1 could include the section between Woodside Ferry Terminal and Tower Road via the route currently followed by the heritage tram. However, to be meaningful in generating mode shift, it is recommended that this system employ several vehicles and run at a frequency high enough to make it an attractive alternative to the private car. This may make use of the heritage tram line unfeasible (since this is single track throughout much of its length) however it is recommended that the Council and Growth Company work co-operatively with Peel to provide a solution which works for all parties.

It is worth mentioning that Demand Responsive Transport (DRT) such as the Arriva Click service in Liverpool providing real-time tailored public transport journeys based on demand, may have a role in the ultimate solution for the A41 North study area. These services could provide penetration to regions that are not otherwise serviceable by conventional public transport.

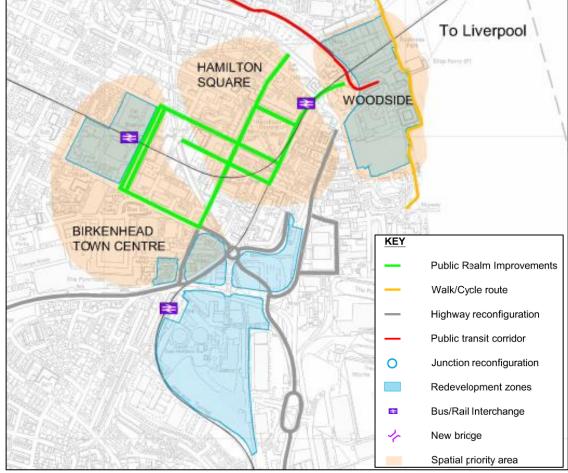


Figure 10: A41 North Strategy - Phase 1

4.2.4 A41 North Corridor - Phase 2 (2025 – 2030)

Phase 2 of the strategy would expand on the major changes in Phase 1 by constructing a new link road to connect the A41 directly with the Borough Road / Argyle Street junction. This would further open up the Hind Street area for development and enhance access to and from Birkenhead Central station. The site could then be directly connected to the town centre and ultimately Wirral Waters via re-use of the former Dock Railway alignment to provide a dedicated walking, cycling and transit corridor from Birkenhead Central (and potentially beyond to Rock Ferry) to Corporation Road at the north of the town centre. This link could be transformational in providing sustainable access to the Hind Street site and would help to boost the accessibility into the town centre and Wirral Waters from the south.

Concurrently, Phase 2 proposed significant regeneration of the Woodside area of the town. Remodelling of the large-scale gyratory and redevelopment of the bus interchange (in favour of the enhanced bus-rail interchange now provided at Hamilton Square) would significantly aid in opening up the adjacent Woodside Business Park and commercial area to the south (with a new link road to Rose Brae).

Finally, further access improvements to the town centre from the south could be achieved by substantial improvements at the junction of Borough Road and Whetstone Lane.

To Liverpool HAMILTON SQUARE WOODSIDE BIRKENHEAD TOWN CENTRE **KEY** Public Realm Improvements Walk/Cycle route Highway reconfiguration Public transit corridor Junction reconfiguration 0 Redevelopment zones Bus/Rail Interchange New bridge Spatial priority area

Figure 11: A41 North Strategy - Phase 2

Source: Mott MacDonald

4.2.5 A41 North Corridor - Phase 3 (2030 – 2040)

Phase 3 involves a further major change to movement in the area made possible by a major scheme to be described later in this section. The main change affecting the A41 is the removal of general traffic from the Queensway Tunnel, reserving it for public transport (both regular buses and the enhanced transit concept discussed previously). The removal of traffic would significantly reduce the amount of through-traffic in this part of the town centre and would allow significantly more space for enhanced Public Realm and public transport accessibility.

In a further potential innovation, the former Queensway service tunnel from Rendel Street in the north of the town centre could provide a dedicated transit access corridor allowing the mode to access the tunnel directly from Wirral Waters and link into schemes on the Liverpool side of the Mersey (this will be discussed further in subsequent sub-sections). This would represent a significant new use of an existing underused asset and help to further cement the Queensway Tunnel as a public transport conduit. Depending on the mode chosen for transit system, this

could integrate directly with systems on the Liverpool side of the river or could at least provide highly efficient interchange with potential future networks.

To Liverpool HAMILTON SQUARE WOODSIDE BIRKENHEAD KEY TOWN CENTRE Public Realm Improvements Walk/Cycle route Highway reconfiguration Public transit corridor 0 Junction reconfiguration Redevelopment zones Bus/Rail Interchange New bridge Spatial priority area

Figure 12: A41 North Strategy - Phase 3

Source: Mott MacDonald

4.3 Wirral Waters Transport Strategy

4.3.1 Issues to overcome

Wirral Waters is a very different prospect from the A41 North area in terms of addressing its transport shortfalls. Most of these come from lack of accessibility and low capacity routes rather than the severance caused by overdesigned infrastructure. In particular, the following overarching issues specific to Wirral Waters will need to be considered:

- Poor quality and low capacity highway and junctions particularly the main junctions surrounding the site itself on Dock Road, Tower Road, Corporation Road and Wallasey Bridge Road;
- Localised congestion during times of delay such as when the bridges are raised or when Ro-Ro ships are discharging;
- Severance from Kingsway Tunnel Approach Road which cuts a swathe into the landscape particularly between Seacombe and the study area;

- Limited public transport penetration (particularly from north) as a result of buses mainly using the Tower Road bridge on the extreme east of the site;
- Poor walking and cycling connectivity and facilities due to limited existing attraction in the area; and
- High volume of HGV movements moving to and from the roll-on roll-off ferry terminal (Ro-Ro).

In addition, as has been noted previously, there is a need to create better linkages and integration to, from and between the spatial priority areas of most importance to Wirral Waters, including Birkenhead Town Centre, Hamilton Square and Woodside and New Brighton.

4.3.2 Emerging Solutions

The solutions to these will necessarily consist of a significant improvement in junction and highway capacity, however with congestion observed locally and with an obligation incumbent on the Council to improve air quality and to generate sustainable transport solutions, this cannot form the main aspect of the strategy. Instead the site must be opened up on a multi-modal basis with strong walking and cycling links from both north and south complimented by high quality public transport. The images below show examples from continental Europe of successfully regenerated dockland areas integrated with transport and accessibility improvements:

Figure 13: Dockside Transit and Pedestrian Infrastructure Examples





Source: Mott MacDonald Library

The public transport 'transit' solution will need to be fully integrated with the proposals for the A41. As such it is proposed that a new transit network be created that addresses the needs of Wirral Waters, links into Birkenhead Town Centre and the A41 North study area, reduces severance to the north and provides direct access to Wirral Waters from Seacombe and ultimately New Brighton, and eventually links over the water to schemes in Liverpool. Merseytravel, as passenger transport arm of the Liverpool City Region, will have a significant role to play in the identification and specification of this network but we introduce the concept and potential routeing within this document.

As noted previously, this strategy remains non-committal over the ultimate mode for this service. It is worth noting that many existing transit systems have been successful at incorporating

multiple modes. The below image highlights a bus transit vehicle running on a dedicated alignment suitable for tram and bus, as could be utilised on Wirral to integrate the system with Peel Holdings' Street-Car aspirations.



Figure 14: Bus running on tram alignment - Germany

Source: Mott MacDonald Library

4.3.3 Wirral Waters - Phase 1 (to 2025)

Phase 1 of the Wirral Waters development is focussed on the north east and east of the site on Dock Road and Tower Road. To facilitate this immediately, the majority of the proposed effort is required to bring the existing network up to required standards of capacity. In this way road and junction improvements are required at the junctions of:

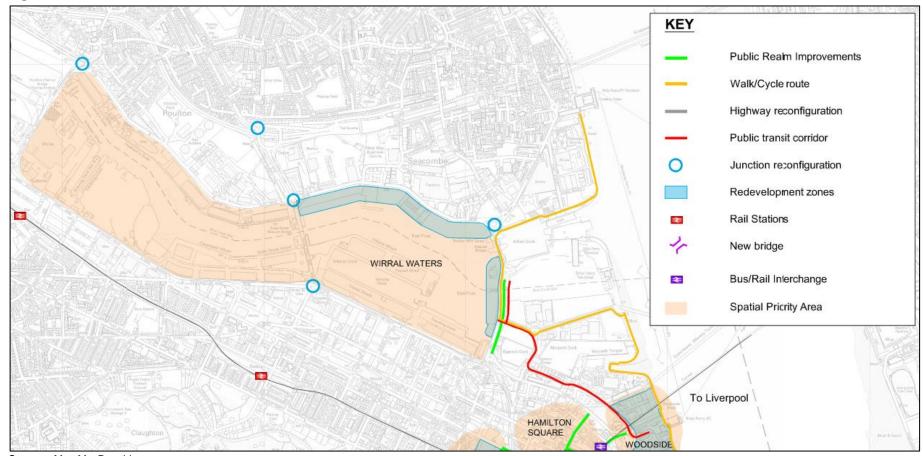
- Dock Road / Gorsey Lane;
- Dock Road / Birkenhead Road;
- Duke Street / Corporation Road; and
- Wallasey Bridge Road / Dock Road.

The Wirral Waters aspiration is to construct a light rail 'Street-Car' system between Woodside Ferry Terminal and Tower Road using much of the heritage tram alignment. This route is therefore proposed as the first phase of the enhanced transit network serving Wirral Waters, however the system may ultimately need to be higher capacity than is possible using the heritage tram alignment and it is recommended that Wirral Council and Growth Company work co-operatively with Peel to identify the optimal solution for this system. It should be noted that part of the solution may incorporate a Demand Responsive Transport system such as Arriva

Click or similar to provide a tailored public transport offer for the 'last mile' component of the journey.

In addition, walking and cycling routes to access Wirral Waters from the south are required. As part of this, significant route improvements on Tower Road itself extending northwards along Birkenhead Road are proposed, connecting into Wirral Circular Trail.

Figure 15: Wirral Waters - Phase 1



Source: Mott MacDonald

4.3.4 Wirral Waters - Phase 2 (2025-2030)

In Phase 2, the major proposal is a significant expansion of the transit network around the East Float of the docklands making use of the preserved dock railway alignment on the south side of the dock and potentially running on-street on the northern (Dock Road) side. The transit would be accompanied as elsewhere by adjacent walking and cycling routes (and the width is clearly available for this on the former rail alignment). This would also incorporate the replacement of the Duke Street bridge (which is believed to be approaching life expiry and is likely to need replacing in the medium term in any case) and could be replaced with a more suitable structure to cater for multiple modes of transport.

Enhanced Public Realm and walking and cycling routes are proposed to tie the area better into the residential areas to the south of the site as well as Birkenhead Park. As part of this, an improved bus-rail interchange at Birkenhead Park station is recommended alongside an increased number of bus services penetrating further into the Wirral Waters site via Duke Street (including the 408, 409, and 423 services that currently use Tower Road). This would better connect the northern areas of Seacombe and Liscard into the Wirral Waters area.

Finally, the waterfront active mode route could be extended into Seacombe by providing access across the Ro-Ro terminal avoiding the longer route around via the roads. This would significantly enhance the attractiveness of walking and cycling as a means of accessing Seacombe from the south.

KEY Public Realm Improvements Walk/Cycle route Highway reconfiguration Public transit corridor 0 Junction reconfiguration Redevelopment zones * Bus/Rail Interchange WIRRAL WATERS New bridge Spatial priority area To Liverpool HAMILTON SQUARE WOODSIDE

Figure 16: Wirral Waters - Phase 2

4.3.5 Wirral Waters - Phase 3 (2030-2040)

With the third phase of the strategy for Wirral Waters comes the proposed extension of the transit system in three axes. Firstly, the system is extended around West Float to help open up this part of the site for development, secondly the system is extended to the north serving Seacombe and New Brighton via the A554, and thirdly the system is extended to Liverpool via the Queensway service tunnel and the newly public-transport-only Queensway tunnel. On the south side of the dock, the transit system makes use of the former rail alignment and incorporates an adjacent walking and cycling route as previously. It is envisaged that the Liverpool-bound route would leave the dockside route via Corporation Road and Rendel Street, accessing the service tunnel and travelling to Liverpool via Queensway.

This route runs alongside an improved City Boulevard corridor (Corporation Road / Beaufort Road) which provides highway access but with significantly enhanced Public Realm. In addition, Wallasey Bridge Road will require significant Public Realm improvements and the replacement of the existing bridge with a new fixed structure.

To further improve accessibility to the east of the site, a new multi-modal link (walking, cycling, highway) is created to connect the Wallasey Tunnel Approach junction with the new City Boulevard via a new bridge over the dock. This link further opens development land in the West Float area and ensures that the site is fully accessible by all modes.

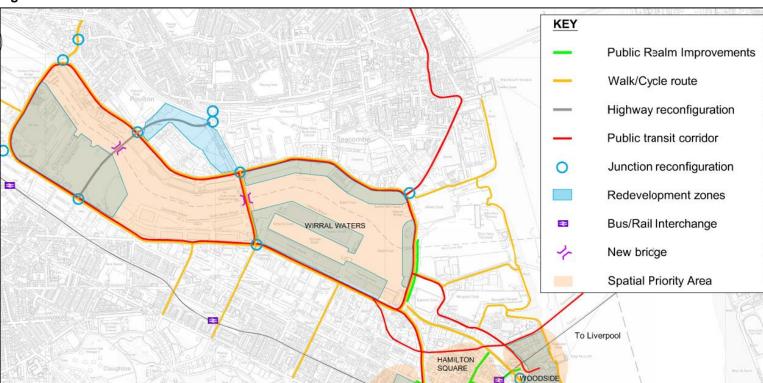


Figure 17: Wirral Waters - Phase 3

Source: Mott MacDonald

4.4 Strategic Transport Framework Action Plan

4.4.1 Issues to overcome

Having outlined the main overarching proposals for the A41 North and Wirral Waters study areas, attention must now be turned to the major schemes shortlisted for the wider Wirral borough and its place within the wider City Region. The Strategic Transport Framework Action Plan provides a blueprint for scheme investment across the whole borough and includes a number of schemes that will be of enormous benefit not just to Wirral but to the wider City Region.

As with the smaller scale strategies, the key issues to overcome on a borough-wide level are presented first followed by the means by which these are proposed to be overcome:

- Congestion and high traffic flows on the A41 particularly north of Bromborough where population densities become higher;
- Limited accessibility to Wirral Waters by any mode as discussed in the previous sub-section;
- Poor public transport connectivity to sectors of the borough including Seacombe and the rural communities in the west and south-west of Wirral;
- Limited capacity of the Mersey Tunnels for general traffic (particularly Queensway);
- Conflict between industrial and leisure uses on the east of the borough e.g. traffic to the Ro-Ro terminal competing with leisure users on the Wirral Circular Trail;
- Lack of sustainable accessibility to central and south western areas of borough with limited bus services and a limited Wrexham-Bidston rail service.

These problems are not easy to resolve and will require significant commitment and resources but, as is shown in the strategy put forward below, several key innovations have already been proposed as part of the individual strategies for A41 North and Wirral Waters.

4.4.2 Towards a City Region Transport Strategy

The following components form the basis of the proposed longer-term transport strategy for Wirral and could form key elements of an overarching transport strategy for the City Region:

- 1. Queensway Tunnel for Public Transport Only As part of the third phase of the A41 North and Wirral Waters transport strategies, it is proposed to close the Queensway Tunnel to general traffic and retain it for public transport only (bus and new transit). The lifespan of the tunnel is likely to be limited, however by removing what would amount to more than 90% of vehicle crossings this lifespan could be greatly increased adding decades to the programme of replacement;
- 2. Kingsway Tunnel Capacity Upgrade As a part mitigation to the closure of Queensway to general traffic, it is proposed that the Kingsway Tunnel be upgraded in capacity. The first and potentially simplest phase of this would be replacing the toll plaza with a technological tolling solution e.g. utilising ANPR which would dramatically speed up traffic accessing and egressing the tunnel;
- 3. New Transit Routes Introduced By Phase 3 of the A41 North and Wirral Waters strategies, the transit network would extend from New Brighton in the north to Birkenhead Central and potentially extending to Rock Ferry in the south. It would serve Wirral Waters comprehensively and provide direct links to Woodside and across the river to Liverpool via Queensway tunnel. Given noted aspirations on the Liverpool side of the Mersey to create transit across the City Centre, eastwards to the Knowledge Quarter via Brownlow Hill, and

- north to Liverpool Waters via the waterfront¹⁴, there is the potential to tie the Wirral transit network into a wider City Region network operating on both sides of the river and allowing the costs, benefits and risks to be better distributed between City Region partners. As noted previously, a rollout of Demand Responsive Transport could also potentially form a part of the solution here;
- 4. Borderlands Line and Links to Heswall There are long-standing proposals to increase the level of service on the Borderlands (Wrexham Bidston) line and to incorporate it into the Merseyrail network to run trains direct from Wrexham to Liverpool business case work for this is already under development. With the latest franchise commitments from Abellio (the new Wales and borders franchisee) and Merseyrail, it seems likely that this could be achieved without expensive electrification but instead utilising battery power (with recharging at either end). Significant benefit could be gained, however, by creating a better connection to Heswall town centre potentially even providing a new rail spur and interchange close to the retail centre.
- 5. A41 Downgraded North of Bromborough The closure of Queensway to general traffic would significantly reduce the amount of through-traffic on the A41 north of Bromborough. Select Link Analysis from the Liverpool City Region Transport Model highlight that much of Queensway's traffic is not heading for either Birkenhead or Liverpool City Centres but is instead travelling between Wirral and the M62 / South Liverpool from a wide catchment area including Chester, Ellesmere Port and North Wales. As such there would be less reason to travel on the A41 to complete these journeys and the route could be downgraded. Nowhere would this be more beneficial than at New Ferry and Rock Ferry whose town centres were effectively severed from their residential populations when the bypass was constructed. The downgrading of this link and the reinstatement of at-grade junctions and crossings could provide significant regeneration in both towns, particularly New Ferry which continues to recover from the recent gas explosion.
- New Cross-Mersey Link and Tidal Barrage In order to facilitate the above components, there will need to be a major alternative route for traffic accessing Liverpool from Wirral, but which avoids the city centre and links better to the motorway and South Liverpool networks. In addition, the Mayor of Liverpool City Region has strong aspirations for a tidal barrage on the Mersey estuary to generate power and provide a degree of sustainable energy independence. The proposal is to link these two projects and create a new bridge and tidal barrage across the Mersey, potentially from the Bromborough area to Otterspool in Liverpool. This would tie in with the South Liverpool corridor improvement which is currently ongoing and could potentially be linked into the Queens Drive ring road route to the M62. The bridge would provide a high capacity route which effectively bypasses much of the most sensitive parts of the network whilst facilitating the changes described earlier in this section. By linking the scheme with the tidal barrage, deliverability could be increased albeit requiring a solution which allows the Mersey to remain navigable. If rail were also to make use of the new structure, new route potential could be opened up between South Wirral and Liverpool Airport, and between the Northern Line and the Wirral Line destinations with direct journeys possible from Southport to Chester via Liverpool City Centre.

The strategic components of the strategy are shown in **Figure 18.** In addition to these more strategic components of the strategy, a number of additional interventions are proposed throughout the borough to address other key transport shortfalls and to complete the Strategic Transport Framework Action Plan. These include:

¹⁴ See Knowledge Quarter Vision Document for details of the Lime Line concept at https://www.kqliverpool.co.uk/wp-content/uploads/2017/10/7203_KQ_Transport_Vision-AW_WEB.pdf

- A new access to Wirral International Business Park this could potentially be delivered directly from the proposed New Cross-Mersey Link;
- Saughall Massie Link Road new infrastructure to support the development of golf tourism in the Hoylake area;
- Heron Road improvements further improvements to the accessibility of Hoylake and West Wirral:
- Bus / Rail interchange improvements at New Brighton and West Kirby stations to improve accessibility and integration; and
- A new transport hub in Heswall town centre providing multi-modal interchange and integration.

The origin of these and all the other schemes that are proposed to form the ultimate transport strategy for Wirral is explained in more detail in the following sections as noted below.

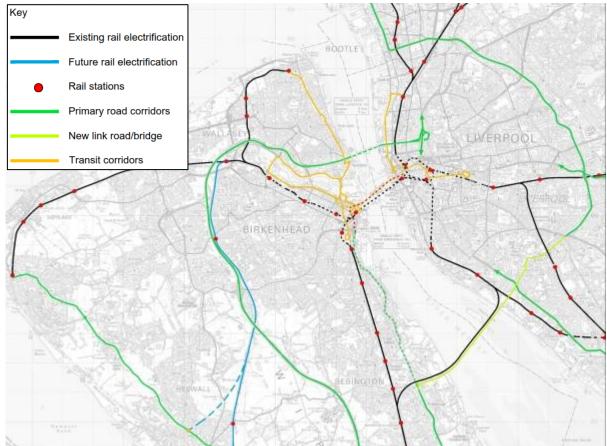


Figure 18: Wirral Strategic Transport Framework - Strategic Interventions

Source: Mott MacDonald

4.5 Remaining Sections

Now that the strategic vision for the STF Action Plan is fully understood, we devote the remaining sections of the document to establishing how the schemes discussed above were identified and developed, starting with issue identification and culminating in packaging and phasing. In this way, the following sections explain how the schemes forming the above strategy were identified.

5 Identification of key transport issues

This chapter outlines how the current transport issues which exist across Wirral were identified noting their pragmatic importance for the future growth of Wirral and its overarching regeneration aims.

5.1 Introduction

This section reviews and updates the key transport access and movement issues affecting Wirral which the STF must address. A thorough appraisal of previously identified issues, supported by discussions with stakeholders and an assessment of additional updated sources of evidence has been undertaken to ensure that the emerging STF is fully cognisant of ongoing issues.

Issue identification provided the foundations for the development of the appropriate transport intervention schemes noted in the subsequent stages of this report, which ultimately seek to provide Wirral with a world class transport system.

5.2 Issue Identification

5.2.1 Previous 2016 Issues List

Prior to the production of the previous Wirral Pipeline in 2016, a comprehensive list of issues was identified to inform the development of appropriate transport schemes. These issues are set out in the table below.

Table 1: Wirral Transport Pipeline 2016 Identified Issues

Key Issues	Transport Mode	Spatial Location
Poor links to Port infrastructure across the LCR. Needed to enhance 'Superport' growth and opportunities in key growth sectors	Road/ Rail/Port	Wirral Waters EZ
Access to and within the Wirral Waters Enterprise Zone from across the LCR	All	Wirral Waters EZ
Access to employment opportunities	All	Borough Wide
Access to both Liverpool and Manchester Airports for business access and logistics	Road	Borough Wide
Capacity and connectivity of the rail network	Rail	Borough Wide
Fragmented LCR cycle network	Active Travel	Borough Wide
Lack of a well-functioning strategic highway network including cross river traffic which can support growth and opportunities in the LCR	Road/Ferry	Wirral Waters, Hamilton Square and Woodside
Supporting housing and employment growth by establishing well-functioning, accessible and sustainable transport links	Active Travel, Bus, Rail	Borough Wide
Access to existing and future visitor attractions	Active Travel, Ferry, Rail	Borough Wide
Improving bus networks to enhance bus stations and interchange facilities	Bus	Borough Wide

Key Issues	Transport Mode	Spatial Location
Improving cross boundary travel for public transport journeys in and out of the borough to the wider LCR and to opportunities in Chester, Ellesmere Port and North Wales	Road, Ferry, Rail	Borough Wide
Creating a transport network which supports the delivery of the Growth Plan by supporting Wirral's major development areas	Road, Bus, Ferry, Rail	Wirral Waters EZ, A41 Corridor
Levels of accessibility by sustainable transport modes	Active Travel, Bus, Rail	Borough Wide
Improving access to key town centres to support economic growth and improve the vitality of district and local centres	Bus, Rail, Road	Local Town Centres
Integration of all transport modes so that seamless door to door journeys can take place within Wirral	Road, Rail, Bus	Borough Wide
Raising the awareness of and facilitate an increase in levels of safe and sustainable travel through programmes such as travel training, travel solutions and business/school travel support	Smart Choices	Borough Wide
Provision of low emission public transport systems and high quality active travel infrastructure	Active Travel	Borough Wide
Capacity, flow and connectivity of the A41 and A552 Corridors	Road and Bus	A41 Corridor
Enhancing the M53 junctions to improve capacity and access to the strategic and local highway network	Road	Birkenhead Town Centre
Network improvements and maintenance of assets to support the development of the Enterprise Zone and Wirral Waters to increase capacity and enable efficient and sustainable access	Road, Rail, Active Travel, Bus	Wirral Waters EZ, A41 Corridor
Key 'gateway' junctions to Birkenhead	Road	Birkenhead Town Centre
New and improved road infrastructure to support development of Hoylake Golf Resort	Road	Local Town Centres
Efficient traffic management	Traffic Management	Borough Wide
Off and on street car parking management enforcement	Road	Borough Wide
Infrastructure improvements and maintenance to support a resilient network, addressing pinch points and hotspots	Road	Birkenhead Town Centre, A41 Corridor
Provision of high quality public transport and cycle/pedestrian alternatives to car based journeys	Bus, Rail, Active Travel	Borough Wide
Lack of Park and Ride provision at rail stations throughout the entire borough	Road	Borough Wide
Current perception of walking and cycling as an unattractive option	Active Travel	Borough Wide
Future capacity issues on the Merseyrail Wirral Line	Rail	Borough Wide
Improving the rail network to enhance capacity and connectivity to key LCR and Wirral employment and housing	Rail	Borough Wide

Key Issues	Transport Mode	Spatial Location
locations, as well as opportunities in North Wales and Cheshire		
Frequency of current Borderlands (Wrexham-Bidston) Rail Line services	Rail	Birkenhead Town Centre
Provision and connectivity of rail services	Rail	Borough Wide
Non-electrification of Borderlands (Wrexham-Bidston) Rail line- Does not join up with progression of Merseyrail Network	Rail	Birkenhead Town Centre
Lack of facilities for disabled passengers at rail stations	Rail	Borough Wide
Infrastructure does not support an increased use of rail freight	Rail	Wirral Waters EZ, A41 Corridor
Safety and attractiveness of cycle and pedestrian facilities	Active Travel	A41 Corridor, Wirral Waters EZ , New Brighton
Bus routes do not have sufficient coverage. Particularly to key destinations such as the Enterprise Zones and key employment and housing sites	Bus	Birkenhead Town Centre, A41 Corridor
Improving the image of bus travel	Bus	Borough Wide
Facilitating the use of taxis as part of an integrated transport system	Road	Borough Wide
Lack of electric charging point infrastructure to facilitate the use of electric taxis ¹⁵	Road	Borough Wide
Urban centres lack coherent connections to route 56	Cycling	New Brighton
Lack of public transport links to Deeside and North Wales	Rail	Local Town Centres
Excessive pressure on Mersey Tunnels as a result of developments	Road	Birkenhead Town Centre, Wirral Waters EZ
Information about local cycle routes is minimal	Active Travel	Borough Wide
No flexible ticketing options to make savings on bus passes for people who want to use the bus 2 or 3 days a week	Public Transport (Bus)	Borough Wide
Journeys by public transport can in some cases take over double, and nearly triple the length of time of the same journey by car	Public Transport	Borough Wide

New Issues from Wirral Waters and A41 North Baseline Work 5.2.2

Issues from the previous pipeline set out above have been reviewed and the need to update the list has been recognised. Issues have been reconsidered in line with the spatial priorities identified within the Strategic Regeneration Framework and further work has been carried out to develop a robust evidence base for two of these areas; the A41 North Study Area and Wirral Waters Enterprise Zone.

¹⁵ Also relates to other forms of electric transport.

Issues within the A41 North and Wirral Waters study areas were identified through discussions with various stakeholder, site observations and data analysis. These additional issues are set out in Table 2 and Table 3.

Table 2: Issues identified in the A41 (North) Corridor Baseline Work

Key Issues	Transport Mode	Source
The location of historic rail corridors creates barriers to vehicle and pedestrian movement	Rail	Site Visit
Land targeted for development is isolated creating the need for new transport links	All	Site Visit
The potential of Hamilton Square as an attractive area is not realised as the quality of the buildings fabric is gradually declining	Active Travel	Site Visit
Multiple land owners within the study area may influence the types of transport schemes in the short to medium term	All	Landownership Plan (Wirral Council)
Aside from Hamilton Square, there is a lack of green space in the study area limiting opportunities for leisure and recreation	Active Travel	Site Visit
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	All	A41/Wirral Waters Environmental Constraints Report
Key roads within the study area create barriers to movement including a number of A roads through town centre areas	Active Travel	Site Visit
Surplus of cheap long stay commuter car parking increases the number of vehicles in the area and discourages walking and cycling from local areas	Road	Site Visit
Current car parking provision is of a low grade with poor lighting and surfacing	Road	Site Visit
Inconsistent on-street parking tariffs causes confusion for visitors	Road	Site Visit
Complicated road layout to the south of the study area creates confusion for visitors	Road	Site Visit
Large number of one way and closed off roads within the study area, making it harder to navigate and reducing activity and footfall on these streets	Road	Site Visit
Proximity of Wirral Waters and the potential to 'drag' significant volumes of traffic through the A41 North study area	Road	Wirral Waters
Over provision of bus infrastructure at Hamilton Square and Woodside	Bus	Discussions with Merseytravel
Restricted access for buses outside of Hamilton Square and Birkenhead Central stations	Bus	Discussions with Merseytravel
Lack of interchange from rail stations including poor walking and cycling links	Active Travel	Site Visit/Discussions with Merseytravel
Woodside ferry terminal is served by ageing infrastructure putting the future of services at risk	Ferry	Site Visit/Discussions with Merseytravel
The majority of waking and cycling routes are in poor condition decreasing the attractiveness of active modes	Active Travel	Site Visit
The biggest opportunity for pedestrian movements to the town centre is from residential areas to the south. However, this is	Active Travel	Site Visit

Key Issues	Transport Mode	Source
where major A roads create barriers to movement		
East-west pedestrian and cyclist movements are restricted by barriers to movement, including high volume roads and rail corridors	Active Travel	Site Visit
Limited infrastructure for pedestrians and cyclists including crossings, cycle lanes and secure cycle parking	Active Travel	Site Visit
Disconnect, particularly for pedestrians, between key areas in and around the study area – Woodside, Hamilton Square, Birkenhead town centre, Birkenhead Priory	Active Travel	Site Visit
Clusters of accidents occur along key pedestrian desire lines	Safety	Collision Data (Wirral Council)
The majority of accidents involving pedestrians occur in areas with the most pedestrian movements	Safety	Collision Data (Wirral Council)
Anti-social behaviour in Hamilton Square, poorly lit and poorly overlooked streets and footpaths creates intimidating environments for pedestrians	Safety	Site Visit
Large extents of brownfield land exist next to existing transport hubs i.e. Hind Street.	All	Stakeholder Workshop

Table 3: Issues identified in the Wirral Waters Baseline Work

Key Issues	Transport Mode	Source
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.	All	Site Visit
Existing development is of relatively low density across the study area, reducing the overall efficiency of space.	All	Site Visit
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.	All	A41/Wirral Waters Environmental Constraints Report
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	Road	Wirral Waters Plans
Key junctions within the study area are of poor quality and present unattractive gateways into development areas.	Road	Site Visit
Occurrences such as the dock bridges lifting and Ro-Ro ferries disembarking cause localised congestion.	Road	Site Visit
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	Rail	Workshop
Infrequent bus services at Birkenhead North provides limited interchange facilities	Bus	Site Visit/Stakeholder Workshop
Bus penetration through the Wirral Waters area is limited	Bus	Site Visit/Stakeholder Workshop

Key Issues	Transport Mode	Source
The north east of the study area is poorly served by cross-river services with neither bus or rail services available	Bus	Site Visit
Poor walking and cycling connectivity with few areas accessible from rail stations within 15 minutes walking time and limited infrastructure	Active Travel	Site Visit
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.	Active Travel	Site Visit
Clusters of accidents exist at key junctions within the study area presenting issues of road safety	Active Travel	Collision Data (Wirral Council)

5.2.3 New Issues from Traffic Model Analysis

In addition to site visits and data analysis, modelling work has been undertaken to identify the capacity constraints on the highway network and highlight junctions which may need to be addressed in the STF.

The Wirral Traffic Model (WTM) has been used to review the operational performance of the local highway network with reference to the volume over capacity (v/c) relationships for turning movements at junctions. Junctions on the network were classified according to the following capacity bands:

- 85% v/c to 100% v/c: This junction is operating with at least one turning movement that is approaching capacity and as a result there are increased queue lengths and delays.
- >100% v/c: This junction is operating over capacity for at least one turning movement.
 Queues and delays at this location are likely to grow exponentially.

The junctions which have been identified as problematic on the basis that they operate at or over capacity in one or more peak periods are listed in the table below.

Table 4: Priority Junction Capacity Modelling

Junction	Number of times the junction exceeds capacity in 1 day	Time of day the junction exceeds capacity
A552 Woodchurch Road / Holm Lane	2	AM and PM Peak
A553 Hoylake Road / Tollmache Road	2	IP and PM Peak
A552 Borough Road / A5029 Exmouth Street	2	AM and PM Peak
Borough Road / Thornton Road	2	AM and PM Peak
Borough Road / The Wiend	2	AM and PM Peak
A552 Woodchurch Road / Prenton Hall Road	2	AM and PM Peak
B5151 Storeton Road / Prenton Lane	2	AM and PM Peak
A553 Hoylake Road / B5151 Bidston Village Road	3	IP AM and PM Peak
B5148 Bebington Road / B5149 Old Chester Road	3	IP AM and PM Peak
B5136 Bebington Road / B5149 Old Chester Road	3	IP AM and PM Peak
B5137 Brimstage Road / B5136 Church Road	3	IP AM and PM Peak
A41 New Chester Road / Croft Avenue East	2	AM and PM Peak
A41 New Chester Road / Bromborough Village Road	3	IP AM and PM Peak
A5088 Poulton Bridge Road / B5145 Breck Road	3	IP AM and PM Peak
A5088 Mill Lane / A5027 Woodstock Road	3	IP AM and PM Peak
A551 Liscard Crescent / A551 Liscard Road	3	IP AM and PM Peak

Junction	Number of times the junction exceeds capacity in 1 day	Time of day the junction exceeds capacity
A551 Leasowe Road / Castleway North	2	AM and PM Peak
A540 Hillbre View / B5139 Black Horse Hill	2	AM and PM Peak
A5027 Upton Bypass / B5192 Saughall Massie Road	3	IP AM and PM Peak
A5027 Upton Road / Ford Road	2	AM and PM Peak
A551 Arrowe Park Road / Ford Road	2	IP and PM Peak
A551 Arrowe Park Road / A552 Woodchurch Road	3	IP AM and PM Peak
A540 Telegraph Road / B5138 Pensby Road	2	IP and PM Peak
A553 Hoylake Road / A554 / Supermarket Entrance	2	AM and PM Peak
A5027 Upton Road / Salacre Lane	2	AM and PM Peak
A552 Woodchurch Road / Ackers Road	2	AM and PM Peak
B5139 Frankby Road / Greasby Road	2	IP and PM Peak
B5192 Saughall Massie Road / Brookside Crescent	2	AM and PM Peak
A551 Arrowe Park Road / Arrowe Park Hospital	3	IP AM and PM Peak
A551 Leasowe Road / Greenleas Road	3	IP AM and PM Peak
A553 Conway Street / Adelphi Street	3	IP AM and PM Peak
A5027 Upton Road / Noctorum Avenue	2	AM and PM Peak
B5151 Mount Road / Lever Causeway	2	AM and PM Peak
B5151 Mount Road / Thornton Road	2	AM and PM Peak
A551 Arrowe Park Road / Arrowe Brook Road	2	AM and PM Peak
A554 King's Parade / Atherton Street	2	AM and PM Peak
A41 New Chester Road / Torr Drive	3	IP AM and PM Peak
A540 Telegraph Road / Dawstone Road	2	AM and IP Peak
A553 Hoylake Road / Millhouse Lane	2	AM and PM Peak
A553 Hoylake Road / Digg Lane	2	AM and PM Peak
B5192 Saughall Massie Road / Girtrell Road	2	AM and PM Peak
A552 Woodchurch Road / ASDA	2	AM and PM Peak
A551 Barnston Road / The Warrens Medical Centre	2	AM and PM Peak
A551 Arrowe Park Road / Arrowe Park Hospital	2	AM and PM Peak

These are highlighted on the plan overleaf which identifies the key capacity hotspot junctions across Wirral. These junctions were therefore added to the list of identified issues to ensure capacity constraints are addressed within the Strategic Transport Framework Action Plan, and that the network is able to remain resilient and supportive of growth across the borough.

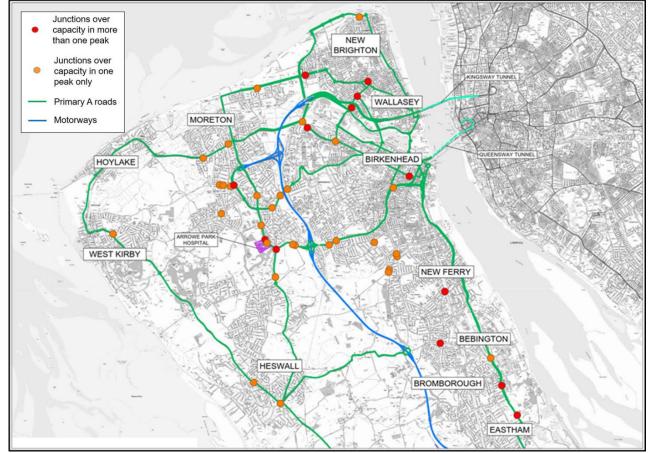


Figure 19: Junction Capacity Hotspots

5.2.4 Categorisation of Issues

As can be seen from the sections above, issues have been identified from various sources of data and previous evidential work. Therefore, issues have been combined and organised into categories to ensure comprehensive solutions can be derived.

Table 5 presents the final list of issues in 15 categories, derived from the sources described above, some of which are borough wide and some which are specific to the previously defined spatial priority areas. These have each been ascribed a unique identifying reference for use in matching with existing schemes in the following section.

This section has demonstrated the key transport issues facing Wirral which will be used to inform the development of transport schemes. Pipeline schemes will be later assessed against these issues to ensure that all issues are addressed and the transport network in Wirral is able to facilitate the ambitious growth plans in the borough.

Table 5: Final Issues List

Category	Ref	Issue	Description	Mode	Spatial Location
Mode-based	TR1	High PT journey time	Journeys by public transport can in some cases take over double, and nearly triple the length of time of the same journey by car	Public Transport	Strategic & Borough Wide
	TR2	Poor integration	Limited integration of all transport modes. Ultimately means that seamless door to door journeys cannot consistently take place within Wirral	All	Strategic and Borough Wide
	TR3	Poor quality sustainable travel	Poor provision of high quality public transport and cycle/pedestrian alternatives to car based journeys	Public Transport / Active Travel	Strategic and Borough Wide
	TR4	Walking and cycling unattractive	Current perception of walking and cycling as an unattractive option	Active Travel	Strategic and Borough Wide
	TR5	Poor public perception of bus	Poor public image and subsequent public perception of bus travel	Bus	Strategic and Borough Wide
	TR6	Disconnected use of taxis	Poor integration of taxis with the rest of the transport network	Taxis	Strategic and Borough Wide
	TR7	Lack of flexible ticketing	No flexible ticketing options to make savings on passes for people who want to use the bus 2 or 3 days a week	Public Transport	Strategic and Borough Wide
	TR8	Minimal cycle route information	Information about the local cycle routes is not widely advertised	Cycling	Strategic and Borough Wide
	TR9	Bus routing Birkenhead- centric	Most bus services, particularly between East and West Wirral, are routed via Birkenhead rather than providing direct point to point journeys	Bus	Strategic and Borough Wide
	TR10	Poor PT outside core hours	Buses typically run to standard working times that do not reflect shift patterns - Trains from West Wirral do	Public Transport	Strategic and Borough Wide

Category	Ref	Issue	Description	Mode	Spatial Location
			not start early enough to facilitate connections into LCR to align with the commuter work patterns		
	TR11	Insufficient capacity on rail network in future	Capacity and connectivity of the rail network	Rail	Strategic and Borough Wide
	TR12	Poor PT coverage in some areas	Insufficient bus networks and interchange facilities	Public Transport	Strategic and Borough Wide
	TR13	Limited low emission PT and active travel infrastructure	Limited provision of low emission public transport systems and high quality active travel infrastructure	Public Transport / Active Travel	Strategic and Borough Wide
	TR14	Low frequencies on Borderlands line	Frequency of current Borderlands (Wrexham- Bidston) Rail Line services especially on Sundays	Rail	Strategic and Borough Wide
Access	AC1	Poor access to/around Wirral Waters	Poor access to and within the Wirral Waters Enterprise Zone from across the LCR	All	Wirral Waters EZ
	AC2	Limited access to Liverpool and Manchester Airports	Poor access to both Liverpool and Manchester Airports for business access and logistics	Road / Public Transport	Strategic and Borough Wide
	AC3	Limited access to existing and future visitor attractions	Limited access to existing and future visitor attractions	Active Travel / Ferry / Rail	Strategic and Borough Wide
	AC4	Limited access to local town centres	Poor access to local town centres, limiting support of economic growth and the vitality of district and local centres	Bus / Rail / Road / Active Travel	Local Town Centres
	AC5	Congestion at Birkenhead gateway junctions	Key 'gateway' junctions to Birkenhead	Road	Birkenhead Town Centre
	AC6	Limited accessibility by sustainable modes	Limited levels of accessibility by sustainable transport modes.	Active Travel / Bus / Rail	Strategic and Borough Wide
	AC7	Lack of facilities for disabled passengers at rail stations	Lack of facilities for disabled passengers at rail stations	Rail	Strategic and Borough Wide
	AC8	Poor access to Hoylake Town Centre from Municipal Golf Club	Carr Lane rail crossing acts as a pinch point	Active Travel	Local Town Centres

Category	Ref	Issue	Description	Mode	Spatial Location
Infrastructure	IN1	Poor connections to NCN Route 56	Urban centres lack coherent connections to route 56	Active Travel	New Brighton
	IN2	Poor connections to Port infrastructure	Poor links to Port infrastructure across the LCR. Compromising 'Superport' growth and opportunities in key growth sectors	Road / Rail / Port	Wirral Waters EZ
	IN3	Limited infrastructure to major growth areas	Creating a transport network which supports the delivery of the Growth Plan by supporting Wirral's major development areas	Road / Bus / Ferry / Rail	A41 Corridor, Wirral Waters EZ
	IN4	Limited rail freight infrastructure	Infrastructure does not support an increased use of rail freight	Rail	A41 Corridor, Wirral Waters EZ
	IN5	Safety of cycle and pedestrian facilities	Cycle and pedestrian facilities could be made more safe and attractive for use.	Active Travel	A41 Corridor, Wirral Waters EZ, New Brighton, Local Town Centres
	IN6	Inadequate road infrastructure to Hoylake	Inadequate road infrastructure to support development of Hoylake Golf Resort - Need for better access to Hoylake in the context of the Golf Resort plans	Road	Local Town Centres
	IN7	Lack of Park and Ride provision	Lack of Park and Ride provision at rail stations throughout the entire borough	Road	Strategic and Borough Wide
	IN8	Lack of rail electrification of Borderlands	Non-electrification of Borderlands (Wrexham- Bidston) Rail line- Does not join up with progression of Merseyrail Network	Rail	Local Town Centres
	IN9	Excessive pressure on Mersey Tunnels	Excessive pressure on Mersey Tunnels as a result of increased demand associated with developments	Road	Birkenhead Town Centre, Wirral Waters EZ
	IN10	Lack of electric charging infrastructure	Lack of electric charging point infrastructure to	Road / Bus / Taxi	Strategic and Borough Wide

Category	Ref	Issue	Description	Mode	Spatial Location
			facilitate the use of electric vehicles (cars, buses, taxis)		
Connectivity	CO1	Fragmentation of LCR cycle network	Fragmentation of LCR cycle network - The cycling infrastructure within Wirral's urban centres is often fragmented and unconnected to the regional cycling routes such as Route 56	Active Travel (Cycling)	Strategic and Borough Wide
	CO2	Lack of direct rail connectivity	Capacity and connectivity of the rail network - Connections between different branches in the Wirral require a change of service at Hamilton Square. This subsequently increases journey times thereby reducing the attractiveness of using public transport	Rail	Strategic and Borough Wide
	CO3	Difficult cross-boundary PT journeys	Inadequate cross boundary travel for public transport journeys in and out of the borough to the wider LCR and to opportunities in Chester, Ellesmere Port and North Wales - Lack of public transport links to Deeside and North Wales	Public Transport	Strategic and Borough Wide
	CO4	Connectivity of A41 and A552 corridors	Capacity, flow and connectivity of the A41 and A552 Corridors are all challenging (although bus priority on A552 has improved the situation)	Road and Bus	A41 Corridor
	CO5	Limited strategic highway network	Strategic highway network, including cross river traffic, is limited in extent, capacity and connectivity, compromising growth and opportunities in the LCR	Road / Ferry	Wirral Waters EZ, Hamilton Square and Woodside
	CO6	Poor rail network connectivity to major development	Rail network capacity and connectivity to key LCR and Wirral employment and	Rail	Strategic and Borough Wide

Category	Ref	Issue	Description	Mode	Spatial Location
			housing locations, as well as opportunities in North Wales and Cheshire		
	C07	Poor rail network connectivity to Heswall	Heswall is poorly served by rail compared to other urban areas across the Wirral	Rail	Local Town Centres
	CO8	Inefficient traffic management	Inefficient traffic management - much of the UTMC and CCTV equipment is obsolete	Traffic Management / Road / Bus	Strategic and Borough Wide
Highway	HI1	Challenges with highway infrastructure and maintenance	Limited resources create challenges for highways infrastructure and maintenance to support a resilient network, exacerbating pinch points and hotspots	Road	Strategic and Borough Wide
	HI2	Inadequate capacity and access to M53 junctions	Capacity and access to various M53 junctions is inadequate, compromising the strategic and local highway network	Road	Strategic and Borough Wide
	HI3	Illegal parking and difficulties in enforcing restrictions	Illegal parking observed in several restricted locations across the borough	Road	Strategic and Borough Wide
	HI4	Congestion through Kingsway Tunnel	Potential future congestion through the Kingsway Tunnel as a result of new development	Road	Strategic and Borough Wide
	HI5	Congestion at Woodside and on Queensway approach	Tunnel approach and network around Woodside is operating close to capacity in the AM peak	Road	Hamilton Square and Woodside
	HI6	Congestion on town centre approaches (A552)	Current congestion on approaches into the town centre, particularly the A552	Road	Birkenhead Town Centre
Junction Capacity	JU1-JU44	Capacity constraints at junctions Identified in Table 4	Junction capacity issues	Road	Birkenhead Town Centre, New Brighton, Local Town Centres
Sustainability	SU1	Limited availability of sustainable travel programmes	Limited awareness and availability of safe and sustainable travel through	Smart Choices	Strategic and Borough Wide

Category	Ref	Issue	Description	Mode	Spatial Location
			programmes such as travel training, travel solutions and business/school travel support		
	SU2	Lack of sustainable transport links to support growth	Sustainable transport links do not support housing and employment growth	Active Travel / Bus / Rail	Strategic and Borough Wide
	SU3	Poor public environment and Public Realm in East Wirral	Urban centres in East Wirral require rejuvenation, including improved retail and leisure offers and better Public Realm	Active Travel	Birkenhead Town Centre, New Brighton, Local Town Centres
	SU4	High cost and complex pricing of bus use	Bus fares have increased more than motoring costs over the same period, and can be confusing to new customers	Bus	Strategic and Borough Wide
A41 North Context	CTX1	Historic Rail Corridors	The location of historic rail corridors creates barriers to vehicle and pedestrian movement	Rail	A41 Corridor
	CTX2	Isolated development land	Land targeted for development is isolated creating the need for new transport links	All	A41 Corridor
	CTX3	Public Realm at Hamilton Square	The potential of Hamilton Square as an attractive area is not realised as the quality of buildings are gradually declining and the perception of crime is prevalent.	Active Travel	A41 Corridor
	CTX4	Multiple land owners	Multiple land owners add challenges to the planning and implementation of transport schemes in the short to medium term	All	A41 Corridor
	CTX5	Lack of green space	Aside from Hamilton Square, there is a lack of green space in the study area limiting opportunities for leisure and recreation	Active Travel	A41 Corridor
	CTX6	Environmental constraints	A number of environmental constraints have been	All	A41 Corridor

Category	Ref	Issue	Description	Mode	Spatial Location
			identified within the study area and within 500m of the study boundary which may restrict options for transport improvements		
A41 North Vehicle Access	VA1	Road severance	Key roads within the study area create barriers to movement including a number of A roads through town centre areas	Active Travel	A41 Corridor
	VA2	Surplus of cheap long stay car parking	Surplus of cheap long stay car parking increases the number of vehicles in the area and discourages walking and cycling from local areas	Road	A41 Corridor
	VA3	Car parking quality	Current car parking provision is of a low grade with poor lighting and surfacing	Road	A41 Corridor
	VA4	Inconsistent on-street parking tariffs	Inconsistent on-street parking tariffs causes confusion for visitors	Road	A41 Corridor
	VA5	Complicated highway layout	Complicated road layout to the south of the study area creates confusion for visitors	Road	A41 Corridor
	VA6	Excessive traffic management	Large number of one way and closed off roads within the study area, making it harder to navigate and reducing activity	Road	A41 Corridor
	VA7	Proximity of Wirral Waters	Proximity of Wirral Waters and the potential to 'drag' significant volumes of traffic through the A41 study area	Road	A41 Corridor
A41 North Public Transport	PT1	Over provision of bus infrastructure	Over provision of bus infrastructure at Hamilton Square and Woodside	Bus	A41 Corridor
	PT2	Poor bus/rail interchange at Hamilton Square and Birkenhead Central	Restricted access for buses outside of Hamilton Square and Birkenhead Central stations	Bus	A41 Corridor

Category	Ref	Issue	Description	Mode	Spatial Location
	PT3	Poor interchange at rail stations for active modes	Lack of interchange from rail stations including poor walking and cycling links	Active Travel	A41 Corridor
	PT4	Age of Woodside Ferry Terminal	Woodside ferry terminal is served by ageing infrastructure risking future operations	Ferry	A41 Corridor
A41 North Active Travel	ACT1	Poor quality sustainable travel routes	Some walking and cycling routes are in poor condition decreasing the attractiveness of active modes	Active Travel	A41 Corridor
	ACT2	Severance to movement from the south	The biggest opportunity for pedestrian movements to the town centre is from residential areas to the south. However, this is where major A roads create barriers to movement	Active Travel	A41 Corridor
	ACT3	Some unsafe and unattractive footways	East-west pedestrian and cyclist movements are restricted by unsafe and unattractive footways	Active Travel	A41 Corridor
	ACT4	Limited infrastructure for pedestrians and cyclists	Limited infrastructure for pedestrians and cyclists including crossings, cycle lanes and secure cycle parking	Active Travel	A41 Corridor
	ACT5	Disconnected infrastructure for Active Travel	Disconnect, particularly for pedestrians, between key areas in and around the study area – Woodside, Hamilton Square, Birkenhead town centre	Active Travel	A41 Corridor
A41 North Safety	SAF1	Accident clusters	Clusters of accidents occur along key pedestrian desire lines	Safety	A41 Corridor
	SAF2	High proportional pedestrian accident rate	The majority of accidents involving pedestrians occur in areas with the most pedestrian movements	Safety	A41 Corridor
	SAF3	Anti-social behaviour	Anti-social behaviour in Hamilton Square, poorly lit	Safety	A41 Corridor

Category	Ref	Issue	Description	Mode	Spatial Location
			and poorly overlooked streets and footpaths creates intimidating environments for pedestrians – need to better integrate all members of community by providing better public realm and linkage.		
WW Context	WWC1	Development land occupation	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	All	Wirral Waters EZ
	WWC2	Low density of development land	Existing development is of relatively low density across the study area, reducing the overall efficiency of space	All	Wirral Waters EZ
	WWC3	Environmental constraints	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	All	Wirral Waters EZ
WW Vehicle Access	WWV1	Generation of HGV movements	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	Road	Wirral Waters EZ
	WWV2	Quality of junctions	Key junctions within the study area present unattractive gateways into development areas	Road	Wirral Waters EZ
	WWV3	Localised congestion	Occurrences such as the dock bridges lifting and ferries disembarking cause localised congestion	Road	Wirral Waters EZ

Category	Ref	Issue	Description	Mode	Spatial Location
WW Public Transport	WWP1	Limited rail access	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	Rail	Wirral Waters EZ
	WWP2	Limited interchange at Birkenhead North	Infrequent bus services at Birkenhead North provides limited interchange facilities	Bus	Wirral Waters EZ
	WWP3	Limited bus penetration	Bus penetration through the Wirral Waters area is limited	Bus	Wirral Waters EZ
	WWP4	Limited cross-river public transport to north east	The north east of the study area is poorly served by cross-river services with neither bus or rail services available	Bus	Wirral Waters EZ
WW Active Travel	WWA1	Poor walking and cycling connectivity	Poor walking and cycling connectivity with few areas accessible from rail stations within 15 minutes walking time	Active Travel	Wirral Waters EZ
	WWA2	Limited pedestrian and cycle facilities	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	Active Travel	Wirral Waters EZ
WW Safety Source: <insert notes="" or="" source=""></insert>	WWS1	Accident clusters	Clusters of accidents exist at key junctions within the study area, presenting issues of road safety	Active Travel	Wirral Waters EZ

Source: <Insert Notes or Source>

6 Review of Previous Wirral Transport Pipeline

6.1 Introduction

As part of the LCR Transport Investment Pipeline, Mott MacDonald produced the Wirral Transport Investment Pipeline (2016). The output of this commission produced a long list of 60 intervention ideas developing on the issues and opportunities identified in the baseline work.

The Merseytravel Transport Investment Pipeline was also produced as part of the LCR Transport Investment Pipeline which address current and future issues across Merseytravel's five core delivery areas (Rail, Bus, Ferries, Tunnels and Smarter Choices). Merseytravel's pipeline sits alongside the pipelines of the six local authorities in LCR, Liverpool, Halton, Sefton, Knowsley, St. Helens and Wirral. Of this, seven schemes on the Merseytravel Transport Investment Pipeline are directly relevant to Wirral.

In November 2016, Kellogg Brown & Root were commissioned by Wirral Council to produce an East Wirral Options and Feasibility Study. From the final deliverable of this commission, four schemes were identified for Wirral.

This section will introduce and review:

- The 60 schemes included in the original Wirral Transport Pipeline.
- The 7 schemes included in the original Merseytravel Pipeline that are relevant to Wirral.
- The 4 schemes identified by KBR in the East Wirral Study.

This will include exploring if any of the identified interventions have been taken forward for development since 2016.

6.2 Scheme Pool from Previous Work

Table 6 to Table 8 below set out the long list of schemes produced for the previous Wirral Pipeline including indicative costs and timescales. This review of previously identified schemes shows that little, or no, progress has been made since 2016.

6.2.1 Previous Wirral Transport Pipeline Schemes

Schemes aimed at facilitating the Wirral Waters development have made the most progress with various funding sources identified or secured, designs developed for road infrastructure improvements and construction of identified active travel improvements. Details of progress to date for each scheme as provided by officers at Wirral Council is also set out in the table below.

Table 6: Schemes listed in the 2016 Wirral Pipeline

		•			
No.	Scheme Description	Mode	Cost	Timescale	Progress to Date
1	A41 Corridor (Capacity)	Road	£10m-£20m	2019-2024	TAG feasibility study undertaken
2	A41 Rail Freight Link	Rail	£3m-£10m	2024-2034	
3	A41 Cycle and Pedestrian Connectivity	Cycling, Public Transport, Road	£3m-£10m	2019-2024	Funding has been secured under STEP and is due to be completed by 2020
4	A41 Bus Connectivity and Improvements	Public Transport	£1m-£3m	2019-2021	
5	Port Wirral	Road	£1m-3m	2019-2024	
6	Mersey Tunnels	Road/Public Transport	£10m-£20m	2019-2024	
7	Water Taxis	Public Transport	£3m-£10m	post-2034	
8	Wirral Waters Cross Dock Connectivity	Road, Active Transport	£20m-£50m	2024-2034	
9	Gateways to Wirral Waters	Road	£10m-£20m	2024-2034	TAG Feasibility Fund money has been awarded to Wirral Council to undertake some preliminary feasibility work to take the project towards OBC including A and C bridge replacement.
10	Wirral Waters Supporting Road Infrastructure	Road	£20m-£50m	2024-2034	Supporting road infrastructure is included in the TAG Feasibility funding award. Design for Tower Road Civilised Street has been progressed and an NPIF bid has been successful (this will only complete a phase 1 from Canning Street roundabout to the Ro-Ro roundabout).
11	Wirral Waters Active Travel Connectivity	Road, Active Transport	£3m-£10m	2019-2024	Funding has been secured through STEP 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.
12	Wirral Waters Streetcar (Mass Transit)	Rail	£50m-£150m	2024-2034	Trampower have produced a feasibility report for phase 1a and Vectos have produced a capital expenditure report.
13	Rail Freight Links -Wirral Waters	Rail	£10m-£20m	2024-2034	
14	Birkenhead Town Centre Gateways	Road	£10m-£20m	2024-2034	Included within TAG feasibility study work.
15	Birkenhead Town Centre Streetscape	Active Travel	£3m-£10m	2019-2024	Included within TAG feasibility study work.
16	Wirral Waters Public Transport Accessibility	Public Transport	£1m-£3m (£100K-500K p.a)	2019-2021	Merseytravel have been working to 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
17	A553/A554 Improvements	Road/Cycling	£3m-£10m	2019-202	
18	Wirral Line Stations Master Plan	Rail	£20m-£50m	2019-2024	
19	Wirral Line Park and Ride	Rail	£1m-£3m	2019-2021	Merseytravel are currently working towards the target of, site purchase and design completion for the upgrade for Spital Park and Ride car park.

No.	Scheme Description	Mode	Cost	Timescale	Progress to Date
20	Improvements to Bus Infrastructure at Birkenhead Park and Conway Park	Public Transport	£10m-£20m	2019-2024	
21	Birkenhead North-Bus/Rail Interchange Improvements	Public Transport	£3m-£10m	2019-2021	
22	New Brighton- Bus/Rail Interchange Improvements	Public Transport	£1m-£3m	2019-2021	
23	West Kirby- Bus/Rail Interchange Improvements	Public Transport	£1m-£3m	2019-2021	
24	Heswall Public Transport Connectivity	Public Transport	£3m-£10m	2019-2024	
25	Coastal Cycling Strategy	Active Travel	£3m-£10m	2019-2021	
26	Wirral Line Connectivity	Public Transport	£10m-£20m	2019-2024	
27	Smart/Integrated Ticketing	Public Transport	<£10m	2019-2021	
28	Community Road Safety Promotion	All	£100-500k	2019-2021	Wirral Council has undertaken wider engagement, through businesses under the Mind Your Business programme.
29	Airport Accessibility (Signage)	Road	£1m-£3m	2019-2024	
30	Capacity Improvements to M53	Road	£10m-£20m	2019-2024	
31	M53 Junction Approaches Improvements	Road	£1-3m	2019-2024	
32	M53 Smart Motorways between Junction 5 and 11	Road	£3m-£10m	2019-2021	This scheme has been discontinued by the HE.
33	New and Upgraded UTMC and CCTV	Traffic Management	£10m-£20m	2019-2024	The Urban Traffic Management and Control (UTMC) upgrade has been awarded funding via LGF3 Key Route Network (KRN).
34	Active Travel Route Across M53	Active Travel	£3m-£10m	2019-2021	
35	Active Travel Connectivity to Local Centres	Active Travel	£1m-£3m	2019-2024	
36	Residential Road Streetscape	Road	£1m-£3m	2019-2021	
37	Travel Solutions	Active Travel, Public Transport	£100-500k	2019-2021	Received Public Health funding for 2 years post LSTF, which finished in March 2017. There is funding for a smaller scale City Region scheme for 12 months utilising the Cycling and Walking to Work Pilot fund money.
38	Business Travel Support	Smarter Choices	£100k-£500k	2019-2021	
39	Wirral Active Travel Campaign	Active Travel	£100k-£500k	2019-2021	The scheme links to LCWIP and Sustrans Bike Life.
40	Wirral-Maintain our Assets	Road	£20-£50m	2024-2034	Funding has been awarded via LGF3 KRN to resurface the A41 Rock Ferry Bypass
41	LED Phase 2	Road	£10m-£20m	2019-2024	Awarded - funding secured through Council Capital for LED and Salix for column replacement.
42	Access to Deeside	Public Transport	£100-500k	2019-2021	

No.	Scheme Description	Mode	Cost	Timescale	Progress to Date
43	Introduce New Borderlands (Wrexham-Bidston) Line Stations	Rail	£20m-£50m	2024-2034	
44	Extend Borderland (Wrexham- Bidston) Line	Rail	£50m-£150m	2024-2034	
45	New Brighton Accessibility Improvements	Road	£1m-£3m	2019-2021	
46	Town Meadow/Ledsham New Stations	Rail	£3m-£10m	2024-2034	
47	Wirral SUD Schemes	Active Travel	£1m-£3m	2019-2021	There is scheme under development with a route identified along the Birkett to Wirral Waters, awaiting funding confirmation.
48	Saughall Massie Link Road- New Infrastructure	Road	£3m-£10m	2019-2024	TAG Feasibility Fund money has been awarded to Wirral Council to undertake some preliminary feasibility work to take the project towards OBC.
49	Saughall Massie Road- Infrastructure Upgrade	Road	£3m-£10m	2019-2024	TAG Feasibility Fund money has been awarded to Wirral Council to undertake some preliminary feasibility work to take the project towards OBC.
50	Heron Road Improvements	Road	£3m-£10m	2019-2024	
51	Cycle Route to Arrowe Park and the Hospital	Cycle	£1m-£3m	2017-2021	
52	A552 Corridor Capacity Improvements	Road and Pedestrian	£3m-£10m	2019-2024	
53	A540 Heswall Pinch Point Improvements	Road	£3m-£10m	2019-2021	
54	Brimstage Bus Connectivity	Public Transport	£1m-£3m	2024-2034	
55	Clatterbridge to Mersey Waterfront Corridor Improvements	Road/Active travel	£3m-£10m	2019-2024	
56	Green Lane Station Refurbishment	Rail	£3m-£10m	2019-2024	
57	Park and Ride at Birkenhead Central	Public Transport	£3m-£10m	2019-2024	
58	Meols Station Accessibility	Rail	£3m-£10m	2019-2021	
_	Matt MaaDanald				

6.2.2 East Wirral Transport Study (Kellogg-Brown Report) Schemes

Table 7: Schemes listed in the East Wirral Transport Study

No.	Scheme Description	Mode	Cost	Timescale	Progress to Date
59	Woodside Ferry Travel	Public Transport	None specified	None specified	-
60	Europa Boulevard/Conway Park Station Re-modelling	Public Transport	None specified	None specified	-
61	Birkenhead Town Station	Public Transport	None specified	None specified	-
62	Relocation of Birkenhead Bus Station	Public Transport	None specified	None specified	-

Source: Mott MacDonald

6.2.3 City Region Pipeline Schemes Relevant to Wirral

Table 8: Schemes listed in the Merseytravel Pipeline

63 Mersey Tunnel Toll Plaza Congestion Management 64 Queensway Tunnel Toll Plaza Road £20m-£50m 2019-2024 - 65 Queensway Tunnel Resilience Measures 66 Bidston Moss Viaduct Major Maintenance 67 Mersey Tunnel Flood Resilience Road £10m-£20m 2019-2024 - 80 £20m-£50m 2019-2024 - 80 £20m-£50m 2024-2034 - 80 £20m-£50m 2024-2034 - 80 £20m-£50m 2024-2034 - 80 £150m 2019-2024 -	No.	Scheme Description	Mode	Cost	Timescale	Progress to Date
Re-Modelling 65 Queensway Tunnel Resilience Road £20m-£50m 2019-2024 - Measures 66 Bidston Moss Viaduct Major Road £50m- 2024-2034 - Maintenance £150m	63	•	Road	£10m-£20m	2016-2019	-
Measures 66 Bidston Moss Viaduct Major Road £50m- 2024-2034 - Maintenance £150m	64	•	Road	£20m-£50m	2019-2024	-
Maintenance £150m	65		Road	£20m-£50m	2019-2024	-
67 Mersey Tunnel Flood Resilience Road £10m-£20m 2019-2024 -	66	•	Road		2024-2034	-
	67	Mersey Tunnel Flood Resilience	Road	£10m-£20m	2019-2024	•
68 Behaviour Change Measures Smarter Choices £500k-£1m p.a. 2019-2024 -	68	Behaviour Change Measures	Smarter Choices	£500k-£1m p.a.	2019-2024	•
Employment Travel Solutions Smarter Choices £500k-£1m p.a. 2019-2024 -		Employment Travel Solutions	Smarter Choices	£500k-£1m p.a.	2019-2024	•
E-Mobility and Low Emission Smarter Choices £10m-£20m 2019-2024 Under development. Vehicle Infrastructure		•	Smarter Choices	£10m-£20m	2019-2024	Under development.
Smart Ticketing Smarter Choices >£150m 2019-2024 To be updated following the Transforming Cities Fund award.		Smart Ticketing	Smarter Choices	>£150m	2019-2024	To be updated following the Transforming Cities Fund award.
69 Improved Ferry Service Public Transport To be updated following the Transforming Cities Fund award.	69	Improved Ferry Service	Public Transport	-	-	To be updated following the Transforming Cities Fund award.

When reviewing the 71 schemes from various previous studies listed above it became clear that the Wirral Transport Pipeline requires a more radical refresh in order to support the Strategic Regeneration Framework and focus interventions in certain areas of development. There is also a clear need to identify the schemes which may be considered to be enabling schemes from one or more of the other interventions. The subsequent section describes the process undertaken to identify gaps in the Strategic Transport Framework Action Plan in terms of achieving the aims and objectives outlined in the SRF.

6.3 Gap Analysis

The schemes outlined in the above sections identified through previous studies provided the basis for option development. However, these schemes have been reviewed to identify gaps in order to ensure all key issues are addressed and the pipeline is fully aligned with the SRF.

6.3.1 Matching of Issues and Previous Schemes

Chapter 3 of this document sets out a list of the key transport issues across Wirral which was compiled following extensive evidence base research and discussions with key stakeholders.

The final list of key issues has been examined against the schemes identified in previous pipeline work. These issues were matched with a scheme or number of schemes that would address it. This led to the identification of issues with no or few schemes to address them therefore informing areas where option development should be focused.

Prior to the development of new schemes, the following issues were not addressed within STF Action Plan:

- Fragmented use of taxis- fragmentation of the use of taxis as part of an integrated transport system.
- Bus routing Birkenhead-centric-most bus services, particularly between East and West Wirral, are routed via Birkenhead rather than providing direct point to point journeys.
- Poor PT outside core hours- buses typically run to standard working times that do not reflect shift patterns - trains from West Wirral do not start early enough to facilitate connections into LCR to align with the commuter work patterns.

New schemes were developed to address these issues during the next stage of work which is discussed in the following Section.

6.3.2 Alignment of Previous Schemes with SRF objectives

As highlighted in Chapter 2, the Wirral Strategic Regeneration Framework (SRF) sets out the spatial priorities and challenges for economic growth in the borough. This has a focus on the areas of significant growth potential, identified as the spatial priorities which are:

- Birkenhead Town Centre
- Hamilton Square and Woodside.
- Wirral Waters Enterprise Zone.
- The A41 Corridor
- Wirral International Business Park
- New Brighton
- Local Town Centres

When considered alongside the strategic borough-wide geography, there are eight spatial priorities to be considered.

Six strategic themes have also been identified under the SRF to drive economic growth which include:

- High Quality Housing.
- · Employment, Skills and Economic Development.
- Excellent Connectivity transport and digital.
- The Tourism and Culture offer.
- Sustainable development and a high-quality environment.
- A great place to live and work healthier lifestyles and safer neighbourhoods.

Another key component of the strategic vision of the SRF is policy context, namely the Wirral Transport Strategy: Connecting Wirral (2015) which sets four priorities:

- Priority 1: Keep traffic moving safely and efficiently.
- Priority 2: Reliable and affordable public transport.
- Priority 3: Encourage healthy active travel.
- Priority 4: Inclusive integrated transport that supports our resident's needs.

In total, there are therefore 18 spatial priorities and strategic themes to consider in relation to the schemes/

Aligning with spatial priorities and strategic themes and priorities outlined in the SRF and local policy will be key to ensuring growth across the borough is deliverable and sustainable. Therefore, all of the above components have been considered when reviewing the previous schemes in the context of current growth and identifying gaps.

Each of the previous 71 schemes was given a score between 0 and 2 against the spatial priorities and strategic themes identified in the SRF and the priorities outlined within the Wirral Transport Strategy (0 being the least aligned to that component).

This produced an overall score for each scheme which translated to one of five categories as illustrated below:



Figure 20 provides a snapshot of this stage in the gap analysis process with comments of the SRF and Wirral Transport Strategy across the top and the overall score for each scheme to the right. The full table of results is provided in Appendix A.

Figure 20: Previous Scheme Alignment with SRF and Wirral Priorities (Incomplete Table – see Appendix A for full table)

Figure 20: Previous Scheme Alignment with SRF and Wirral Priorities (Incomplete Table – see Appendix A for full table)								_										
					Spatial P	riority		 			Str	rategic Theme	 •		Wirral Tran	sport Strategy		ı
Scheme No.	Scheme Description	Birkenhead Town Centre		Woodside	Wirral Waters EZ	Z A41 Corridor	Wirral International Business Park	 Local Towr Centres	IHigh	Employment, Skills, Economic Development	Connectivity - Transport/Digita		Healthier lifestyles and safer neighbourhoods	Keep traffic moving safely and efficiently	Reliable and affordable public transport	Encourage healthy active travel	Inclusive integrated transport that supports our residents needs	Score
41	LLED Phase 2																	34
	Wirral Line Stations Master Plan																	32
	Wirral Line Connectivity																	32
- 3	A41 Cycle and Pedestrian Connectivity																	31
27	Smart/Integrated Ticketing																	31
35	Active Travel Connectivity to Local Centre																	31
17	7 A553/A554 Improvements																	30
19	Wirral Line Park and Ride																	30
25	Coastal Cycling Strategy																	30
- 4	A41 Bus Connectivity and Improvements																	29
34	Active Travel Routes Across the M53																	29
1	A41 Corridor (Capacity)																	28
28	Community Road Safety Promotion																	28
47	Wirral SUD Schemes																	27
52	A552 Corridor Capacity Improvements																	27
57	Park and Ride at Birkenhead Central																	27
10	Wirral Waters Supporting Road Infrastr	l																26
11	Wirral Waters Active Travel Connectivity																	26
12	Wirral Waters Streetcar (Mass Transit)																	26
14	Birkenhead Town Centre Gateways																	25
15	Birkenhead Town Centre Streetscape																	25
16	Wirral Waters Public Transport Accessit																	25
30	Capacity Improvements to the M53																	25
6	Mersey Tunnels																	24
9	Gateways to Wirral Waters																	24
31	M53 Junction Approaches Improvement																	24
44	Extend Borderland (Wrexham-Bisdston)																	24
20	Improvements to Bus Infrastructure at E	3																23
	Business Travel Support																	23
39	Wirral Active Travel Campaign																	23

39|Wirral Active Travel Campaign
Source: Mott MacDonald

Scores for each spatial priority and strategic themes were combined together taking into account all schemes. This produced an overall score for each theme which was ranked from the highest to the lowest.

Of the eighteen priorities and themes tested, the nine which ranked the lowest in terms of coverage from the previous pipeline of schemes are shown in the list below

- Wirral Waters EZ
- Hamilton Square
- Birkenhead Town Centre
- Woodside
- Wirral International Business Park
- Encourage healthy active travel
- A41 Corridor
- New Brighton
- High Quality Housing

It was therefore concluded that additional schemes were required to be added to the long list for Wirral Strategic Transport Framework Action Plan that address the lowest scoring themes noted above. The compilation of the full scheme long list is the subject of the next Chapter.

7 Recommendations for new Wirral Strategic Transport Framework schemes

Following the identification of gaps within the previous Transport Pipeline there is a need to consider new schemes to account for all spatial priority areas and themes outlined in the SRF and all key issues. This section outlines the additional schemes have been identified and how these fit within the updated long list.

7.1 Introduction

In this section, the new schemes that will be considered as part of the long list for the Strategic Transport Framework Action Plan are identified. These have emerged from a variety of sources including:

- The Issue and SRF gap analysis described in the previous Chapter;
- A strategic internal workshop held amongst Mott MacDonald employees with a strong working or residential knowledge of the borough; and
- Emerging schemes from the ongoing A41 North and Wirral Waters Strategic Transport
 Feasibility Study work to address the more detailed issues and opportunities identified in
 these locations and discussed in the previous section.

7.2 New Scheme Identification

A number of new schemes have been identified in addition to those listed in the previous pipeline and previous studies. New schemes have emerged through identifying the gaps where key issues are not addressed by schemes and through discussions with stakeholders and the project team following detailed analysis of transport conditions across Wirral.

7.2.1 New schemes as a result of Issues and SRF Gap Analysis

Following a review of the key transport issues and aims of the SRF, a number of gaps were identified in the previous pipeline of schemes. The following issues were identified, which were not addressed by schemes in the previous pipeline:

- Fragmentation of the use of taxis as part of an integrated transport system.
- Most bus services, particularly between East and West Wirral, are routed via Birkenhead rather than providing direct point to point journeys.
- Buses typically run to standard working times that do not reflect shift patterns Trains from West Wirral do not start early enough to facilitate connections into LCR to align with the commuter work patterns.

These issues were addressed by the addition of the following scheme to the long list:

Improved and Integrated Taxi and Demand Responsive Transport (DRT) Coverage- working
with operators and using technology such as Uber and Arriva Click to ensure that bus and
taxi services cover areas which conventional public transport cannot provide for.

7.2.2 New schemes as a result of Internal Workshop

An additional workshop was held within the Mott MacDonald Integrated Transport team on the 11th April 2018 to present emerging issues and opportunities. The workshop consisted of a team with local knowledge and transport planning expertise who were asked to present feedback on the issues and opportunities and highlight any additional schemes or issues not accounted for.

A number of schemes were suggested at the workshop – these were as follows:

- Closure of Queensway Tunnel.
- Repurposing of Queensway Tunnel for Public Transport only.
- Kingsway Capacity Increase.
- New Cross-River Link e.g. Eastham Aighurth or Bromborough to Otterspool.
- Redevelopment of Woodside Bus Station for alternative public use.
- Improved bus interchange at Hamilton Square.
- Reconfiguration of Woodside Gyratory roundabout.
- Dedication of Woodside area for leisure, heritage and tourism use.
- Use of old rail line corridors to create green link between Seacombe, Wirral Waters, Woodside and Rock Ferry.
- Promote student market in Birkenhead Town Centre to encourage greater levels of active mode activity at evenings and weekends.
- Create a direct public transport service between Seacombe and Liverpool via Wirral Waters.
- Create a dedicated transit link from New Brighton to Liverpool via the Promenade serving Seacombe, Wirral Waters, Duke Street (Birkenhead Park), Corporation Road, and entering the Queensway Tunnel via the service tunnel access on Rendel Street. The transit link could use Queensway tunnel to access Liverpool.
- Restrict navigable waterway to the west of Duke Street to allow the bridge to be replaced and fixed (non-lifting) – this will allow additional bridges including footbridges.
- Create a pedestrian / cycle link along the waterfront from Woodside to Seacombe (and continuing via the Promenade).
- Cover the Wallasey Tunnel Approach cutting to overcome severance between Seacombe and Wirral Waters.
- Remove redundant industrial infrastructure adjacent to Wirral Waters to reduce severance.
- Relocate Birkenhead RO-RO to an alternative location on the Mersey.

These 17 schemes were added to the long list which is set out in the following section.

7.2.3 New schemes as a result of ongoing A41 North and Wirral Waters feasibility studies

Alongside the development of this action plan a number of schemes have been identified as part of the ongoing transport feasibility studies for the Wirral Waters EZ and A41 North corridor. Schemes suggested as part of this work are listed below:

- Access Road to Rosebrae Development Site
- Access into Hind Street (Mollington Link Road);
- Realignment/removal of the A41 Chester Street underpass, A5227 Town Link Viaduct, and Queensway Toll plaza.
- Active travel routes

- Woodside Ferry Terminal
- Reconfigure Woodside Bus Station
- Reconfigure Woodside Gyratory Bus stops
- Hamilton Street two-way outside Station
- Relocate Bus Terminus at Woodside
- Car park facility for Birkenhead Police Station
- Remove mini-roundabouts at Hamilton Square
- Remove Hamilton Street / Duncan Street road closure
- Improved walk route between Woodside and Hamilton Square
- Improved Public Realm outside Hamilton Square rail station
- Improved Public Realm Argyle Street
- Off-street car parking at Birkenhead Central
- Improved bus / rail interchange at Birkenhead Central
- De-traffic / Public Realm improvements Conway Street
- Improved pedestrian crossing facilities along Argyle Street
- Improved access to Birkenhead Priory
- Conway Park Public Realm improvements
- Pedestrian wayfinding strategy
- Improve Argyle Street south approach to Hamilton Square
- Green walk / cycle route on dis-used railway
- Transit route on dis-used railway
- Close Queensway Tunnel to general traffic and build new link elsewhere
- Queensway Tunnel public transport only
- Improve pedestrian and cycle crossings of Borough Road
- Improve pedestrian linkage to Birkenhead town centre from south
- Improved crossing facilities/road safety improvements at Whetstone Lane/Borough Road Junction
- Pedestrian overbridge of Borough Road, Whetstone Lane
- Signage/ better entrance to retail core

7.3 New Long List

Table 9 sets out the full list of options developed as part of the Strategic Transport Framework Action Plan before any form of appraisal. This list has been compiled through the processes described in the previous sub-sections.

The long list is made up of a combination of new schemes and schemes presented in the previous pipeline. Previous schemes that have been taken forward to this stage have been assessed in terms of their contribution to the SRF and their ability to address the key transport issues identified.

The long list in Table 9 is therefore a comprehensive list of schemes which covers all the spatial priorities and themes in the SRF and addresses the gaps identified in the previous pipeline to overcome an updated list of key issues. However, as a result of combining a number of previous studies and sources, there is significant duplication of schemes within the new long list. This

was addressed during the initial sift where schemes were merged or removed. This is noted in Chapter 8 but for completeness all schemes are shown here in the first instance.

Schemes presented in the table below are grouped together by their source (i.e. Previous Piepline, KBR Report, Merseytravel Pipeline and New Schemes) and each have an indicative timescale over which they may be expected to be delivered. Timescales have been assigned to each scheme based on discussions held during workshops and within the project team and will inform the phasing of schemes during the final strategy. Timescales identified in three categories as follows:

- Short Term up to 2025
- Medium Term 2025-2030
- Long Term beyond 2030

Table 9: Long List of Schemes

Ref:	Scheme	Timescale
	Previous Pipeline	
1	A41 Corridor (Capacity)	Short
2	A41 Rail Freight Link	Medium
3	A41 Cycle and Pedestrian Connectivity	Short
4	A41 Bus Connectivity and Improvements	Short
5	Port Wirral	Medium
6	Mersey Tunnels	Short
7	Water Taxis	Long
8	Wirral Waters Cross Dock Connectivity	Long
9	Gateways to Wirral Waters	Medium
10	Wirral Waters Supporting Road Infrastructure	Long
11	Wirral Waters Active Travel Connectivity	Medium
12	Wirral Waters Streetcar (Mass Transit)	Long
13	Rail Freight Links to Wirral Waters	Medium
14	Birkenhead Town Centre Gateways	Short
15	Birkenhead Town Centre Streetscape	Short
16	Wirral Waters Public Transport Accessibility	Short
17	A553/A554 Improvements	Short
18	Wirral Line Stations Master Plan	Short
19	Wirral Line Park and Ride	Short
20	Improvements to Bus Infrastructure at Birkenhead Park and Conway Park	Short
21	Birkenhead North-Bus/Rail Interchange Improvements	Short
22	New Brighton- Bus/Rail Interchange Improvements	Short
23	West Kirby- Bus/Rail Interchange Improvements	Short
24	Heswall Public Transport Connectivity	Short
25	Coastal Cycling Strategy	Short
26	Wirral Line Connectivity	Short
27	Smart/Integrated Ticketing	Short
28	Community Road Safety Promotion	Short
29	Airport Accessibility (Improved Signage)	Medium
30	Capacity Improvements to the M53	Short
31	M53 Junction Approaches Improvements	Short
32	M53 Smart Motorways between Junction 5 and 11	Short

Ref:	Scheme	Timescale
33	New and Upgraded UTMC and CCTV	Short
34	Active Travel Routes Across the M53	Short
35	Active Travel Connectivity to Local Centres	Short
36	Residential Road Streetscape	Short
37	Travel Solutions	Short
38	Business Travel Support	Short
39	Wirral Active Travel Campaign	Short
40	Wirral-Maintain our Assets	Medium
41	LED Phase 2	Short
42	Access to Deeside	Short
43	Introduce New Borderlands (Wrexham-Bidston) Line Stations	Medium
44	Extend Borderland (Wrexham-Bidston) Line	Medium
44a	Extend Borderlands (Wrexham-Bidston) Line	Medium
44b	Borderlands (Wrexham-Bidston) Line Frequency Increase	Short
45	New Brighton Accessibility Improvements (Parking Review/Land Train)	Short
46	Town Meadow/Ledsham New Stations	Medium
47	Wirral SUD Schemes	Short
48	Saughall Massie Link Road- New Infrastructure	Short
49	Saughall Massie Road- Infrastructure Upgrade	Short
50	Heron Road Improvements	Short
51	Cycle Route to Arrowe Park and the Hospital	Short
52	A552 Corridor Capacity Improvements	Short
53	A540 Heswall Pinch Point Improvements	Short
54	Brimstage Bus Connectivity	Short
55	Clatterbridge to Mersey Waterfront Corridor Improvements	Medium
56	Green Lane Station Refurbishment	Short
57	Park and Ride at Birkenhead Central	Short
58	Meols Station Accessibility	Short
	Kellogg Brown and Root Post 2016 Interventions	
59	Woodside Ferry Travel	Short
60	Europa Boulevard/Conway Park Station Re-modelling	Short
61	Birkenhead Town Station	Medium
62	Relocation of Birkenhead Bus Station	Short
	Merseytravel Pipeline	
63	Mersey Tunnel Toll Plaza Congestion Management	Short
64	Queensway Tunnel Toll Plaza Re-Modelling	Medium
65	Queensway Tunnel Resilience Measures	Short
66	Bidston Moss Viaduct Major Maintenance	Medium
67	Mersey Tunnel Flood Resilience	Short
68	Smarter Choice Interventions	Short
69	Improved Ferry Service	Short
	New Schemes	
70	Closure of Queensway Tunnel	Long
71	Repurposing of Queensway Tunnel for Public Transport only	Long
72	Kingsway Capacity Increase	Short
73	Kingsway Toll Plaza Re-modelling / Removal	Short
74	Kingsway Public Transport Priority	Short

Ref:	Scheme	Timescale
75	New Mersey Crossing e.g. Eastham - Aigburth	Long
76	Reconfigure / Redevelop Woodside Bus Station and relocate Bus Terminus	Medium
77	Hamilton Square-Bus/Rail Interchange Improvements	Short
78	Reconfigure / Redevelop Woodside Gyratory roundabout	Medium
80	Green link: Rock Ferry to Seacombe via Former Rail Corridor	Medium
82	New Brighton / Seacombe / Wirral Waters - Liverpool Rapid Transit	Medium
84	Wirral Cross-Dock Connectivity - Revised	Long
85	Green Link: Woodside to Seacombe via waterfront	Medium
86	Cover the Wallasey Tunnel Approach	Medium
87	Relocate Wirral Waters Industrial Uses to remove severance	Long
88	Relocate Birkenhead RO-RO	Long
89	Access Road to Rosebrae Development Site	Short
90	Access into Hind Street, Mollington Link road;	Medium
91	Queensway Toll Plaza Re-modelling / Removal	Long
93	Woodside Ferry Terminal Enhancements	Medium
96	Hamilton Street two-way outside Station	Short
98	Car park facility for Birkenhead Police Station	Short
99	Remove mini-roundabouts at Hamilton Square	Short
100	Remove Hamilton Street / Duncan Street road closure	Short
101	Improved walk route between Woodside and Hamilton Square	Short
102	Improved Public Realm outside Hamilton Square rail station	Short
103	Improved Public Realm Argyle Street	Short
104	Off-street car parking at Birkenhead Central	Short
105	Improvements to Bus Infrastructure at Birkenhead Park and Conway Park	Short
106	Public Realm improvements: Conway Street	Short
107	Improved pedestrian crossing facilities along Argyle Street	Short
108	Improved access to Birkenhead Priory	Short
109	Re-modelling and Public Realm Improvements: Conway Park and Europa Boulevard	Short
110	Pedestrian wayfinding strategy	Short
111	Improve Argyle Street south approach to Hamilton Square	Short
116	Improve pedestrian and cycle crossings of Borough Road	Short
117	Improve pedestrian linkage to Birkenhead town centre from south	Short
118	Improved crossing facilities/road safety improvements at Whetstone Lane/Borough Road Junction	Short
119	Pedestrian overbridge of Borough Road, Whetstone Lane	Medium
120	Signage/ better entrance to retail core	Short
121	Rail Electrification - Wrexham-Bidston	Medium
122	New rail spur and station - Heswall	Long
123	New Mersey Crossing e.g. Bromborough to Aigburth	Long
123a	New access link into WIBP from Liverpool	Long
124	Rapid Transit - Wirral Waters to Liverpool	Long
125	Rapid Transit - New Brighton to Rock Ferry	Medium
126	Kingsway Tunnel Capacity Improvements	Short
127	M53 to M62 Linkage (Waterloo Tunnel)	Long
128	Queensway Tunnel closure to general traffic	Long
129	A41 / A552 / flyover area re-modelling	Short
130	Birkenhead - local access road improvements	Short

Ref:	Scheme	Timescale
130a	Downgrading New / Rock Ferry Bypass	Long
131	Queensway Tunnel for Public Transport Only	Long
132	Woodside Bus Station redevelopment	Short
133	Hamilton Square - Bus / Rail Interchange	Short
134	Use of Queensway Service Tunnel for Rapid Transit	Medium
135	Use of former Dock Railway for Rapid Transit	Medium
136	Birkenhead North - Bus / Rail Interchange	Short
136a	Birkenhead Central- Bus / Rail Interchange	Short
137	Green Link: Woodside to Seacombe via waterfront	Medium
138	Green link: Rock Ferry to Seacombe via Former Rail Corridor	Medium
139	Argyle Street Public Realm Improvements	Short
140	Hamilton Square - Woodside Improved route	Short
141	Conway Park - Market Improved route	Short
142	Cross Wirral Waters Routes	Medium
143	Borough Road / Whetstone Lane Enhanced Crossing	Short
144	New Duke Street Bridge	Medium
145	Extend Victoria Park to Dock Road	Medium
146	Green Link: Wirral Waters to Birkenhead Park	Medium
147	New north-south link and bridge	Medium
148	Two-lane dual carriageway between Poulton Bridge Road and grain warehouse	Medium
149	Duke Street Active Travel Improvements	Short
150	Dock Road to Corporation Road Dual Carriageway link (Duke St)	Medium
151	Improved and integrated Taxi and DRT Coverage	Short
152	Other local access road improvements	Medium
153	Removal of cheap long stay parking in Birkenhead TC	Short

This list of 153 schemes was then taken forward to the next stage of option development where schemes were sifted, structured and appraised against specific criteria.

8 Initial Sifting and Structuring of Long List

This section describes how the long list of schemes in Section 7 was initially sifted to remove any schemes which may no longer be relevant to improving transport across Wirral. After removing a number of schemes, the long list was structured to group schemes together for appraisal and packaging within the final strategy.

8.1 Initial Sift

The initial sift of the long list of schemes was an exercise where each scheme was assessed at a high level to ensure all schemes were up to date and relevant within the context of the Strategic Regeneration Framework. Schemes were removed from the long list if:

- They were already being progressed;
- They may be merged or amalgamated into another scheme;
- They were direct duplicates of previously listed schemes;
- They had poor alignment with SRF; or
- It was a non-capital scheme or has no detail or spatial definition.

The following table outlines the schemes which were not progressed to the next stage of appraisal and the rationale as to why they were removed.

Table 10: Schemes Removed from the Long List as Result of First Sift

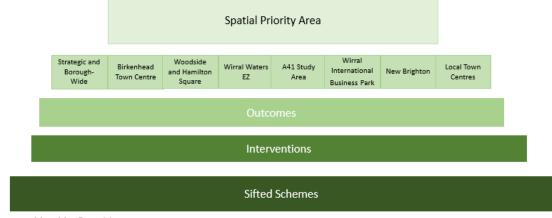
Ref	Scheme Removed from Long List	Rationale
3	A41 Cycle and Pedestrian Connectivity	To be progressed within Tranche 1 of LCWIP (Local Cycling and Walking Infrastructure Plan).
6	Mersey Tunnels	Merged with new schemes 70-74 which comprise the closure of Queensway Tunnel, repurposing for public transport, Kingsway Tunnel capacity increase, Toll Plaza re-modelling and Kingsway Public Transport Priority.
12	Wirral Waters Streetcar (Mass Transit)	Merged with new schemes 124 and 125 which suggest rapid transit from Liverpool to Wirral Waters and New Brighton to Rock Ferry.
28	Community Road Safety Promotion	Already progressed and non-capital scheme. Wirral Council has undertaken wider engagement, through businesses under the Mind Your Business programme.
33	New and Upgraded UTMC and CCTV	Already progressed. The UTC upgrade is on the list for LGF3 KRN funding.
37	Travel Solutions	Non-capital scheme.
38	Business Travel Support	Non-capital scheme.
39	Wirral Active Travel Campaign	Non-capital scheme. This was envisaged as a LCR campaign - There is funding for the Cycling and Walking to Work Pilot fund.
40	Wirral-Maintaining our Assets	Already progressed. A bid for funding was submitted to and is on the list for the LGF3 KRN pot to resurface the A41 Rock Ferry Bypass.
41	LED Phase 2	Already progressed with local funding to complete phase 2.
59	Woodside Ferry Travel	Merged with new scheme 93 – Woodside Ferry Terminal.
60	Europa Boulevard/Conway Park Station Re-modelling	Merged with scheme 109- Re-modelling and Public Realm Improvements: Conway Park and Europa Boulevard.
63	Mersey Tunnel Toll Plaza Congestion Management	Merged with new scheme 64 - Queensway Tunnel Toll Plaza Re- Modelling.
66	Bidston Moss Viaduct Major Maintenance	To be progressed via maintenance budgets within Wirral Council and Highways England.

Ref	Scheme Removed from Long List	Rationale
68	Smarter Choice Interventions	Non-capital scheme
69	Improved Ferry Service	Non-capital scheme
82	New Brighton / Seacombe / Wirral Waters - Liverpool Rapid Transit	Merged with scheme 124– Rapid Transit: Wirral Waters to Liverpool
91	Queensway Toll Plaza Re-modelling / Removal	Merged with new scheme 64- Queensway Tunnel Toll Plaza Re- Modelling
104	Off-street car parking at Birkenhead Central	Merged with previous pipeline scheme 57- Park and Ride at Birkenhead Central
121	Rail Electrification - Wrexham-Bidston	Merged with previous pipeline scheme 44- Extend Borderland (Wrexham-Bidston) Line
123	New Mersey Crossing e.g. Bromborough to Aigburth	Merged with previous pipeline scheme 75- New Mersey Crossing e.g. Eastham - Aigburth
126	Kingsway Tunnel Capacity Improvements	Merged with new scheme 72- Kingsway Capacity Increase
131	Queensway Tunnel for Public Transport Only	Merged with new scheme 71- Repurposing of Queensway Tunnel for Public Transport Only
132	Woodside Bus Station redevelopment	Merged with new scheme 76- Reconfigure / Redevelop Woodside Bus Station and relocate Bus Terminus
133	Hamilton Square - Bus / Rail Interchange	Merged with new scheme 77- Hamilton Square-Bus/Rail Interchange Improvements
136	Birkenhead North - Bus / Rail Interchange	Merged with previous pipeline scheme 21- Birkenhead North-Bus/Rail Interchange Improvements
139	Argyle Street Public Realm Improvements	Merged with new scheme 103- Improved Public Realm Argyle Street
140	Hamilton Square - Woodside Improved route	Merged with new scheme 101- Improved walk route between Woodside and Hamilton Square
142	Cross Wirral Waters Routes	Merged with new scheme 84- Wirral Cross-Dock Connectivity - Revised
143	Borough Road / Whetstone Lane Enhanced Crossing	Merged with new scheme 119- Pedestrian overbridge of Borough Road, Whetstone Lane

Structuring of Schemes 8.2

To further develop the Action Plan and aid the appraisal process, the sifted schemes were organised into themes which can be packaged together for use in the final strategy. All schemes were placed within a hierarchy as demonstrated in the image below.

Figure 21: Long List Structure



This shows how schemes were sorted into the 8 spatial priority areas to ensure direct alignment with the SRF. Strategic outcomes have been identified for each priority area with a number of distinct interventions set out to achieve each outcome as shown in the below Table 11.

Table 11: Spatial Priorities, Outcomes and Interventions

S	patial Priorities	0	utcomes	In	terventions
1	Strategic and Borough-	1	A41 Corridor	1	A41 Corridor Capacity Improvements
	Wide	2	M53 Corridor	1	M53 Junction 1 Improvements
				2	M53 Capacity Improvements
		3	A540 Corridor	1	A540 Capacity Improvements
		4	East-west linkage	1	Active Travel Links
				2	Access Improvements
		5	Rail Connectivity	1	Wirral Line Stations Enhancements
				2	Borderlands Line Enhancements
				3	Enhanced Rail Freight Access
				4	Smart Integrated Ticketing
		6	Wider Connections	1	Cross-River
				2	Port Wirral
				3	Beyond Wirral
2	Birkenhead Town Centre	1	Support Birkenhead Town	1	Birkenhead Town Centre Gateways
			Centre Regeneration	2	Birkenhead Town Centre Streetscape
					Bus / Rail Interchange Enhancements
3	Woodside and	1	Support Woodside and	1	Woodside Regeneration
	Hamilton Square		Hamilton Square Regeneration	2	Hamilton Square Regeneration
4	Wirral Waters EZ	1	Support Growth at Wirral	1	Wirral Waters Cross Dock Connectivity
			Waters	2	Gateways to Wirral Waters
				3	Wirral Waters Supporting Road Infrastructure
				4	Wirral Waters Active Travel Connectivity
				5	Wirral Waters Public Transport Connectivity
5	A41 North Study Area	1	Support Hind Street Regeneration	1	Hind Street Access Improvements
		2	A41 North Study Area Access Improvements	1	A41 North Southern Access Improvements
				2	A41 North Sustainable Connectivity
6	Wirral International Business Park	1	Support Economic Growth of Business Park	1	Access to Wirral International Business Park
7	New Brighton	1	Support Regeneration in New Brighton	1	New Brighton Public Transport Enhancements
8	Local Town Centres	1	Support Regeneration in New Ferry	1	Removing Severance
		2	Support growth of golf tourism in Hoylake	1	Access Improvements
		3	Support growth in other town	1	Other Public Transport Enhancements
			centres	2	Other Schemes

Source: Mott MacDonald

The sifted schemes form the specific components which will enable the interventions and strategic outcomes. There are between 1 and 15 schemes for each intervention. The interventions and schemes are listed below in Table 12. The full structure can be found in Appendix B.

Table 12: Interventions and Sifted Schemes for Appraisal

Interventions	Sifte	ed Schemes	Prev No/s	Source
A41 Corridor	1	Bridle Road junction capacity improvements	1	Prev Wirral Pipeline
Capacity Improvements	2	Eastham Village Road junction capacity improvements	1	Prev Wirral Pipeline
improvements	3	Stanley Lane junction capacity improvements	1	Prev Wirral Pipeline
	4	Port Causeway junction capacity improvements	1	Prev Wirral Pipeline
	5	Croft Avenue / Caldbeck Road junction capacity improvements	1	Prev Wirral Pipeline
	6	New signal junction on Rock Ferry Bypass (Esplanade)	1	Prev Wirral Pipeline
M53 Junction 1	1	A554 Capacity Increase	10	Prev Wirral Pipeline
Improvements	2	A553 / A554 junction improvements	17	Prev Wirral Pipeline
	3	A553 Fender Lane to A553 / A554 roundabout cycle lane	17	Prev Wirral Pipeline
	4	Bidston Moss Viaduct Major Maintenance	66	Prev LCR Pipeline
M53 Capacity	1	Conversion of M53 to Smart Motorway Junctions 5-11	30, 32	Prev Wirral Pipeline
Improvements	2	M53 Junctions 5 and 6 approach improvements	30, 31	Prev Wirral Pipeline
A540 Capacity Improvements	1	A540 Heswall Pinch Point Improvements	53	Prev Wirral Pipeline
Active Travel	1	Wirral Circular Trail improvements - Coastal Cycle Strategy	25	Prev Wirral Pipeline
Links	2	Implementation of Birket Scheme - Pasture Road to Reeds Lane, Moreton	25	Prev Wirral Pipeline
	3	Wirral CityBike Scheme	25	Prev Wirral Pipeline
	4	Active Travel Routes across the M53	34	Prev Wirral Pipeline
	5	Cycle Route to Arrowe Park and the Hospital	51	Prev Wirral Pipeline
	6	Wirral Cycle Route Network - Connecting the Dots (previously SUDs)	47	Prev Wirral Pipeline
Access	1	A552 Corridor Capacity Improvements	52	Prev Wirral Pipeline
Improvements	2	Clatterbridge to Mersey Waterfront Corridor Improvements	55	Prev Wirral Pipeline
Wirral Line	1	Station facilities and waiting environment enhancements	18	Prev Wirral Pipeline
Stations Enhancements	2	Wirral Line Park and Ride Enhancements	19	Prev Wirral Pipeline
Linancements	3	Town Meadow/Ledsham New Stations	46	Prev Wirral Pipeline
	4	Green Lane Station Refurbishment	56	Prev Wirral Pipeline
	5	Park and Ride at Birkenhead Central	57	Prev Wirral Pipeline
	6	Meols Station Accessibility	58	Prev Wirral Pipeline
	7	Re-modelling and Public Realm Improvements: Conway Park & Europa Boulevard	109	New Scheme
	8	Improvements to Bus Infrastructure at Birkenhead Park & Conway Park	20,105	Prev Wirral Pipeline
	9	Birkenhead Town Station	59	KBR Report
Borderlands Line	1	Introduce New Borderlands (Wrexham - Bidston) Line Stations	43	Prev Wirral Pipeline
Enhancements	2	Extend Borderlands (Wrexham - Bidston) Line to Birkenhead North	44	Prev Wirral Pipeline
	3	Borderlands (Wrexham-Bidston) Line Frequency Increase	44b	Prev Wirral Pipeline
	4	Borderlands (Wrexham - Bidston) Line Electrification	44a	Prev Wirral Pipeline
Enhanced Rail	1	A41 Rail Freight Link at Port Sunlight	2	Prev Wirral Pipeline
Freight Access	2	Rail freight Links to Wirral Waters	13	Prev Wirral Pipeline
Smart Integrated Ticketing	1	Integration of Merseyside ticketing with Deeside and Cheshire West	27	Prev Wirral Pipeline
Cross-River	1	Queensway Tunnel closure to general traffic	128	New Scheme
	2	Re-purposing of Queensway Tunnel for Public Transport Only	71	New Scheme
	3	Kingsway Capacity Increase	72	New Scheme
	4	Kingsway Toll Plaza Re-modelling / Removal	73	New Scheme
	5	Kingsway Public Transport Priority	74	New Scheme

Interventions	Sifte	ed Schemes	Prev No/s	Source
	6	Use of Queensway Service Tunnel for Rapid Transit	134	New Scheme
	7	Queensway Toll Plaza Re-modelling / Removal	64	Prev LCR Pipeline
	8	Water Taxis	7	Prev Wirral Pipeline
	9	Wirral Line Connectivity - Wirral Line to Northern Line Link	26	Prev Wirral Pipeline
	10	New Mersey Crossing e.g. Bromborough - Aigburth	75	New Scheme
	11	M53 to M62 Linkage (Waterloo Tunnel)	127	New Scheme
	12	Queensway Tunnel Resilience Measures	65	Prev LCR Pipeline
	13	Mersey Tunnel Flood Resilience	67	Prev LCR Pipeline
Port Wirral	1	Port Wirral Road Improvements and Signage Strategy	5	Prev Wirral Pipeline
Beyond Wirral	1	Airport Accessibility and Signage Strategy	29	Prev Wirral Pipeline
	2	Access to Deeside	42	Prev Wirral Pipeline
Birkenhead	1	A41 Chester Street highway realignment	14	Prev Wirral Pipeline
Town Centre	2	Capacity and flow improvements on Borough Road / Singleton Avenue	14	Prev Wirral Pipeline
Gateways	3	A553 / Park Road East junction improvements	14	Prev Wirral Pipeline
	4	A553 capacity improvements	14	Prev Wirral Pipeline
	5	Chester Street junction improvements	14	Prev Wirral Pipeline
	6	Signage improvement to Birkenhead Priory and Tranmere Docks	14	Prev Wirral Pipeline
	7	Electric charging points in Birkenhead Town Centre	14	Prev Wirral Pipeline
	8	Signage/ better entrance to retail core	14,120	Prev Wirral Pipeline
	9	Birkenhead - local access road improvements	14,130	Prev Wirral Pipeline
Birkenhead	1	Improved Public Realm in retail core	15	Prev Wirral Pipeline
Town Centre	2	Improved Public Realm Argyle Street	15,103	Prev Wirral Pipeline
Streetscape	3	Cleveland Street / Market Street / Price Street Public Realm	15	Prev Wirral Pipeline
	4	Public Realm improvements: Conway Street	15,106	Prev Wirral Pipeline
	5	Improved pedestrian crossing facilities along Argyle Street	15,107	Prev Wirral Pipeline
	6	Pedestrian overbridge of Borough Road, Whetstone Lane	15,117	Prev Wirral Pipeline
	7	Improve ped linkage to B'head town centre from south	15,116	Prev Wirral Pipeline
	8	Conway Park - Market Improved route	15,141	Prev Wirral Pipeline
	9	Removal of cheap long stay parking in Birkenhead TC	153	New Scheme
Bus / Rail	1	Improvements to Bus Infrastructure at Birkenhead Park & Conway Park	105	New Scheme
Interchange	2		62	KBR Report
Enhancements	3	Relocation of Birkenhead Bus Station	77	New Scheme
		Hamilton Square-Bus/Rail Interchange Improvements Bus / Rail Interchange at Birkenhead North and Birkenhead Park	21	
	5			Prev Wirral Pipeline
Maadaida		Bus Rail Interchange at Birkenhead Central	136a	New Scheme
Woodside Regeneration	1	Woodside Ferry Terminal Enhancements People Ferry Terminal Enhancements People Ferry Terminal Enhancements	93	New Scheme New Scheme
J	2	Reconfigure / Redevelop Woodside Gyratory roundabout	78	
	3	Redevelop Woodside Bus Station and relocate Bus Terminus	76	New Scheme
Jamilton Carra	4	Access Road to Rosebrae Development Site	89	New Scheme
Hamilton Square Regeneration	1	Hamilton Street two-way outside Station	93	New Scheme
<u> </u>	2	Remove mini-roundabouts at Hamilton Square	99	New Scheme
	4	Remove Hamilton Street / Duncan Street road closure	100	New Scheme
	5	Improved Public Realm outside Hamilton Square rail station	102	New Scheme
	6	Car park facility for Birkenhead Police Station	98	New Scheme
	7	Improved Public Realm at Hamilton Square	102	New Scheme
	8	Improved walk route between Woodside and Hamilton Square	101	New Scheme
	9	Improve Argyle Street south approach to Hamilton Square	111	New Scheme

Interventions	Sifte	d Schemes	Prev No/s	Source
Wirral Waters	1	Replacement of Poulton Bridge with a Fixed Structure	8	Prev Wirral Pipeline
Cross Dock Connectivity	2	Replacement of Duke Street Bridge	144	New Scheme
Somectivity	3	Wirral Cross-Dock Connectivity - Revised	8, 84	Prev Wirral Pipeline
	4	New north-south link and bridge	147	New Scheme
	5	Relocate Birkenhead RO-RO	8, 88	Prev Wirral Pipeline
Gateways to	1	A5139 Dock Road / A5088 Wallasey Bridge Road junction	9	Prev Wirral Pipeline
Wirral Waters	2	Duke St / Dock Road / Gorsey Lane junction	9	Prev Wirral Pipeline
	3	A5027 Dock Road/A554 Tower Road / A554 Birkenhead Road junction	9	Prev Wirral Pipeline
	4	Duke St / Corporation Road junction	9	Prev Wirral Pipeline
	5	Relocate Wirral Waters Industrial Uses to remove severance	9, 87	Prev Wirral Pipeline
	6	A554 Tower Road / Rendel Street junction	9	Prev Wirral Pipeline
	7	Rendel Street / Corporation Road junction	9	Prev Wirral Pipeline
	8	Duke Street / Corporation Road junction	9	Prev Wirral Pipeline
Wirral Waters	1	Wallasey Bridge Road Improvements	10	Prev Wirral Pipeline
Supporting Road	2	Widening of Beaufort Road and Wallasey Bridge Road (City Boulevard)	10	Prev Wirral Pipeline
Infrastructure	3	A5030 Beaufort Road/A5088 Wallasey Bridge Road junction improvements	10	Prev Wirral Pipeline
	4	Corporation Road / Cavendish Street / Cleveland Street junction improvements	10	Prev Wirral Pipeline
	5	A554 Tower Road / Canning Street Capacity Improvements	10	Prev Wirral Pipeline
	6	Canning Street / Lord Street Capacity Improvements	10	Prev Wirral Pipeline
	7	New development access from Beaufort Road & Wallasey Bridge Road	10	Prev Wirral Pipeline
	8	A5027 Gorsey Lane / Kingsway Tunnel junction improvements	10	Prev Wirral Pipeline
	9	Dock Road Link widening	10	Prev Wirral Pipeline
	10	Tower Road Link widening	10	Prev Wirral Pipeline
	11	Two-lane dual carriageway from Poulton Bridge Rd to grain warehouse	148	Saville Bird and Axon
	12	Dock Road to Corporation Road Dual Carriageway link (Duke St)	150	Saville Bird and Axon
Wirral Waters Active Travel	1	City Boulevard (green transport corridor Corporation Road and Beaufort Road)	11	Prev Wirral Pipeline
Connectivity	2	Tower Road / Birkenhead Road ped / cycle link	11	Prev Wirral Pipeline
	3	Footbridge on Dockside Route	11	Prev Wirral Pipeline
	4	A5027 Duke Street Public Realm	11	Prev Wirral Pipeline
	5	Wallasey Bridge Road cycle route	11	Prev Wirral Pipeline
	6	Dock Road cycle route	11	Prev Wirral Pipeline
	7	Pedestrian crossings on Tower Road	11	Prev Wirral Pipeline
	8	Toucan crossings on Wallasey Bridge Road	11	Prev Wirral Pipeline
	9	River Birket route into West Float	11	Prev Wirral Pipeline
	10	Cycle Route along Canning Street	11	Prev Wirral Pipeline
	11	Wirral Waters Pedestrian wayfinding strategy	11,110	Prev Wirral Pipeline
	12	Cover the Wallasey Tunnel Approach	86	New Scheme
	13	Extend Victoria Park to Dock Road	145	New Scheme
	14	Green Link: Wirral Waters to Birkenhead Park	146	New Scheme
	15	Duke St Active Travel Improvements	149	New Scheme
Wirral Waters Public Transport	1	Rapid Transit - Wirral Waters to Liverpool	16, 124	Prev Wirral Pipeline
Connectivity	2	Rapid Transit - New Brighton to Rock Ferry via Wirral Waters	16,125	Prev Wirral Pipeline

Interventions	Sifte	ed Schemes	Prev No/s	Source
	3	Bus routes diverted via Wirral Waters (410, 411, 413, 414)	16	Prev Wirral Pipeline
Hind Street Access Improvements	1	Access to Hind Street - Mollington Link Road	90	New Scheme
Southern Access	1	Green Lane Roundabout capacity improvements	1	Prev Wirral Pipeline
Improvements	2	Duncan Street jnc capacity improvements	1	Prev Wirral Pipeline
	3	Ivy Street jnc capacity improvements	1	Prev Wirral Pipeline
	4	Campbeltown Road capacity improvements	1	Prev Wirral Pipeline
	5	Improve ped linkage to B'head town centre from south	117	New Scheme
	6	A41 / A552 / flyover area re-modelling	129	New Scheme
	7	Improved access to Birkenhead Priory	108	New Scheme
	8	A41 North Southern Bus Access Improvements	4	Prev Wirral Pipeline
A41 North Sustainable Connectivity	1	Green link: Rock Ferry to Seacombe via Former Rail Corridor	80,137	New Scheme
	2	Green Link: Woodside to Seacombe via waterfront	85,138	New Scheme
	3	Use of former Dock Railway for Rapid Transit	135	New Scheme
Access to Wirral International Business Park	1	New access link into WIBP from Liverpool	123a	New Scheme
New Brighton	1	Bus / Rail Interchange at New Brighton	22	Prev Wirral Pipeline
Public Transport Enhancements	2	New Brighton Accessibility Improvements (Parking Review/Land Train)	45	Prev Wirral Pipeline
Removing Severance	1	Downgrading New / Rock Ferry Bypass	130a	New Scheme
Access	1	Saughall Massie Link Road - New Infrastructure	48	Prev Wirral Pipeline
Improvements	2	Saughall Massie Road- Infrastructure Upgrade	49	Prev Wirral Pipeline
	3	Heron Road Improvements	50	Prev Wirral Pipeline
	4	Other local access road improvements	152	New Scheme
Other Public	1	Bus / Rail Interchange at West Kirby	23	Prev Wirral Pipeline
Transport Enhancements	2	Heswall Station Bus / Rail Interchange, Linkage and Parking	24	Prev Wirral Pipeline
	3	Brimstage Bus Connectivity	54	Prev Wirral Pipeline
	4	New rail spur and station - Heswall	122	New Scheme
Other Schemes	1	Active Travel Connectivity to Local Centres	35	Prev Wirral Pipeline
	2	Residential Road Streetscape	36	Prev Wirral Pipeline
	3	Improved and integrated Taxi and DRT Coverage	151	New Scheme

It should be noted that the schemes in the table above may now be described by their reference number which is formed of four digits indicating their: Spatial Priority; Outcome; Intervention and Scheme Number.

Using Tables 11 and 12 to derive these it may be seen that, as an example, the 'Bus Rail Interchange at West Kirby' scheme is in the:

- 'Local Town Centres' spatial priority;
- 'Support Growth in Local Town Centres' outcome;
- 'Other Public Transport Enhancements' intervention; and
- 'Bus Rail Interchange at West Kirby' scheme

It may therefore be identified by the reference number 8.3.1.1

9 Appraisal of Long List

Following an initial sift to remove schemes which are no longer relevant to the framework and structuring schemes into spatial priority areas and key outcomes, schemes were appraised using Mott MacDonald's in-house Investment Sifting and Evaluation Tool (INSET). This tool applies weighted scoring to each option based on how well an option meets identified criteria.

This assessed how well they align with local and sub regional policy and their ability to deliver effective solutions to key transport issues. This section details the process through which the criteria was developed and how INSET was used to appraise schemes.

9.1 INSET

INSET is a decision support toolkit developed in-house by Mott MacDonald which draws upon standard tools for comparing scheme options, primarily DfT's EAST (Early Assessment and Sifting Tool).

Multi-Criteria Assessment

Weighting / Sensitivity Testing

Prioritisation & Packaging

Figure 22: Mott MacDonald's Investment Sifting and Evaluation Tool (INSET)

Source: Mott MacDonald

The purpose of INSET in the development of the Strategic Transport Framework Action Plan was to narrow the 'pool' of options and ensure the schemes with the greatest benefits were taken forward. INSET utilises overarching themes and assessment criteria under these themes to systematically test and appraise options appropriate for the required level of sifting or assessment. The criteria developed for use in this appraisal is described in the following section.

9.2 Appraisal against City Region Criteria

Distinct appraisal criteria were developed to ensure the schemes which were best positioned to enable growth were taken forward into the Strategic Transport Framework Action Plan.

Therefore, policy context, ability to address key issues and deliverability were key to the development of criteria. The three main goals of the Liverpool City Region 'A Transport Plan for Growth' form the overarching themes through which the various criteria were developed. These are:

- **Growth** supporting economic growth through increasing employment, levels of productivity and investment:
- Low Carbon using a range of sustainable energy sources, having the option to use vehicles powered by alternatives to fossil fuels, and having increased levels of walking and cycling;
- Access to opportunity improving access to employment, training and education and wider opportunities such as healthcare, leisure and recreation.

A number of sub-themes were developed under each of these which take into account the priorities and themes of the Strategic Regeneration Framework and the key things that Wirral want to deliver through the Strategic Transport Framework Action Plan as identified within the initial brief and rationale of this work.

Weighting was assigned based on the relative importance of themes set in the context of local policy and wider strategic aspirations, where transport can be a key enabler. The three themes at the highest level (Growth, Low Carbon and Access to opportunity) were given equal weighting to reflect their equal importance in the Growth Plan, as were the six assessment criteria listed in tables 13, 14 and 15. The weighting of the sub-criteria varied slightly as there were more criteria for some themes than others, this ensured the weighting remined equal at the highest level and at the assessment criteria level. The different criteria for each theme is shown in the tables below alongside the source from which they were derived.

Table 13: Assessment Criteria- Theme 1: Growth

Assessment Criteria	Description	Sub-criteria	Source/Key Issue
Economic Growth	The extent to which the scheme supports economic growth through job	Supporting Access to Regeneration and Development	Ambition in SRF to deliver 5,000 new jobs, 250 new
	The extent to which the scheme promotes the key attractions in the borough and enhances accessibility for visitors.	Supporting Birkenhead Town Centre	businesses and £250m of new inward investment by
		Opening up new land for development	2020.
		Improving investment and job creation	Birkenhead Town Centre identified in SRF as spatial priority area for delivering growth.
Supporting Visitor		Improving facilities and services at Woodside Ferry Terminal	Tourism and Cultural offerakey strategic theme of
Economy		Improved wayfinding and legibility	the SRF for driving growth.
		Building on key assets	

Table 14: Assessment Criteria- Theme 2: Low Carbon

Assessment Criteria	Description	Sub-criteria	Source/Key Issue
Environmental	The extent to which the scheme creates high quality environments with	Maintain low levels of noise and pollution	STF Strategic theme: High quality environment
	minimal environmental impacts.	Protecting or enhancing landscapes	STF Environmental Pledge
		Creating new green spaces	
		Enhancing townscapes	

Assessment Criteria	Description	Sub-criteria	Source/Key Issue
Local access and	The extent to which the scheme improves access by sustainable modes and reduces the dominance of vehicles on the local highway network.	Increased attractiveness of walking and cycling routes	Wirral Transport Strategy: Connecting Wirral- Key
connectivity		Reducing the number of vehicles	priorities: Reliable and affordable public transport,
		Making better use of the highway network	encourage healthy active travel, Inclusive integrated
		Making better use of public transport	transport that supports our resident's needs.
		Improved transport interchange	— Tesident's fieeds.
		Removing barriers to movement	

Table 15: Assessment Criteria- Theme 3: Access to opportunity

Assessment Criteria	Description	Sub-criteria	Source/Key Issue
Social Impacts	The extent to which the scheme improves quality of life creating attractive places to live and work.	Better connected communities	Wirral Waters Supporting
		Increased access to jobs / opportunities/ training	Road Infrastructure Feasibility Study and A41 North Corridor Study
		Reducing the number of accidents	specification/ STF
		Enhanced pedestrian / cycle safety	Business and People Pledge
Deliverability	The extent to which the scheme will be socially accepted and delivered within realistic financial and logistical boundaries.	Public Approval	Department for Transport
		Stakeholder Approval	analysis guidance: WebTAG
		Barriers / Constraints	WebTAG
		Land ownership / acquisition	
		Relative difficulty / cost	

Source: Mott MacDonald

9.3 Appraisal Results

A 5-point scoring system was used to score how well each scheme was likely to deliver benefits against each of the sub-criteria. Scores ranged from -2 to +2 with -2 being highly negative or detrimental to the meeting the criteria and +2 being highly positive or being able to meet the criteria very well.

The scoring process was undertaken and checked by members of the consultant team with significant technical expertise. Although efforts have been made to ensure this appraisal was robust it is recognised that the appraisal remains fairly subjective and more detailed modelling and appraisal will be required before schemes can be taken forward to the business case stage.

The number of issues addressed by each scheme was also counted within the appraisal. However, this was a quantitative analysis with no account for the severity of the issues addressed. For example, a scheme that addressed one major issue may be more beneficial to meeting criteria than a scheme appearing to address multiple smaller issues. Therefore, this was not included within the calculations of the total score for each scheme but was noted for illustrative purposes only.

The total score for each of the six assessment criteria was added together to produce an overall score that enabled schemes to be ranked. Each scheme was assigned a rank position between 1 and 155 where 1 was the highest scoring intervention. The approximate top 80% (122 schemes) were then taken forward into the short list of schemes to be packaged and phased into the final action plan. This cut-off point was agreed with the client and reflects the point at which schemes below this threshold were judged to offer too little overall benefit to progress. It

should be noted that all of the schemes on the long list clearly have some level of merit and therefore should be retained in a 'development pool' for further consideration at a point in the future. Many may score more highly once they have been developed further and it is important to note that none are being discounted permanently as part of this process.

Table 16 summarises the scores of each intervention while the full appraisal results can be found in Appendix C.

Table 16: Appraisal Results Summary

Scheme	Score	Rank	Shortlisted?
New Mersey Crossing e.g. Bromborough - Aigburth	8.43	1	YES
A41 / A552 / flyover area re-modelling	8.38	2	
Rapid Transit - Wirral Waters to Liverpool	7.52	3	
Green Link: Woodside to Seacombe via waterfront	7.43	4	
Bus routes diverted via Wirral Waters (410, 411, 413, 414)	7.32	5	
Use of Queensway Service Tunnel for Rapid Transit	7.18	6	
Improve pedestrian linkage to B'head town centre from south	7.08	7	
Improved pedestrian crossing facilities along Argyle Street	7.05	8	
Pedestrian overbridge of Borough Road, Whetstone Lane	7.02	9	
Signage/ better entrance to retail core	7.00	10	
Queensway Tunnel closure to general traffic	6.95	11	
Green link: Rock Ferry to Seacombe via Former Rail Corridor	6.95	11	
Use of former Dock Railway for Rapid Transit	6.85	13	
Rapid Transit - New Brighton to Rock Ferry via Wirral Waters	6.77	14	
Access to Hind Street - Mollington Link Road	6.75	15	
Wirral Waters Pedestrian wayfinding strategy	6.63	16	
Active Travel Connectivity to Local Centres	6.63	16	
Re-purposing of Queensway Tunnel for Public Transport Only	6.55	18	
Queensway Toll Plaza Re-modelling / Removal	6.55	18	
Green Link: Wirral Waters to Birkenhead Park	6.55	18	
Bus / Rail Interchange at New Brighton	6.55	18	
Woodside Ferry Terminal Enhancements	6.52	22	
Conway Park - Market Improved route	6.42	23	
Improved Public Realm outside Hamilton Square rail station	6.30	24	
Residential Road Streetscape	6.30	24	
Hamilton Square-Bus/Rail Interchange Improvements	6.27	26	
Bus / Rail Interchange at West Kirby	6.27	26	
Heswall Station Bus / Rail Interchange, Linkage and Parking	6.27	26	
Improved walk route between Woodside and Hamilton Square	6.22	29	
Footbridge on Dockside Route	6.22	30	

Scheme	Score	Rank	Shortlisted?
Wallasey Bridge Road cycle route	6.22	30	
Dock Road cycle route	6.22	30	
Duke Street Active Travel Improvements	6.22	30	
Improved Public Realm in retail core	6.05	34	
Improved Public Realm Argyle Street	6.05	34	
Cleveland Street / Market Street / Price Street Public Realm	6.05	34	
Public Realm improvements: Conway Street	6.05	34	
Improved Public Realm at Hamilton Square	6.05	34	
New Brighton Accessibility Improvements (Parking Review/Land Train)	6.05	34	
Tower Road / Birkenhead Road ped / cycle link	5.97	40	
A5027 Duke Street Public Realm	5.97	40	
Pedestrian crossings on Tower Road	5.97	40	
Toucan crossings on Wallasey Bridge Road	5.97	40	
Bus / Rail Interchange at Birkenhead North and Birkenhead Park	5.93	44	
Bus Rail Interchange at Birkenhead Central	5.93	44	
Improve Argyle Street south approach to Hamilton Square	5.85	46	
A41 North Southern Bus Access Improvements	5.85	46	
Improvements to Bus Infrastructure at Birkenhead Park and Conway Park	5.77	48	
City Boulevard (green transport corridor Corporation Road and Beaufort Road)	5.77	48	
River Birket route into West Float	5.77	48	
Cycle Route along Canning Street	5.77	48	
Downgrading New / Rock Ferry Bypass	5.77	48	
Birkenhead - local access road improvements	5.73	53	
Wirral Cycle Route Network - Connecting the Dots (previously SUDs)	5.70	54	
Relocation of Birkenhead Bus Station	5.68	55	
Replacement of Duke Street Bridge	5.68	56	
New access link into WIBP from Liverpool	5.67	57	
Brimstage Bus Connectivity	5.63	58	
Improved and integrated Taxi and DRT Coverage	5.60	59	
Saughall Massie Road- Infrastructure Upgrade	5.48	60	
Wirral Circular Trail improvements - Coastal Cycle Strategy	5.43	61	
Port Wirral Road Improvements and Signage Strategy	5.43	61	

Scheme	Score	Rank	Shortlisted?
New north-south link and bridge	5.43	63	
Extend Victoria Park to Dock Road	5.40	64	
Remove mini-roundabouts at Hamilton Square	5.23	65	
Active Travel Routes across the M53	5.23	66	
Cycle Route to Arrowe Park and the Hospital	5.23	66	
Hamilton Street two-way outside Station	5.18	68	
Access to Deeside	5.15	69	
Remove Hamilton Street / Duncan Street road closure	5.15	69	
Wirral Line Park and Ride Enhancements	5.12	71	
New rail spur and station - Heswall	5.07	72	
Town Meadow/Ledsham New Stations	4.83	73	
A5139 Dock Road / A5088 Wallasey Bridge Road junction	4.83	73	
Duke St / Dock Road / Gorsey Lane junction	4.83	73	
A5027 Dock Road / A554 Tower Road / A554 Birkenhead Road junction	4.83	73	
Duke St / Corporation Road junction	4.83	73	
Rendel Street / Corporation Road junction	4.83	73	
Duke Street / Corporation Road junction	4.83	73	
Wallasey Bridge Road Improvements	4.83	73	
A5030 Beaufort Road / A5088 Wallasey Bridge Road junction improvements	4.83	73	
Corporation Road / Cavendish Street / Cleveland Street junction improvements	4.83	73	
A5027 Gorsey Lane / Kingsway Tunnel junction improvements	4.83	73	
Implementation of Birket Scheme - Pasture Road to Reeds Lane, Moreton	4.82	84	
Station facilities and waiting environment enhancements	4.73	85	
Access Road to Rosebrae Development Site	4.70	86	
Integration of Merseyside ticketing with Deeside and Cheshire West	4.68	87	
Signage improvement to Birkenhead Priory and Tranmere Docks	4.68	87	
Wirral Line Connectivity - Wirral Line to Northern Line Link	4.68	89	
Introduce New Borderlands (Wrexham - Bidston) Line Stations	4.67	90	
Widening of Beaufort Road and Wallasey Bridge Road (City Boulevard)	4.63	91	
Re-modelling and Public Realm Improvements: Conway Park and Europa Boulevard	4.60	92	
Airport Accessibility and Signage Strategy	4.60	92	
Replacement of Poulton Bridge with a Fixed Structure	4.60	92	

Scheme	Score	Rank	Shortlisted?
Electric charging points in Birkenhead Town Centre	4.55	95	
Reconfigure / Redevelop Woodside Bus Station and relocate Bus Terminus	4.50	96	
Meols Station Accessibility	4.43	97	
Heron Road Improvements	4.40	98	
Other local access road improvements	4.40	98	
Green Lane Station Refurbishment	4.35	100	
Extend Borderlands (Wrexham - Bidston) Line to Birkenhead North	4.30	101	
New development access from Beaufort Road and Wallasey Bridge Road	4.30	101	
Saughall Massie Link Road - New Infrastructure	4.30	101	
A553 Fender Lane to A553 / A554 roundabout cycle lane	4.28	104	
Borderlands (Wrexham-Bidston) Line Frequency Increase	4.28	104	
Kingsway Toll Plaza Re-modelling / Removal	4.27	106	
Relocate Wirral Waters Industrial Uses to remove severance	4.25	107	
A41 Chester Street highway realignment	4.20	108	
Borderlands (Wrexham - Bidston) Line Electrification (Extension of Merseyrail)	4.18	109	
A540 Heswall Pinch Point Improvements	4.13	110	
Wirral CityBike Scheme	4.12	111	
Park and Ride at Birkenhead Central	4.10	112	
Reconfigure / Redevelop Woodside Gyratory roundabout	4.08	113	
Kingsway Capacity Increase	4.07	114	
Queensway Tunnel Resilience Measures	3.98	115	
Mersey Tunnel Flood Resilience	3.98	115	_
Clatterbridge to Mersey Waterfront Corridor Improvements	3.97	117	
Chester Street junction improvements	3.95	118	
Green Lane Roundabout capacity improvements	3.73	119	
Ivy Street jnc capacity improvements	3.73	119	
Campbeltown Road capacity improvements	3.73	119	
A554 Tower Road / Canning Street Capacity Improvements	3.53	122	NO
Canning Street / Lord Street Capacity Improvements	3.53	122	
M53 to M62 Linkage (Waterloo Tunnel)	3.52	124	
A553 / Park Road East junction improvements	2.45	125	
	3.45	123	

ASSA Tower Road / Rendel Street junction 3.38 127	Scheme	Score	Rank	Shortlisted?
Cover the Wallasey Tunnel Approach 3.35 129 Wirral Cross-Dock Connectivity - Revised 3.30 130 Dock Road to Corporation Road Dual Carriageway link (Duke St) 3.30 130 Removal of cheap long stay parking in Birkenhead TC 3.27 132 Two-lane dual carriageway between Poulton Bridge Road and grain warehouse 3.27 133 Rall freight Links to Wirral Waters 3.17 134 Kingswaye Public Transport Priority 3.17 134 A41 Rail Freight Link at Port Sunlight 2.92 136 Duncan Street inc capacity improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 A552 Corridor Capacity Improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.86 141 A654 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 A553 / A554 Junction Improvements 2.43 144	A554 Tower Road / Rendel Street junction	3.38	127	
Wirral Cross-Dock Connectivity - Revised 3.30 130 Dock Road to Corporation Road Dual Carriageway link (Duke St) 3.30 130 Removal of cheap long stay parking in Birkenhead TC 3.27 132 Two-lane dual carriageway between Poulton Bridge Road and grain warehouse 3.27 133 Rail freight Links to Wirral Waters 3.17 134 Kingsway Public Transport Priority 3.17 134 A41 Rail Freight Link at Port Sunlight 2.92 136 Duncan Street (inc capacity improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144	Water Taxis	3.37	128	
Dock Road to Corporation Road Dual Carriageway link (Duke St) 3.30 130 Removal of cheap long stay parking in Birkenhead TC 3.27 132 Two-lane dual carriageway between Poulton Bridge Road and grain warehouse 3.27 133 Rail freight Links to Wirral Waters 3.17 134 Kingsway Public Transport Priority 3.17 134 A41 Rail Freight Link at Port Sunlight 2.92 136 Duncan Street jnc capacity improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146	Cover the Wallasey Tunnel Approach	3.35	129	
Removal of cheap long stay parking in Birkenhead TC 3.27 132 Two-lane dual carriageway between Poulton Bridge Road and grain warehouse 3.27 133 Rail freight Links to Wirral Waters 3.17 134 Kingsway Public Transport Priority 3.17 134 A41 Rail Freight Link at Port Sunlight 2.92 136 Duncan Street inc capacity improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jn	Wirral Cross-Dock Connectivity - Revised	3.30	130	
Two-lane dual carriageway between Poulton Bridge Road and grain warehouse 3.27 133 Rail freight Links to Wirral Waters 3.17 134 Kingsway Public Transport Priority 3.17 134 A41 Rail Freight Link at Port Sunlight 2.92 136 Duncan Street jnc capacity improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.02 149 Bridle Road jnc ca	Dock Road to Corporation Road Dual Carriageway link (Duke St)	3.30	130	
Rail freight Links to Wirral Waters 3.17 134 Kingsway Public Transport Priority 3.17 134 A41 Rail Freight Link at Port Sunlight 2.92 136 Duncan Street inc capacity improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 A653 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.01 149 Bridle Road jnc capacity improvements 2.02 149 Eastham Willage Road jnc capacity improvements 2.02	Removal of cheap long stay parking in Birkenhead TC	3.27	132	
Kingsway Public Transport Priority 3.17 134 A41 Rail Freight Link at Port Sunlight 2.92 136 Duncan Street inc capacity improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M63 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements	Two-lane dual carriageway between Poulton Bridge Road and grain warehouse	3.27	133	
A41 Rail Freight Link at Port Sunlight 2.92 136 Duncan Street jnc capacity improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M63 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jnc capacity improvements 2.02 149 Stanley Lane inc capacity improvements 2.02 149 Stanley Lane inc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Rail freight Links to Wirral Waters	3.17	134	
Duncan Street jnc capacity improvements 2.88 137 A552 Corridor Capacity Improvements 2.88 137 Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Fer	Kingsway Public Transport Priority	3.17	134	
A552 Corridor Capacity Improvements 2.88 137 Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road inc capacity improvements 2.02 149 Eastham Village Road inc capacity improvements 2.02 149 Stanley Lane inc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	A41 Rail Freight Link at Port Sunlight	2.92	136	
Capacity and flow improvements on Borough Road / Singleton Avenue 2.88 137 Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Duncan Street jnc capacity improvements	2.88	137	
Tower Road Link widening 2.87 140 Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	A552 Corridor Capacity Improvements	2.88	137	
Improved access to Birkenhead Priory 2.85 141 A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Capacity and flow improvements on Borough Road / Singleton Avenue	2.88	137	
A553 capacity improvements 2.80 142 Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Tower Road Link widening	2.87	140	
Dock Road Link widening 2.70 143 A554 Capacity Increase 2.43 144 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Improved access to Birkenhead Priory	2.85	141	
A554 Capacity Increase 2.43 A553 / A554 Junction Improvements 2.43 144 Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	A553 capacity improvements	2.80	142	
A553 / A554 Junction Improvements 2.43 Car park facility for Birkenhead Police Station 2.42 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Dock Road Link widening	2.70	143	
Car park facility for Birkenhead Police Station 2.42 146 Relocate Birkenhead RO-RO 2.23 147 M53 Junctions 5 and 6 approach improvements 2.15 148 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	A554 Capacity Increase	2.43	144	
Relocate Birkenhead RO-RO2.23147M53 Junctions 5 and 6 approach improvements2.15148Bridle Road jnc capacity improvements2.02149Eastham Village Road jnc capacity improvements2.02149Stanley Lane jnc capacity improvements2.02149Port Causeway jnc capacity improvements2.02149Croft Avenue / Caldbeck Road jnc capacity improvements2.02149New signal junction on Rock Ferry Bypass (Esplanade)2.02149	A553 / A554 Junction Improvements	2.43	144	
M53 Junctions 5 and 6 approach improvements 2.15 Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.15 148 2.02 149 149 149	Car park facility for Birkenhead Police Station	2.42	146	
Bridle Road jnc capacity improvements 2.02 149 Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Relocate Birkenhead RO-RO	2.23	147	
Eastham Village Road jnc capacity improvements 2.02 149 Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	M53 Junctions 5 and 6 approach improvements	2.15	148	
Stanley Lane jnc capacity improvements 2.02 149 Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Bridle Road jnc capacity improvements	2.02	149	
Port Causeway jnc capacity improvements 2.02 149 Croft Avenue / Caldbeck Road jnc capacity improvements 2.02 149 New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Eastham Village Road jnc capacity improvements	2.02	149	
Croft Avenue / Caldbeck Road inc capacity improvements2.02149New signal junction on Rock Ferry Bypass (Esplanade)2.02149	Stanley Lane jnc capacity improvements	2.02	149	
New signal junction on Rock Ferry Bypass (Esplanade) 2.02 149	Port Causeway jnc capacity improvements	2.02	149	
	Croft Avenue / Caldbeck Road jnc capacity improvements	2.02	149	
Conversion of M53 to Smart Motorway Junctions 5-11 1.33 155	New signal junction on Rock Ferry Bypass (Esplanade)	2.02	149	
	Conversion of M53 to Smart Motorway Junctions 5-11	1.33	155	

10 Action Plan of Schemes – Forward Investment Plan for Wirral

Following the identification of a shortlist through the INSET appraisal process, schemes were organised into packages with identified costs and timescales to guide the delivery of transport improvements. This section therefore presents the final proposed transport investment pipeline for Wirral.

A total of 17 packages are proposed, based on the previously noted interventions, which each contain a number of the 122 short listed schemes alongside indicative costs and timescales.

Schemes have been phased according to timescale with 3 key phases for each package as defined below:

- Phase 1: Short Term up to 2025
- Phase 2: Medium Term 2025-2030
- Phase 2: Long Term beyond 2030

Costing of schemes has been undertaken at high level order of magnitude level only at this stage and true costing will clearly require significant additional development work on each scheme. Costs have either been attributed to single schemes or, where more appropriate, to larger groups of multiple schemes. These should be treated as indicative only based on benchmarks, local knowledge and high-level estimation.

Table 17 below presents the proposed Wirral Transport Investment 'Pipeline' Programme. This also shows the structure of packages and phasing of schemes; full details of schemes and packages can be found in Appendix D.

Table 17: Scheme Packages and Phasing

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
1	Expanding Active Travel	1.2.1.3	A553 Fender Lane to A553 / A554 roundabout cycle lane	1	£3m-£10m	Wirral Council
		1.4.1.1	Wirral Circular Trail improvements - Coastal Cycle Strategy	1	£3m-£10m	
		1.4.1.2	Implementation of Birket Scheme - Pasture Road to Reeds Lane, Moreton	1	£1m-£3m	
		1.4.1.3	Wirral CityBike Scheme	1	£3m-£10m	
		1.4.1.4	Active Travel Routes across the M53	1	£3m-£10m	
		1.4.1.5	Cycle Route to Arrowe Park and the Hospital	1	£1m-£3m	
		1.4.1.6	Wirral Cycle Route Network - Connecting the Dots (previously SUDs)	1	£1m-£3m	
		8.3.2.1	Active Travel Connectivity to Local Centres	1	£1m-£3m	
		8.3.2.2	Residential Road Streetscape	1	£1m-£3m	
Total Cost					£20m-£50m	
2	Removing Highway Constraints	1.3.1.1	A540 Heswall Pinch Point Improvements	1	£3m-£10m	Wirral Council
		1.4.2.2	Clatterbridge to Mersey Waterfront Corridor Improvements (A5137/B5137)	2	£3m-£10m	
		1.6.2.1	Port Wirral Road Improvements and Signage Strategy	2	£1m-3m	
		1.6.3.1	Airport Accessibility and Signage Strategy	2	£1m-£3m	
Total Cost					£10m-£20m	
3	Wirral Line Enhancements	1.5.1.1	Station facilities and waiting environment enhancements	1	£10m-£20m	Merseytravel
Er		1.5.1.2	Wirral Line Park and Ride Enhancements	1	£1m-£3m	
		1.5.1.3	Town Meadow/Ledsham New Stations	2	£20m-£50m	
		1.5.1.4	Green Lane Station Refurbishment	1	£3m-£10m	
		1.5.1.5	Park and Ride at Birkenhead Central (inc new forecourt and access route from east)	1	£3m-£10m	
		1.5.1.6	Meols Station Accessibility	1	£3m-£10m	
		2.1.3.1	Improvements to Bus Infrastructure at Birkenhead Park and Conway Park	1	£1m-£3m	
		2.1.3.3	Hamilton Square-Bus/Rail Interchange Improvements	1	£1m-£3m	
		2.1.3.4	Bus / Rail Interchange at Birkenhead North	1	£1m-£3m	
		2.1.3.5	Bus / Rail Interchange at Birkenhead Central	1	£1m-£3m	
		7.1.1.1	Bus / Rail Interchange at New Brighton	1	£1m-£3m	
		8.3.1.1	Bus / Rail Interchange at West Kirby	1	£1m-£3m	
Total Cost					£50m-£100m	
4	Borderlands Line	1.5.2.1	Introduce New Borderlands (Wrexham - Bidston) Line Stations	2	£20m-£50m	
	Transformation	1.5.2.2	Extend Borderlands (Wrexham - Bidston) Line to Birkenhead North	2	£20m-£50m	_

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
		1.5.2.3	Borderlands (Wrexham-Bidston) Line Frequency Increase	1	n/a	Network Rail /
		1.5.2.4	Borderlands (Wrexham - Bidston) Line Electrification (Extension of Merseyrail)	2	n/a	Merseytravel / Merseyrail
		8.3.1.4	New rail spur and station - Heswall	3	£50m-£100m	_ ivici3cyran
		8.3.1.2	Heswall Station Bus / Rail Interchange, Linkage and Parking	1	£3m-£10m	
Total Cost					£100m-£500m	
5	Cross-River Strategy	1.6.1.1	Queensway Tunnel closure to general traffic	3	£20m-£50m	Liverpool City
		1.6.1.6	Use of Queensway Service Tunnel for Rapid Transit	3		Region CA
		1.6.1.12	Queensway Tunnel Resilience Measures	1		
		1.6.1.2	Re-purposing of Queensway Tunnel for Public Transport Only	3		
		1.6.1.3	Kingsway Capacity Increase	1	£10m-£20m	
		1.6.1.4	Kingsway Toll Plaza Re-modelling / Removal	1	<u> </u>	
		1.6.1.9	Wirral Line Connectivity - Wirral Line to Northern Line Link	3	£10m-£20m	_
		1.6.1.10	New Mersey Crossing e.g. Bromborough - Aigburth	3	£500m-£1bn	
		6.1.1.1	New access link into WIBP from Liverpool	3	£3m-£10m	
		1.6.1.13	Mersey Tunnel Flood Resilience	1	£10m-£20m	
Total Cost					£600m- £1.1bn+	
6	Birkenhead Town Centre	2.1.1.1	A41 Chester Street highway realignment	1	£10m-£20m	Wirral Council /
	Gateways	2.1.1.5	Chester Street Junction Improvements	1		Wirral Growth Company
		2.1.1.6	Signage improvement to Birkenhead Priory and Tranmere Docks	1		Company
		2.1.1.7	Electric charging points across borough	1		
		2.1.1.8	Signage/ better entrance to retail core	1		
		2.1.1.9	Birkenhead - local access road improvements	1	<u> </u>	
Total Cost					£10m-£20m	
7	Birkenhead Town Centre	2.1.2.1	Improved Public Realm in retail core	1	£10m-£20m	Wirral Council /
	Streetscape	2.1.2.2	Improved Public Realm Argyle Street	1		Wirral Growth Company
		2.1.2.3	Cleveland Street / Market Street / Price Street Public Realm	1		Company
		2.1.2.4	Public Realm improvements: Conway Street	1		
		2.1.2.5	Improved pedestrian crossing facilities along Argyle Street	1		
		2.1.2.6	Pedestrian overbridge of Borough Road, Whetstone Lane	2		
		2.1.2.7	Conway Park - Market Improved route	1		

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
		1.5.1.7	Re-modelling and Public Realm Improvements: Conway Park and Europa Boulevard	1		
Total Cost					£10m-£20m	
8	Regenerating Woodside	3.1.1.1	Woodside Ferry Terminal Enhancements - new Pontoon	2	£10m-£20m	Wirral Council /
	and Hamilton Square	3.1.1.2	Reconfigure / Redevelop Woodside Gyratory roundabout	2	£10m-£20m	Wirral Growth Company /
		3.1.1.3	Reconfigure / Redevelop Woodside Bus Station and relocate Bus Terminus	2		Peel Holdings
		3.1.1.4	Access Road to Rosebrae Development Site	2		
		3.1.2.1	Hamilton Street two-way outside Station	1		
		3.1.2.2	Remove mini-roundabouts at Hamilton Square	1		
		3.1.2.3	Remove Hamilton Street / Duncan Street road closure	1		
		3.1.2.4	Improved Public Realm outside Hamilton Square rail station	1		
		3.1.2.6	Improved Public Realm at Hamilton Square	1		
		3.1.2.7	Improved walk route between Woodside and Hamilton Square	1		
		3.1.2.8	Improve Argyle Street south approach to Hamilton Square	1	<u> </u>	
Total Cost					£20-£50m	
9	Gateways to Wirral	4.1.2.1	A5139 Dock Road / A5088 Wallasey Bridge Road junction	1	£10m-£20m	Wirral Council /
	Waters	4.1.2.3 Duke St / Dock Road / Gorsey Lane junction		1		Peel Holdings
		4.1.2.4	A5027 Dock Road / A554 Tower Road / A554 Birkenhead Road junction	1		
		4.1.2.5	Duke St / Corporation Road junction	1		
		4.1.2.6	Relocate Wirral Waters Industrial Uses to remove severance	3		
		4.1.2.8	Rendel Street / Corporation Road junction	1	<u> </u>	
		4.1.2.9	Duke Street / Corporation Road junction	1		
Total Cost					£10m-£20m	
10	Wirral Waters Cross-	4.1.1.1	Replacement of Poulton Bridge with a Fixed Structure	3	£20m-£50m	Wirral Council /
	Dock Connectivity	4.1.1.2	Replacement of Duke Street Bridge	2		Peel Holdings
		4.1.1.4	New north-south link and bridge	3		
Total Cost					£20m-£50m	
11	Wirral Waters Supporting	4.1.3.1	Wallasey Bridge Road Improvements	1	£20m-£50m	Wirral Council /
	Highways	4.1.3.2	Beaufort Road and Wallasey Bridge Road (City Boulevard)	2		Peel Holdings
		4.1.3.3	A5030 Beaufort Road / A5088 Wallasey Bridge Road junction improvements	3		
		4.1.3.4	Corporation Road / Cavendish Street / Cleveland Street junction improvements	3		
		4.1.3.7	New development access from Beaufort Road and Wallasey Bridge Road	3	_	

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
		4.1.3.8	A5027 Gorsey Lane / Kingsway Tunnel junction improvements	1		
Total Cost					£20m-£50m	
12	Wirral Waters Active	4.1.4.1	City Boulevard (green transport corridor Corporation Road and Beaufort Road)	2	£3m-£10m	Wirral Council /
	Travel	4.1.4.2	Tower Road / Birkenhead Road pedestrian / cycle link	1		Peel Holdings
		4.1.4.3	Footbridge on Dockside Route	3		
		4.1.4.4	A5027 Duke Street Public Realm	2	<u> </u>	
		4.1.4.5	Wallasey Bridge Road cycle route	2		
		4.1.4.6	Dock Road cycle route	2	<u> </u>	
		4.1.4.7	Pedestrian crossings on Tower Road	1	<u> </u>	
		4.1.4.8	Toucan crossings on Wallasey Bridge Road	3		
		4.1.4.9	River Birket route into West Float	3		
		4.1.4.10	Cycle Route along Canning Street	1		
		4.1.4.11	Wirral Waters Pedestrian wayfinding strategy	1	_	
		4.1.4.13	Extend Victoria Park to Dock Road	2		
		4.1.4.14	Duke Street Active Travel Improvements	2		
		4.1.4.15	Green Link: Wirral Waters to Birkenhead Park	2		
Total Cost					£3m-£10m	
13	World-Class Public	1.5.4.1	Integration of Merseyside ticketing with Deeside and Cheshire West	1	£3m-£10m	Merseytravel /
	Transport	1.6.3.2	Access to Deeside (PT)	1	£100-500k	Mersey Dee Alliance
		2.1.3.2	Relocation of Birkenhead Bus Station	1	£10m-£20m	Alliance
		4.1.5.1	Rapid Transit - Wirral Waters to Liverpool	3	£20m-£50m	_
		4.1.5.2a	Rapid Transit - New Brighton to Rock Ferry via Wirral Waters - Phase 1	1	£3m-£10m	
		4.1.5.2b	Rapid Transit - New Brighton to Rock Ferry via Wirral Waters - Phase 2	2	£3m-£10m	_
		4.1.5.3	Bus routes diverted via Wirral Waters (410, 411, 413, 414)	1	n/a	_
		7.1.1.2	New Brighton Accessibility Improvements (Parking Review/Land Train)	1	£1m-£3m	_
		8.3.1.3	Brimstage Bus Connectivity	1	£1m-£3m	
		8.3.2.3	Improved and integrated Taxi and DRT Coverage	1	£1m-£3m	
Total Cost					£50m-£100m	
14	A41 North Site Access	5.1.1.1	Access to Hind Street - Mollington Link Road	2	£10m-£20m	Wirral Council
	Improvements	1.6.1.7	Queensway Toll Plaza Re-modelling / Removal	1	£10m-£20m	<u> </u>
		5.2.2.2	Green Lane Roundabout capacity improvements	1	£3m-£10m	

Package Number	Package Name	Ref	Scheme	Phase	Cost	Owner
		5.2.2.4	Ivy Street jnc capacity improvements	1	£1m-£3m	
		5.2.2.5	Campbeltown Road capacity improvements	1	£1m-£3m	
		5.2.2.6	Improve ped linkage to B'head town centre from south	1	£1m-£3m	
		5.2.2.7	A41 / A552 / flyover area re-modelling	1	£10m-£20m	
		5.2.2.9	A41 North Southern Bus Access Improvements	1	£1m-£3m	
Total Cost					£50m-£100m	
15	A41 North Sustainable	5.2.3.1	Green link: Rock Ferry to Seacombe via Former Rail Corridor	2	£3m-£10m	Wirral Council
	Connectivity	5.2.3.2	Green Link: Woodside to Seacombe via waterfront	2	£3m-£10m	
		5.2.3.3	Use of former Dock Railway for Rapid Transit	2	£10m-£20m	
Total Cost					£20m-£50m	
16	Hoylake Golf Tourism	8.2.1.1	Saughall Massie Link Road - New Infrastructure	1	£3m-£10m	Wirral Council
	Access	8.2.1.2	Saughall Massie Road- Infrastructure Upgrade	1	£3m-£10m	
		8.2.1.3	Heron Road Improvements	1	£3m-£10m	
		8.2.1.4	Other local access road improvements	2	£3m-£10m	
Total Cost					£20m-£50m	
17	Regenerating New Ferry	8.1.1.1	Downgrading New / Rock Ferry Bypass	3	£50m-£100m	Wirral Council
Total Cost					£50m-£100m	

Source: Mott MacDonald

11 Future Innovation and the Impact on Wirral Strategic Transport Framework Action Plan

11.1 Introduction

The action plan for Wirral's Strategic Transport Framework has been prepared with reference to technologies and transport solutions available at the time of writing, namely December 2018. However, past experience has taught us that in fact the range of available solutions is constantly updating and evolving as new technologies and ideas become more widely available and accessible to the travelling public. It is not always possible to predict in which direction the next large innovation will come from, but we can use logic and experience of historic and emerging trends to some extent to make informed decisions about the future of travel in Wirral.

In this section, a number of potential future technologies and innovative transport solutions will be reviewed and their impact upon the action plan presented in this document evaluated. Alongside each is an estimate of the respective likelihood of each emerging solution and the level of impact that such an innovation might be expected to have on the strategy as a whole.

11.2 Demand Responsive Transport Applications

11.2.1 Application

As already evidenced by the arrival of Uber onto the urban transport scene a few years ago, there is a significant market for demand responsive, technologically based, personal transport solutions. Taxi-style car-based systems are just one facet of this, however, with Arrivaclick's service on the Liverpool – Aigburth – John Lennon Airport corridor showing how the economies of bus services can be blended with the convenience of demand responsive transport systems. Registered as a flexible bus service, these vehicles do not need to use existing bus stops or bus stations for set.down / pick-up. In practice, it is likely that many of the areas poorly served by public transport may in future be better served by systems of this nature with vehicles ordered via an app rather than following a set frequency.

Figure 23: Images of Arrivaclick





Source: Fickr

11.2.2 Benefit

The main benefits of this application is in efficiency since it avoids the need for costly bus services on low demand routes in which frequencies would necessarily be low. At the same time, average wait times for the passenger are significantly reduced and the ability to track the location and arrival time of the public transport service provides needed confidence and reassurance of its arrival. Their responsiveness to passengers' requirements means they are registered as flexible services and routes.

11.2.3 Likelihood

Given that Arriva Click has already arrived elsewhere in Liverpool City Region and has been successfully trialled in other parts of the country, it is considered highly likely that the service will be rolled out to serve the Wirral. With this opportunity will come competition from other operators, which could potentially drive down prices but may also require new legislation. A challenge would be to see whether these services can be integrated with the existing public transport offer in terms of ticketing and interchange since this remains a significant existing barrier to its use.

11.2.4 Impact

It is likely that Demand Responsive Transport would have a significant impact in some of the more rural parts of the borough with little or no existing public transport. In more urban areas, such a system would have to compete with long-established conventional public transport but there may be a significant role in serving the previously industrial areas that are now earmarked for regeneration, at least until the demand for more regular transit systems is proved.

11.3 Micro-Mobility Solutions

11.3.1 Application

Cycle-hire schemes have been introduced in cities around the world to varying degrees of success. Whilst there is no denying their popularity and ability to help define their home city (such as the 'Boris' bikes in London), complicated sign-up processes, poor levels of maintenance, high operating costs and vandalism (Manchester MoBike discontinued) have often combined to make the schemes expensive and only viable in larger cities with more pressing congestion issues. An alternative system that has been installed in many cities is a network of electric micro-scooters with a large range of potential providers. These offer the advantage of being quick and easy to operate, require little effort compared to cycling (particularly uphill) and take up less roadspace than bicycles. The issue is that, at present, they are illegal on the UK's roads being classed as powered transporters.

Figure 24: Images of Bike and Scooter Hire Schemes





Source: geograph.org and flickr

11.3.2 Benefit

A network of micro-mobility vehicles can provide a fast and efficient alternative to private or public transport, particularly in urban areas where the density of collection points is greater. Although cycles have an obvious health benefit and is a tried and tested technology, many are put off by the effort and energy required to travel large distances and over unfavourable topography. Electric scooters resolve many of these issues and are likely to be legalised on Britain's roads in the near future due to public demand, however safety issues and the need to establish clear rules and priorities on footways, in cycleways and on carriageway reduce their ease of introduction somewhat.

11.3.3 Likelihood

A network of public hire bikes (CityBike) is already available in Liverpool and could potentially be rolled-out to Wirral quite readily, however the system has been affected by issues of vandalism and correspondingly high maintenance costs with many of the original docking stations having been forced to close. A Mo-Bike system (with no docking stations) removes a large amount of the overhead costs but still suffers from vandalism and maintenance issues as a result. Ultimately it is likely that electric scooters such as those provided by Bird or Lime operators, will become available in the UK however the legal issues are unlikely to be resolved quickly and it may be several years before these are freely available.

11.3.4 Impact

The impact of a micro-mobility network is most readily felt in dense urban areas and is therefore unlikely to be significant in the majority of the borough. Once the regeneration and redevelopment schemes proposed for Birkenhead Town Centre and Wirral Waters are realised, it is possible that a scheme such as this could be successful, particularly if accompanied by a network of green routes such as is proposed within the strategy.

11.4 Autonomous Personal Vehicles

11.4.1 Application

There is an understandable current hype around autonomous cars given the potential that they have for reducing congestion, improving safety, reducing vehicle mileage and improving the environment. By taking the human factor out of driving, and by communicating with other road

vehicles, they offer the potential to all but eliminate accidents whilst simultaneously increasing productivity time whilst travelling. In reality an autonomous revolution could lead to a stepchange in the public's views on car ownership, with app-based ride ordering (the autonomous equivalent of Demand Responsive Transport) becoming the norm. However, question marks remain over the true safety value of this innovation after a series of recent high-profile injuries and fatalities around the world. In addition, some planners have questioned whether a fleet of autonomous vehicles picking up and depositing users around cities may actually lead to increased mileage and a reduction in average vehicle occupancy to numbers approaching and potentially even less than 1.

Figure 25: Autonomous Vehicle Images





Source: Flickr and Wikimedia Commons

11.4.2 Benefit

The stated benefits of autonomous personal transport include: efficiency from reducing the amount of time vehicles sit idle and unused; safety by taking the human error factor out of vehicle control and increasing the amount of communication between vehicles; environmental from reducing mileage, emissions and noise; and productivity by increasing the amount of time that users may work while travelling. It should be noted that some of these are disputed and studies are ongoing to better measure the potential for widespread benefit realisation from autonomous transport.

11.4.3 Likelihood

As with all new and innovative technologies, the likelihood of ultimate realisation is not necessarily proportional to the public excitement experienced. Despite significant strides forward in the field in recent years, some significant technical obstacles still need to be overcome for this technology to be released into the market fully. Nonetheless, there is a sense that it is just a matter of time before autonomous or semi-autonomous vehicles become a reality.

11.4.4 Impact

Once they become available there is little doubt that autonomous vehicles will have a major impact on the way we travel both for short journeys around urban areas, and for longer local, regional and national trips. As noted above, there is the potential for a different model for car use – based on a shared system rather than personal ownership – to become more prevalent.

The challenge will be to ensure that this translates into actual vehicle mileage savings with the environmental, congestion and social benefits that this engenders.

11.5 Autonomous Mass Transit

11.5.1 Application

The application of the principles of autonomous personal transport to public mass transit is a simple intellectual step, and indeed the predictable routing and spacing patters of public transport could greatly simplify the technical requirements of the system. Autonomous public transport is not a new idea with driverless trains operating on several systems around the world including the Docklands Light Railway in London, however the recent advances in technology have allowed the principles of autonomous control to be applied to road vehicles such as buses for the first time. Simple systems have already been trialled including smaller pods in Greenwich and by major bus operator Stagecoach for use in its depots only, however the UK Government will need to legislate for this to be extended to carry passengers on public roads.

Figure 26: Autonomous Bus and Transit Vehicles





Source: Flickr

11.5.2 Benefit

The cost saving benefit of autonomous PT is significant since, at present, driver wages make up a large proportion of the operating cost of a service. By removing this component, the technology promises to make public transport cheaper and more efficient, alongside the safety improvements described above for all autonomous transport. This, in turn, will make the running of bus services more viable in areas with lower demand increasing the coverage of the system, and providing public transport provision to some of the more rural or hard to reach areas of the borough, thereby reducing car use.

11.5.3 Likelihood

As with autonomous private vehicles, the momentum behind the technology is clear to see at present. Despite the need to iron out some remaining technological barriers, there is a definite sense of 'when' rather than 'if' in relation to autonomous buses. The need for new legislation to allow passengers to use these vehicles is likely to delay its introduction, however this is likely to be a formality if it can be shown that the software is actually safer than human drivers in relation to accidents and safety.

11.5.4 Impact

In the context of Wirral, the expectation would be that the entire bus network could one day be taken over and operated by autonomous vehicles, thereby reducing costs to the operator and, hopefully, the passenger. As noted above, reduced costs, also make it more likely that routes could be considered viable in areas of low demand which are currently prohibitively expensive to serve, thereby providing an alternative to private transport for Wirral's more isolated communities.

Overall, to help facilitate autonomous vehicles on streets there may be a requirement to modify the actual streets themselves and how people interact with those streets. For example, manufacturers such as Tesla already operate semi-autonomous vehicles, but they can only work effectively in sterile environments like motorways and rural dual carriageways. If a form of this was required in towns to allow these types of vehicles to operate, it could require random elements to be minimised – such as uncontrolled pedestrian crossings and on-street parking.

11.6 Mobility as a Service (MaaS)

11.6.1 Application

Put simply, MaaS is the rationalising of all forms of transport use into a single simple to use interface such as an app or web-site which would handle ticketing, planning, ordering, tracking and other aspects. In practice this means that, whether ordering a demand responsive vehicle (either autonomous or manual), hiring a bike or micro-scooter, buying a public transport ticket or accessing the most expedient walking route, users will make use of the same interface to accomplish this. MaaS has been greeted with excitement and enthusiasm since it was first proposed, however some debate is still underway as to the body that will ultimately 'own' the MaaS platform and the best way to utilise its benefits, particularly in multiple-operator deregulated transport environments as exist within the UK.

Figure 27: MaaS App Infographic

Source: parliament.uk

11.6.2 Benefit

In principle, MaaS has the potential of offering significant benefits to the user, not least by:

- Limiting congestion, particularly during peak travel periods
- Reducing car ownership, car usage and the number of vehicles on roads
- Use of existing infrastructure more effectively and create economies of scale
- Easing of pressure on the transportation network and
- Improving the customer experience by presenting the transportation network as an integrated system.

The ideal outcome would be for each of the providers of transport services within an area to join the system and promote their services through it. Ultimately though, there are significant challenges in networks where substantial competition still remains i.e. between bus operators or taxi providers.

11.6.3 Likelihood

Although a relatively new concept, the House of Commons Transport Committee recently hosted a live enquiry into the benefits of MaaS thereby highlighting how seriously it is being taken on a national level. Despite this, there remain a number of barriers to overcome, not least the issue highlighted above associated with the fragmented nature of the UK's transport services and the competition. The recent buses bill and the additional powers for local transport authorities to franchise bus networks (particularly in city regions with Metro Mayors such as Liverpool City Region) should improve the prospects of this type of application, however.

11.6.4 Impact

The primary impact of MaaS is in the elimination of the currently confusing array of different available services, tickets, restrictions, operators and modes, providing the user instead with a single point of access to the network. It effectively creates a level of integration within the network that is not otherwise possible in a multi-modal, multi-operator environment. In this way the impact would not be so much replacing the existing transport network (or that proposed in this document) but rather making it more accessible for the travelling public, providing a greater body of choice to the private car for journeys.

11.7 Conclusions

To conclude, there is significant potential for new technology to play a role in the future transport network of Wirral. A key issue associated with successfully planning for future networks is the fact that it is difficult to predict the nature or impact of the next big innovation. Past experience tells us that some of the most exciting and over-hyped ideas have ultimately failed to take-off or bring about lasting behavioural change, whereas other solutions have developed slowly and quietly and have come to change the world. Despite this we are able to make some predictions about the future based on available knowns:

1. Firstly we know that Artificial Intelligence (AI) will have a major impact since its use is already established and growing. Al controls electronic journey planners, active-traffic management information displays, automatic navigation systems in cars, and meeting scheduling, all disparate technologies with an impact on the transport network. Al is likely to become increasingly widespread and will ultimately assume control of an ever greater proportion of our lives – it will clearly continue to have a role in transportation;

- 2. Secondly, we know that the transport system must adapt to tackle the challenges of climate change, most immediately by converting from a carbon-based to a sustainable fuel economy. Several contender technologies exist most readily available are hybrid or fully electric vehicle which run using battery storage of energy. Further ahead, a hydrogen economy (which produces no harmful waste and is the most abundant material in the Universe) looks set to revolutionise energy production;
- 3. Finally, with the changes noted above, we know that the changes observed on the network are likely to result in major redundancy of existing infrastructure. Petrol filling stations will become a thing of the past, potentially to be replaced by mass charging points or hydrogen filling points. A move towards autonomous vehicles will reduce the need for car parks or local garages and mechanics, driving a change in land-use that will have a sizeable impact on local areas.

Whilst we are able to make predictions about the general direction of travel of new technology and innovation, we do not know the exact route, and it is therefore vitally important that Transport Action Plans such as that presented in this document be adaptive enough to cope with and incorporate change. It is proposed that the Action Plan for Wirral's Strategic Transport Framework remain a living document and be reviewed regularly in light of new innovations and technologies in order to maximise its usefulness and utility.

12 Conclusions and Next Steps

This document has summarised the process involved in the creation of a fully revised and refreshed programme of forward transport schemes for Wirral Council to support the aspirations of the Strategic Regeneration Framework. The resultant list of schemes is based upon the schemes put forward in 2016 for the Wirral Transport Pipeline but goes much further than this previous document in ensuring the schemes are consistent with:

- The priorities of Wirral Council and Wirral Growth Company through the Strategic Regeneration Framework;
- The emerging strategies for the A41 North and Wirral Waters development areas;
- The refreshed list of issues that the action plan must tackle in terms of transport provision across the borough; and
- Further work undertaken since the publication of the previous pipeline including the East Wirral Transport Study (by KBR) and the latest information on Wirral Waters, Woodside and Hind Street developments.

As noted earlier in this document, this Strategic Transport Framework Action Plan is just one component of the suite of work currently being undertaken on behalf of Wirral Council and Wirral Growth Company. Concurrently work is being undertaken on the business case for Saughall Massie Road improvements, and the transport strategies for the A41 North and Wirral Waters development zones. Further to these, modelling work is also being undertaken to understand the impacts of the schemes proposed within this and the other noted studies. This has been expanded in recent days to incorporate a potential modelling programme to review the impact of the emerging Local Plan for Wirral including the identified draft housing allocations.

The results of the A41 North and Wirral Waters studies, alongside the overarching framework presented in this document, can then be discussed and debated with the required group of stakeholders including political leaders, landowners, transport providers and local interested parties. In particular, there is a need to continue to engage with key City Region partners and leading officers and politicians (such as the Mayor of Liverpool City Region). This will ensure buy-in to the final framework and the beginnings of a City Region-wide transport framework solution that the entire region can support.

More immediately, the packages and schemes contained within this document will need to be fed into the ongoing City Region Pipeline Refresh being undertaken by Merseytravel, particularly the more strategic schemes which will require multiple partner organisations to deliver. The structures to ensure this happens are already in place through existing City Region governance (and the Transport Advisory Group – TAG) and should therefore be easily achievable.

In time there will be a need for more detailed design of the measures proposed in this action plan and one possible option for some of the schemes noted could be to hold a design competition. This could help to ensure that the correct product is delivered in specific areas and could be particularly relevant for the Public Realm works proposed including that on Argyle Street, Conway Street, Europa Boulevard and on the former Dock Railway, however alternative models for progression do exist. Alongside this is the need to identify future funding sources and to apply for this via the traditional business case process. This will be an important next step but it should also be noted that significant amounts of the proposed workload will be of great importance and significance to key third parties such as Peel Holdings, ION

Developments and the Wirral Growth Company partners and there may, therefore, be a substantial amount of third party funding available to help to deliver these schemes. Continued engagement with these parties is considered to be crucial to ensure a beneficial outcome for all concerned.





Appendices

A.	Previous Scheme Alignment with SRF and Wirral Priorities- Results	119
B.	Long List Structure	120
C.	INSET Results	121
D.	Proformas	122

A. Previous Scheme Alignment with SRF and Wirral Priorities- Results

cheme	Birkenhead Town Centre	Hamilton Square	Woodside	Wirral Waters EZ	Priority A41 Corridor	Wirral International Business Park	New Brighton	Local Town Centres	High Quality Housing	Employment, Skills, Economic Development		Tourism and	Sustainable Development / high quality	Healthier lifestyles and safer neighbourhoods	moving safely and	Reliable and	Encourage healthy	Inclusive integrated transport that supports our	Score Category	Ranking Mode
mber Scheme Description										·	, , , ,		Environment		,			residents needs		
40 Wirral-Maintaing our Assets																			34 Excellent	1 Road
LED Phase 2																			34 Excellent	1 Road
8 Wirral Line Stations Master Plan																			32 Excellent	3 Rail
6 Wirral Line Connectivity																			32 Excellent	3 Public Transport
A41 Cycle and Pedestrian Connectivity																			31 Excellent	5 Cycling, Public Transport, Road
27 Smart/Integrated Ticketing																			31 Excellent	5 Public Transport
5 Active Travel Connectivity to Local Centres																			31 Excellent	5 Walking and Cycling
.7 A553/A554 Improvements																			30 Good	10 Road and Cycling
9 Wirral Line Park and Ride																			30 Good	10 Rail
5 Coastal Cycling Strategy																			30 Good	10 Active Transport (Cycling and Walki
A41 Bus Connectivity and Improvements																			29 Good	13 Public Transport (Bus)
4 Active Travel Routes Across the M53																			29 Good	13 Walking and Cycling
A41 Corridor (Capacity)																			28 Good	15 Road
8 Community Road Safety Promotion																			28 Good	15 Road, Active Travel, Public Transpo
7 Wirral SUD Schemes																			27 Good	18 Walking and Cycling
A552 Corridor Capacity Improvements																			27 Good	18 Road and Pedestrain
Park and Ride at Birkenhead Central																			27 Good	18 Public Transport
Wirral Waters Supporting Road Infrastructure																			26 Good	21 Road
Wirral Waters Active Travel Connectivity																			26 Good	21 Road, Active Transport
Wirral Waters Streetcar (Mass Transit)																			26 Good	21 Public Transport (Rail)
Birkenhead Town Centre Gateways																			25 Moderate	24 Road
Birkenhead Town Centre Streetscape																			25 Moderate	24 Active Transport (Cycling and Walk
Wirral Waters Public Transport Accessibility																			25 Moderate	24 Public Transport
Capacity Improvements to the M53																			25 Moderate	24 Road
Mersey Tunnels																			24 Moderate	28 Road, Public Transport
Gateways to Wirral Waters																			24 Moderate	28 Road
M53 Junction Approaches Improvements																			24 Moderate	28 Road
Extend Borderland (Wrexham-Bisdston) Line																			24 Moderate	28 Rail
Improvements to Bus Infrastructure at Birkenhead Park and Conway Park																			23 Moderate	33 Public Transport
Business Travel Support																			23 Moderate	33 Smater Choices
Wirral Active Travel Campaign																			23 Moderate	33 Walking and Cycling
New Brighton Accessibility Improvements (Parking Review/Land Train)																			23 Moderate	33 Road
New and Upgraded UTMC and CCTV																			22 Moderate	39 Traffic Management
7 Travel Solutions																			22 Moderate	39 Active Travel, Public Transport
2 Access to Deeside																			22 Moderate	39 Public Transport
Birkenhead North-Bus/Rail Interchange Improvements																			21 Moderate	44 Public Transport
New Brighton- Bus/Rail Interchange Improvements																			21 Moderate	44 Public Transport
Residential Road Streetscape																			21 Moderate	44 Road
Wirral Waters Cross Dock Connectivity																			20 Poor	47 Road, Active Transport
Introduce New Borderlands (Wrexham-Bidston) Line Stations																			20 Poor	47 Rail
Water Taxis																			19 Poor	51 Public Transport
Port Wirral																			18 Poor	53 Road
West Kirby- Bus/Rail Interchange Improvements																			18 Poor	53 Public Trasnport
4 Heswall Public Transport Connectivity																			18 Poor	53 Public Trasnport
9 Airport Accessibility (Improved Signage)																			18 Poor	53 Road (Improved Signage)
M53 Smart Motorways between Junction 5 and 11																			18 Poor	53 Road
Clatterbridge to Mersey Waterfront Corridor Improvements																			17 Poor	58 Road, Walking and Cycling
Green Lane Station Refurbishment																			17 Poor	58 Rail
A540 Heswall Pinch Point Improvements																			16 Poor	62 Road
Brimstage Bus Connectivity																			16 Poor	62 Public Transport
Meols Station Accessibility																			16 Poor	62 Rail
Town Meadow/Ledsham New Stations																			20 Poor	47 Rail
Saughall Massie Link Road- New Infrastructure																			16 Poor	62 Road
Saughall Massie Road- Infrastructure Upgrade																			16 Poor	62 Road
Heron Road Improvements																			16 Poor	62 Road
Cycle Route to Arrowe Park and the Hospital																			17 Poor	58 Cvcle
A41 Rail Frieght Link																				47 Rail
Rail Frieght Link National Waters																			20 Poor 17 Poor	58 Rail
ost 2016 Interventions																			. 55.	
9 Woodside Ferry Travel																			14 Unaligned	68 Public Transport (Ferry)
D Europa Boulevard/Conway Park Station Remodelling																			11 Unaligned	69 Public Transport (Rail])
Birkenhead Town Station																			23 Moderate	33 Public Transport (Rail])
Relocation of Birkenhead Bus Station																			19 Poor	51 Public Transport (Bus)
•																			•	
travel Pipeline																				
Mersey Tunnel Toll Plaza Congesiton Management																			28 Good	15 Road
Queensway Tunnel toll Plaza Modelling																			31 Excellent	5 Road
Queensway Tunnel Resillience Measures																			31 Excellent	5 Road
Bidston Moss Viaduct Major Maintenance																			22 Moderate	39 Road
																			23 Moderate	33 Road
Mersey Tunnel Flood Resillience Smarter Choice Interventions																			22 Moderate	39 Smarter Choices
Improved Ferry Service																			24 Moderate	28 Public Transport (Ferry)
Score	02	8/1	0	2 05	C A	71	Г4	10	3	10 124	1 116		2/ 12	0	9 100		71	116	27 IVIOUCIALE	20 It done transport (Letty)
Score	02	04	0	2 65	04	1 /1	31	10.	3 4	122	+ 110	3	74 13	0	100	7	+ /1	110		

Theme	Score	Rank
Sustainable Development/high quality Environment	#N/A	#N/A
Employment, Skills, Economic Development	124	#N/A
Excellent Connectivity - Transport/Digital	#N/A	#N/A
Inclusive integrated transport that supports our residents needs	116	#N/A
Local Town Centres	103	#N/A
Keep traffic moving safely and efficiently	100	#N/A
Healthier lifestyles and safer neighbourhoods	99	#N/A
Reliable and affordable public transport	94	#N/A
Tourism and Culture offer	94	#N/A
Wirral Waters EZ	85	#N/A
Hamilton Square	84	#N/A
Birkenhead Town Centre	82	#N/A
Woodside	82	#N/A
Wirral International Business Park	71	#N/A
Encourage healthy active travel	71	#N/A
A41 Corridor	64	#N/A
New Brighton	51	#N/A
High Quality Housing	40	#N/A

Shortfall in schemes aligned to these themes

B. Long List Structure

Spatial Level	Outcomes	Interventions	Sifted Schemes	Prev No/s	
1 Strategic and Borough-Wide	1 A41 Corridor	1 A41 Corridor Capacity Improvements	 Bridle Road jnc capacity improvements Eastham Village Road jnc capacity improvements Stanley Lane jnc capacity improvements Port Causeway jnc capacity improvements 	1 1	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
	2 M53 Corridor	1 M53 Junction 1 Improvements	 5 Croft Avenue / Caldbeck Road jnc capacity im 6 New signal junction on Rock Ferry Bypass (Esp 1 A554 Capacity Increase 2 A553 / A554 junction improvements 	blanade) 1 10 10 17	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
		2 M53 Capacity Improvements	 3 A553 Fender Lane to A553 / A554 roundabou 4 Bidston Moss Viaduct Major Maintenance 1 Conversion of M53 to Smart Motorway Juncti 2 M53 Junctions 5 and 6 approach improvement 	66 sions 5-11 30, 32	Prev Wirral Pipeline Prev LCR Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
	3 A540 Corridor 4 East-west linkage	1 A540 Capacity Improvements 1 Active Travel Links	A540 Heswall Pinch Point Improvements Wirral Circular Trail improvements - Coastal C Implementation of Birket Scheme - Pasture Ro	53 Eycle Strategy 25 Doad to Reeds Lane, Moreton 25	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			 3 Wirral CityBike Scheme 4 Active Travel Routes across the M53 5 Cycle Route to Arrowe Park and the Hospital 6 Wirral Cycle Route Network - Connecting the 	25 34 51 Dots (previously SUDs) 47	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
	5 Rail Connectivity	Access Improvements Wirral Line Stations Enhancements	A552 Corridor Capacity Improvements Clatterbridge to Mersey Waterfront Corridor I Station facilities and waiting environment enh Wirral Line Park and Ride Enhancements		Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			3 Town Meadow/Ledsham New Stations 4 Green Lane Station Refurbishment 5 Park and Ride at Birkenhead Central	46 56 57	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			 Meols Station Accessibility Remodelling and Public Realm Improvements Improvements to Bus Infrastructure at Birken Birkenhead Town Station 		Prev Wirral Pipeline New Scheme Prev Wirral Pipeline KBR Report
		2 Borderlands Line Enhancements	 Introduce New Borderlands (Wrexham - Bidst Extend Borderlands (Wrexham - Bidston) Line Borderlands (Wrexham-Bidston) Line Frequent 	ton) Line Stations 43 to Birkenhead North 44 ncy Increase 44b	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
		3 Enhanced Rail Freight Access 4 Smart Integrated Ticketing	4 Bordelands (Wrexham - Bidston) Line Electrification 1 A41 Rail Freight Link at Port Sunlight 2 Rail freight Links to Wirral Waters 1 Integration of Merseyside ticketing with Dees	2 13	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
	6 Wider Connections	1 Cross-River	 Queensway Tunnel closure to general traffic Re-purposing of Queensway Tunnel for Public Kingsway Capacity Increase 	72	New Scheme New Scheme New Scheme
			 4 Kingsway Toll Plaza Remodelling / Removal 5 Kingsway Public Transport Priority 6 Use of Queensway Service Tunnel for Rapid Toll 7 Queensway Toll Paza Re-modelling / Removal 		New Scheme New Scheme Prev LCR Pipeline
			 8 Water Taxis 9 Wirral Line Connectivity - Wirral Line to North 10 New Mersey Crossing e.g. Bromborough - Aig 	7 nern Line Link 26 burth 75	Prev Wirral Pipeline Prev Wirral Pipeline New Scheme
		2 Port Wirral	 11 M53 to M62 Linkage (Waterloo Tunnel) 12 Queensway Tunnel Resillience Measures 13 Mersey Tunnel Flood Resillience 1 Port Wirral Road Improvements and Signage States 	127 65 67 Strategy 5	New Scheme Prev LCR Pipeline Prev LCR Pipeline Prev Wirral Pipeline
2 Birkenhead Town Centre	1 Support Birkenhead Town Centre Regeneration	3 Beyond Wirral 1 Birkenhead Town Centre Gateways	 Airport Accessibility and Signage Strategy Access to Deeside A41 Chester Street highway realignment 	29 42 14	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			 Capacity and flow improvements on Borough A553 / Park Road East junction improvements A553 capacity improvements Chester Street junction improvements 		Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			 Signage improvement to Birkenhead Priory ar Electric charging points in Birkenhead Town C Signage/ better entrance to retail core 	Centre 14 14, 120	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
		2 Birkenhead Town Centre Streetscape	 9 Birkenhead - local access road improvements 1 Improved public realm in retail core 2 Improved public realm Argyle Street 3 Cleveland Street / Market Street / Price Street 	15 15, 103	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			 4 Public realm improvements: Conway Street 5 Improved pedestrian crossing facilities along a 6 Pedestrian overbridge of Borough Road, When 	15, 106 Argyle Street 15, 107 tstone Lane 15, 117	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
		3 Bus / Rail Interchange Enhancements	 7 Improve ped linkage to B'head town centre fr 8 Conway Park - Market Improved route 9 Removal of cheap long stay parking in Birkenh 1 Improvements to Bus Infrastructure at Birkenh 	15, 141 nead TC 153	Prev Wirral Pipeline Prev Wirral Pipeline New Scheme New Scheme
			 Relocation of Birkenhead Bus Station Hamilton Square-Bus/Rail Interchange Improv Bus / Rail Interchange at Birkenhead North and Bus / Rail Interchange at Birkenhead North and Bus/Rail Interchange 	nd Birkenhead Park 21	KBR Report New Scheme Prev Wirral Pipeline
3 Woodside and Hamilton Square	1 Support Woodside and Hamilton Square Regeneration	1 Woodside Regeneration	 Bus Rail Interchange at Birkenhead Central Woodside Ferry Terminal Enhancements Reconfigure / Redevelop Woodside Gyratory Reconfigure / Redevelop Woodside Bus Station 		New Scheme New Scheme New Scheme New Scheme
		2 Hamilton Square Regeneration	4 Access Road to Rosebrae Development Site 1 Hamilton Street two-way outside Station 2 Remove mini-roundabouts at Hamilton Squar 4 Remove Hamilton Street / Duncan Street road		New Scheme New Scheme New Scheme
			5 Improved public realm outside Hamilton Squa 6 Car park facility for Birkenhead Police Station 7 Improved public realm at Hamilton Square 8 Improved walk route between Woodside and	98 102	New Scheme New Scheme New Scheme New Scheme
4 Wirral Waters EZ	1 Support Growth at Wirral Waters	1 Wirral Waters Cross Dock Connectivity	9 Improved walk route between woodside and 9 Improve Argyle Street south approach to Ham 1 Replacement of Poulton Bridge with a Fixed S 2 Replacement of Duke Street Bridge	nilton Square 111	New Scheme Prev Wirral Pipeline New Scheme
		2 Gateways to Wirral Waters	 Wirral Cross-Dock Connectivity - Revised New north-south link and bridge Relocate Birkenhead RO-RO A5139 Dock Road / A5088 Wallasey Bridge Ro 	8, 84 147 8, 88	Prev Wirral Pipeline New Scheme Prev Wirral Pipeline Prev Wirral Pipeline
			 Duke St / Dock Road / Gorsey Lane junction A5027 Dock Road / A554 Tower Road / A554 Duke St / Corporation Road junction 	9 Birkenhead Road junction 9 9	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			 Relocate Wirral Waters Industrial Uses to rem A554 Tower Road / Rendel Street junction Rendel Street / Corporation Road junction Duke Street / Corporation Road junction 	9, 87 9 9	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
		3 Wirral Waters Supporting Road Infrastructure	 Wallasey Bridge Road Improvements Widening of Beaufort Road and Wallasey Bridge A5030 Beaufort Road / A5088 Wallasey Bridge 	e Road junction improvements 10	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			 4 Corporation Road / Cavendish Street / Clevela 5 A554 Tower Road / Canning Street Capacity In 6 Canning Street / Lord Street Capacity Improve 7 New development access from Beaufort Road 	mprovements 10 ements 10	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			 8 A5027 Gorsey Lane / Kingsway Tunnel junctio 9 Dock Road Link widening 10 Tower Road Link widening 11 Two-lane dual carriageway between Poulton 	10 10	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Saville Bird and Axon
		4 Wirral Waters Active Travel Connectivity	12 Dock Road to Corporation Road Dual Carriage 1 City Boulevard (green transport corridor Corp 2 Tower Road / Birkenhead Road ped / cycle lin	eway link (Duke St) 150 oration Road and Beaufort Road) 11	Saville Bird and Axon Prev Wirral Pipeline Prev Wirral Pipeline
			 Footbridge on Dockside Route A5027 Duke Street public realm Wallasey Bridge Road cycle route Dock Road cycle route 	11 11 11 11	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			7 Pedestrian crossings on Tower Road 8 Toucan crossings on Wallasey Bridge Road 9 River Birket route into West Float	11 11 11 11	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
			 10 Cycle Route along Canning Street 11 Wirral Waters Pedestrian wayfinding strategy 12 Cover the Wallasey Tunnel Approach 13 Extend Victoria Park to Dock Road 	86 145	Prev Wirral Pipeline Prev Wirral Pipeline New Scheme New Scheme
		5 Wirral Waters Public Transport Connectivity	 14 Green Link: Wirral Waters to Birkenhead Park 15 Duke St Active Travel Improvements 1 Rapid Transit - Wirral Waters to Liverpool 2 Rapid Transit - New Brighton to Rock Ferry via 	149 16, 124	New Scheme New Scheme Prev Wirral Pipeline Prev Wirral Pipeline
5 A41 Study Area	1 Support Hind Street Regeneration 2 A41 Study Area Access Improvements	Hind Street Access Improvements Southern Access Improvements	3 Bus routes diverted via Wirral Waters (410, 42) 1 Access to Hind Street - Mollington Link Road 1 Green Lane Roundabout capacity improvement	11, 413, 414) 16 90	Prev Wirral Pipeline New Scheme Prev Wirral Pipeline
			 Duncan Street jnc capacity improvements Ivy Street jnc capacity improvements Campbeltown Road capacity improvements Improve ped linkage to B'head town centre from the proventies 	1 1 1 om south 117	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline New Scheme
			6 A41 / A552 / flyover area remodelling 7 Improved access to Birkenhead Priory 8 A41 Southern Bus Access Improvements	129 108 4	New Scheme New Scheme Prev Wirral Pipeline
6 Wirral International Business Park	1 Support Economic Growth of Business Park	3 A41 Sustainable Connectivity 1 Access to Wirral International Business Park	 Green link: Rock Ferry to Seacombe via Forme Green Link: Woodside to Seacombe via water Use of former Dock Railway for Rapid Transit New access link into WIBP from Liverpool 		New Scheme New Scheme New Scheme New Scheme
7 New Brighton 8 Local Town Centres	Support Regeneration in New Brighton Support Regeneration in New Ferry	New Brighton Public Transport Enhancements Removing Severance	 Bus / Rail Interchange at New Brighton New Brighton Accessibility Improvements (Pail Downgrading New / Rock Ferry Bypass 	rking Review/Land Train) 22 130a	Prev Wirral Pipeline Prev Wirral Pipeline New Scheme
	2 Support growth of golf tourism in Hoylake	1 Access Improvements	 Saughall Massie Link Road - New Infrastructure Saughall Massie Road - Infrastructure Upgrade Heron Road Improvements Other local access road improvements 		Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline New Scheme
	3 Support growth in other town centres	1 Other Public Transport Enhancements	 Bus / Rail Interchange at West Kirby Heswall Station Bus / Rail Interchange, Linkag Brimstage Bus Connectivity 	te and Parking 24 54	Prev Wirral Pipeline Prev Wirral Pipeline Prev Wirral Pipeline
		2 Other Schemes	 4 New rail spur and station - Heswall 1 Active Travel Connectivity to Local Centres 2 Residential Road Streetscape 3 Improved and integrated Taxi Coverage 	122 35 36 151	New Scheme Prev Wirral Pipeline Prev Wirral Pipeline New Scheme

C. INSET Results

Wirral Strategic Transport Framewo	ork - Action Plan Scheme Appraisal									
Interventions.	Cife of Calcumos	Crowth		I au	· Carlhan	Dynamating Haalthing Historian		lance Addressed	Number of Economic Supporting Environmental Local Social Deliverability	the TOTAL Double Dropped to Chart List?
Interventions	Sifted Schemes	Economic Growth	Supporting Visitor Economy	Low Environmental	Carbon Local access and connectivity	Promoting Healthier Lifestyles Social Impacts	Deliverability	Issues Addressed	issues Growth visitor Access Access Access	y TOTAL Rank Proceed to Short List?
		Supporting	Improving		Making hatter	Increased				
		Regeneration Supporting Opening up investment Total Total and Birkenhead new land for and job Economic Economic	I services at Improved Weighted Mic Woodside wayfinding Building on Total Visitor Total Visitor	Maintain low Protecting or levels of noise enhancing Creating new Enhancing Total Total of walking an	s Reducing the use of the Making better Improved Removing Weighted number of highway use of public transport barriers to Total Local Total Local	Better / Reducing the Enhanced Weighted connected opportunities/ number of pedestrian / Total Social Total Social Public	Stakeholder Barriers / ownership / Relative Total	Weighted Total		
A41 Corridor Capacity Improvements	1 1.1.1.1 Bridle Road jnc capacity improvements	Development Town Centre development creation Growth 1 0 0 0 1 0.25	th Ferry Terminal and legibility key assets Economy Economy 0 0 0 0 0 0.00	and pollution landscapes green spaces townscapes Environmental Environmental cycling routes -1 -1 0 0 -2 -0.5 0	s vehicles network transport interchange movement Access Access -1 2 1 0 2 4 0.67	communities training accidents cycle safety Impacts Impacts Approval 1 1 1 4 1.0 1	Approval Constraints acquisition difficulty / cost Deliverability 1 1 1 1 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4	ty Deliverability 0.6 IN3 CO4 JU31 JU32	4 0.25 0.00 -0.50 0.67 1 0.6	2.02 149 NO
	 2 1.1.1.2 Eastham Village Road jnc capacity improvements 3 1.1.1.3 Stanley Lane jnc capacity improvements 4 1.1.1.4 Port Causeway jnc capacity improvements 	1 0 0 0 1 0.25 1 0 0 0 1 0.25 1 0 0 0 1 0.25	0 0 0 0 0.00 0 0 0 0 0.00	-1 -1 0 0 -2 -0.5 0 -1 -1 0 0 0 -2 -0.5 0 -1 -1 0 0 0 -2 -0.5 0	-1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67	1 1 1 1 4 1.0 1 1 1 1 1 4 1.0 1 1 1 1 1 4 1.0 1	1 1 1 -1 3 1 1 1 -1 3 1 1 1 -1 3	0.6 IN3 CO4 JU31 JU32 0.6 IN3 CO4 JU31 JU32	4 0.25 0.00 -0.50 0.67 1 0.6 4 0.25 0.00 -0.50 0.67 1 0.6 4 0.25 0.00 -0.50 0.67 1 0.6	2.02 149 NO 2.02 149 NO 2.02 149 NO
ME2 Junction 1 Improvements	5 1.1.1.5 Croft Avenue / Caldbeck Road jnc capacity improvements 6 1.1.1.6 New signal junction on Rock Ferry Bypass (Esplanade)	1 0 0 0 1 0.25 1 0 0 0 1 0.25 1 0 0 0 1 0.25	0 0 0 0.00 0 0 0 0.00	-1 -1 0 0 -2 -0.5 0 -1 -1 0 0 -2 -0.5 0 1 1 0 0 2 0.5 1	-1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67 1 2 1 0 2 5 0.82	1 1 1 1 4 1.0 1 1 1 1 1 4 1.0 1 1 1 2 1 5 1.25 1	1 1 1 -1 3 1 1 1 -1 3 1 1 1 1 3	0.6 IN3 CO4 JU31 JU32 0.6 IN3 CO4 JU31 JU32	4 0.25 0.00 -0.50 0.67 1 0.6 4 0.25 0.00 -0.50 0.67 1 0.6 1 0.35 0.00 0.50 0.83 1.35 0.6	2.02 149 NO 2.02 149 NO
M53 Junction 1 Improvements	 1 1.2.1.1 A554 Capacity Increase 2 1.2.1.2 A553 / A554 junction improvements 3 1.2.1.3 A553 Fender Lane to A553 / A554 roundabout cycle lane 	1 0 0 0 1 0.25 1 0 0 0 1 0.25 0 0 0 0 0 0.0	0 0 0 0 0.00 0 0 0 0 0.00 0 1 0 1 0.33	-1 -1 0 0 -2 -0.5 1 -1 -1 0 0 -2 -0.5 1 1 1 0 0 2 0.5 2	-1 2 1 0 2 5 0.83 -1 2 1 0 2 5 0.83 1 1 0 0 2 6 1.0	1 1 2 1 3 1.25 1 1 1 2 1 5 1.25 1 1 1 1 2 5 1.25 1	1 1 1 -1 3 1 1 1 -1 3 1 2 1 1 6	0.6 H12 JU2 JU8 JU24 1.2 H12 H12 H12	1 0.25 0.00 -0.50 0.83 1.25 0.6 4 0.25 0.00 -0.50 0.83 1.25 0.6 1 0.00 0.33 0.50 1.00 1.25 1.2	2.43 144 NO 2.43 144 NO 4.28 104 YES
M53 Capacity Improvements	1 1.2.2.1 Conversion of M53 to Smart Motorway Junctions 5-11 2 1.2.2.2 M53 Junctions 5 and 6 approach improvements 1 1.3.1.1 A540 Hoswall Birch Point Improvements	0 0 0 0 0.0 0 0 0 0 0.0 1 0 0 1 2 0.5	0 0 1 1 0.33 0 0 1 1 0.33	1 -1 0 0 0 0.0 0 1 -1 0 0 0 0.0 0 1 0 0 1 0 0 0	-1 2 0 0 2 3 0.5 -1 2 1 0 2 4 0.67 1 2 2 4 0.67	0 1 1 0 2 0.5 1 1 1 1 0 3 0.75 2	1 -1 1 -2 0 1 -1 1 -1 2 1 1 1 1 4	0.0 AC5 HI2 0.4 AC5 HI2	2 0.00 0.33 0.00 0.50 0.5 0 2 0.00 0.33 0.00 0.67 0.75 0.4 3 0.50 0.32 0.50 1.00 1 0.8	1.33 155 NO 2.15 148 NO
A540 Capacity Improvements Active Travel Links	 1 1.3.1.1 A540 Heswall Pinch Point Improvements 1 1.4.1.1 Wirral Circular Trail improvements - Coastal Cycle Strategy 2 1.4.1.2 Implementation of Birket Scheme - Pasture Road to Reeds Lane, Moreton 	0 0 0 0 0 0.0 0 0 0 0 0 0.0 0 0 0 0 0 0.0	0 1 0 2 2 4 1 1 2 0.67	1 0 0 1 2 0.5 1 2 0 0 0 2 0.5 2 1 0 1 0 2 0.5 2	1 0 0 1 2 6 1.0 1 0 0 1 2 6 1.0 1 0 0 1 2 6 1.0	1 1 1 1 1 1 1 2 1 1 1 0 2 4 1.0 2 1 1 1 2 5 1.25 2	1 1 1 -1 4 2 2 1 1 8 2 1 0 2 7	1.6 TR3 TR4 TR13 AC3 AC6 CO1 JU36 SU2 1.4 IN5 CO1 CO1 CO1 CO1	8 0.00 1.33 0.50 1.00 1 1.6 2 0.00 0.67 0.50 1.00 1.25 1.4	5.43 61 YES 4.82 84 YES
	 3 1.4.1.3 Wirral CityBike Scheme 4 1.4.1.4 Active Travel Routes across the M53 5 1.4.1.5 Cycle Route to Arrowe Park and the Hospital 	0 0 0 0 0.0 0 1 0 0 1 0.25 0 0 0 0 0 0.0	0 0 2 2 0.67 0 0 1 1 0.33 0 0 1 1 0.33	2 0 0 1 3 0.75 2 2 0 1 1 4 1.0 2 2 0 1 1 4 1.0 2	1 0 0 1 2 6 1.0 1 0 0 1 2 6 1.0 1 0 0 1 2 6 1.0	1 1 0 0 2 0.5 2 1 1 1 2 5 1.25 2 1 2 1 2 6 1.5 2	1 1 1 1 6 1 1 1 2 7 1 1 1 2 7	1.2 IN5 CO1 IN5 CO1 IN5 CO1 IN5 CO1 IN5 IN5 <td>2 0.00 0.67 0.75 1.00 0.5 1.2 6 0.25 0.33 1.00 1.00 1.25 1.4 11 0.00 0.33 1.00 1.00 1.5 1.4</td> <td>4.12 111 YES 5.23 66 YES 5.23 66 YES</td>	2 0.00 0.67 0.75 1.00 0.5 1.2 6 0.25 0.33 1.00 1.00 1.25 1.4 11 0.00 0.33 1.00 1.00 1.5 1.4	4.12 111 YES 5.23 66 YES 5.23 66 YES
Access Improvements	6 1.4.1.6 Wirral Cycle Route Network - Connecting the Dots (previously SUDs) 1 1.4.2.1 A552 Corridor Capacity Improvements	0 1 1 0 2 0.5 1 1 0 0 2 0.5	0 0 1 1 0.33 0 1 1 2 0.67	2 0 1 1 4 1.0 2 -2 0 0 -1 -3 -0.75 0	1 1 0 1 2 7 1.17 -1 2 1 0 2 4 0.67	1 2 1 2 6 1.5 2 1 1 1 1 4 1.0 1	1 1 1 1 6 0 2 2 -1 4	1.2 TR3 TR4 TR13 IN1 CO1	5 0.50 0.33 1.00 1.17 1.5 1.2 5 0.50 0.67 -0.75 0.67 1 0.8	5.70 54 YES 2.88 137 NO
Wirral Line Stations Enhancements	 2 1.4.2.2 Clatterbridge to Mersey Waterfront Corridor Improvements 1 1.5.1.1 Station facilities and waiting environment enhancements 2 1.5.1.2 Wirral Line Park and Ride Enhancements 	1 0 1 1 3 0.75 0 1 0 0 1 0.25 1 1 0 1 3 0.75	0 0 0 0.00 0 2 1 3 1.00 0 0 1 1 0.33	-1 0 0 0 -1 -0.25 1 1 0 0 1 2 0.5 0 2 0 0 0 2 0.5 0	0 2 1 1 2 7 1.17 1 0 2 1 1 5 0.83 2 1 2 2 1 8 1.33	1 2 2 1 6 1.5 2 1 1 1 0 3 0.75 2 1 2 1 0 4 1.0 2	1 1 1 -1 4 2 1 1 1 7 2 1 1 0 6	0.8 JU11 JU12	2 0.75 0.00 -0.25 1.17 1.5 0.8 3 0.25 1.00 0.50 0.83 0.75 1.4 6 0.75 0.33 0.50 1.33 1 1.2	3.97 117 YES 4.73 85 YES 5.12 71 YES
	 3 1.5.1.3 Town Meadow/Ledsham New Stations 4 1.5.1.4 Green Lane Station Refurbishment 	1 1 1 1 4 1.0 0 1 0 0 1 0.25	0 0 0 0 0.00	2 0 0 0 2 0.5 0 1 0 0 1 2 0.5 0	2 0 2 2 2 8 1.33 1 0 2 2 2 7 1.17	1 2 1 0 4 1.0 2 1 1 0 0 2 0.5 2	2 0 -1 2 5 2 2 1 1 8	1.0 TR1 TR11 AC7 CO2	4 1.00 0.00 0.50 1.33 1 1 1 0.25 0.33 0.50 1.17 0.5 1.6	4.83 73 YES 4.35 100 YES
	 5 1.5.1.5 Park and Ride at Birkenhead Central 6 1.5.1.6 Meols Station Accessibility 7 1.5.1.7 Remodelling and Public Realm Improvements: Conway Park and Europa Boulevard 	1 -1 0 1 1 0.25 0 0 0 0 0 0.0 0 1 0 0 1 0.25		2 0 0 1 3 0.75 0 1 0 0 0 1 0.25 0 0 2 0 2 4 1.0 2	2 1 2 2 2 9 1.5 1 0 2 2 2 7 1.17 0 0 1 1 1 5 0.83	1 2 1 0 4 1.0 2 1 1 1 0 3 0.75 2 0 0 0 1 1 0.25 2	2 0 -1 0 3 2 2 1 1 8 2 2 1 1 8	0.6 TR1 TR2 IN7 HI3 1.6 AC7 AC7 AC7 AC7	4 0.25 0.00 0.75 1.50 1 0.6 1 0.00 0.67 0.25 1.17 0.75 1.6 2 0.25 0.67 1.00 0.83 0.25 1.6	4.10 112 YES 4.43 97 YES 4.60 92 YES
Borderlands Line Enhancements	8 1.5.1.8 Birkenhead Town Station 1 1.5.2.1 Introduce New Borderlands (Wrexham - Bidston) Line Stations		0 1 1 2 0.67 0 0 1 1 0.33	1 0 -1 0 0 0.0 0 2 0 0 0 2 0.5 0	2 0 2 2 8 1.33 2 0 2 2 2 8 1.33	1 2 1 0 4 1.0 1 2 2 1 0 5 1.25 2	1 -1 -2 -2 -3 2 -1 -1 -2 0	-0.6 TR1 TR11 IN9 CO2 CO6 CO6	3 1.00 0.67 0.00 1.33 1 -0.6 5 1.25 0.33 0.50 1.33 1.25 0	3.40 125 NO 4.67 90 YES
	 2 1.5.2.2 Extend Borderlands (Wrexham - Bidston) Line to Birkenhead North 3 1.5.2.3 Borderlands (Wrexham-Bidston) Line Frequency Increase 4 1.5.2.4 Bordelands (Wrexham - Bidston) Line Electrification (Extension of Merseyrail) 	1 1 1 1 4 1.0 1 1 0 1 3 0.75 0 0 0 1 1 0.25	0 0 1 1 0.33	-1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0 2 1 0 0 3 0.75 0	1 0 2 2 2 7 1.17 1 0 2 1 2 6 1.0 1 0 2 1 2 6 1.0	2 2 1 0 5 1.25 2 2 2 1 0 5 1.25 2 2 2 1 0 5 1.25 2	2 1 2 -1 6	1.2 TR1 TR11 TR14 IN9 CO6	6 1.00 0.33 -0.25 1.17 1.25 0.8 5 0.75 0.33 -0.25 1.00 1.25 1.2 7 0.25 0.33 0.75 1.00 1.25 0.6	4.30 101 YES 4.28 104 YES 4.18 109 YES
Enhanced Rail Freight Access	 1 1.5.3.1 A41 Rail Freight Link at Port Sunlight 2 1.5.3.2 Rail freight Links to Wirral Waters 		0 0 0 0.00 0 0 0 0.00	2 0 0 -1 1 0.25 0 2 0 0 -1 1 0.25 0	2 1 0 0 1 4 0.67	0 0 2 1 3 0.75 1 0 0 2 1 3 0.75 1	2 -1 0 -2 0 2 -1 0 -2 0	0.0 TR11 IN3 IN4 CO2 CO2 <td>4 1.25 0.00 0.25 0.67 0.75 0 5 1.50 0.00 0.25 0.67 0.75 0</td> <td>2.92 136 NO 3.17 134 NO</td>	4 1.25 0.00 0.25 0.67 0.75 0 5 1.50 0.00 0.25 0.67 0.75 0	2.92 136 NO 3.17 134 NO
Smart Integrated Ticketing Cross-River	 1 1.5.4.1 Integration of Merseyside ticketing with Deeside and Cheshire West 1 1.6.1.1 Queensway Tunnel closure to general traffic 2 1.6.1.2 Re-purposing of Queensway Tunnel for Public Transport Only 	1 0 0 0 1 0.25 1 2 2 1 6 1.5 0 2 0 0 2 0.5	0 1 1 2 0.67	0 0 0 0 0.0 0 2 1 0 1 4 1.0 0 2 0 0 1 3 0.75 1	1 0 2 2 2 7 1.17 2 2 2 1 1 8 1.33 2 2 2 2 2 11 1.83	1 1 2 1 5 1.25 -1	1 2 2 1 8 1 2 2 2 6 2 2 2 2 9	1.2 AC3 IN3 IN9 CO3 CO5 HI5	2 0.25 0.67 0.00 1.17 1 1.6 6 1.50 0.67 1.00 1.33 1.25 1.2 6 0.50 0.67 0.75 1.83 1 1.8	4.68 87 YES
	 3 1.6.1.3 Kingsway Capacity Increase 4 1.6.1.4 Kingsway Toll Plaza Remodelling / Removal 	1 2 0 2 5 1.25 1 0 1 1 3 0.75	0 0 0 0 0.00	-2 0 0 0 -2 -0.5 0 1 1 0 1 3 0.75 0	0 2 0 0 2 4 0.67	1 1 1 0 3 0.75 2 1 1 0 0 2 0.5 2	2 2 2 -1 7 2 2 2 0 8	1.4 AC3 IN3 IN9 CO3 CO5 HI4	6 1.25 0.33 -0.50 0.83 0.75 1.4 6 0.75 0.00 0.75 0.67 0.5 1.6	4.07 114 YES 4.27 106 YES
	 5 1.6.1.5 Kingsway Public Transport Priority 6 1.6.1.6 Use of Queensway Service Tunnel for Rapid Transit 7 1.6.1.7 Queensway Toll Plaza Re-modelling / Removal 	0 1 0 1 2 0.5 2 2 0 2 6 1.5 2 2 2 0 6 1.5	0 0 2 2 0.67	1 0 0 1 2 0.5 0 2 0 0 1 3 0.75 0 0 2 1 2 5 1.25 1	2 2 2 2 10 1.67 0 2 0 0 2 5 0.83	1 2 1 0 4 1.0 2 1 0 0 1 2 0.5 2	2 2 2 0 8 2 2 2 1 9	1.6 TR1 IN3 IN9 CO3 CO5 HI5	0 0.50 0.53 0.50 1.33 0.5 0 6 1.50 0.67 0.75 1.67 1 1.6 6 1.50 0.67 1.25 0.83 0.5 1.8	7.18 6 YES 6.55 18 YES
	 8 1.6.1.8 Water Taxis 9 1.6.1.9 Wirral Line Connectivity - Wirral Line to Northern Line Link 	0 0 0 0 0.0 2 2 0 1 5 1.25	2 0 1 3 1.00 0 0 0 0 0.00	1 0 0 0 1 0.25 0 1 0 0 0 1 0.25 0 4 2 0 2 2 0.75 2	0 0 1 2 1 4 0.67 2 0 2 2 2 8 1.33	1 0 0 0 1 0.25 1 2 2 1 0 5 1.25 2	1 1 2 1 6 2 -1 2 -2 3	1.2 AC1 AC3 IN3 CO3	4 0.00 1.00 0.25 0.67 0.25 1.2 7 1.25 0.00 0.25 1.33 1.25 0.6	3.37 127 NO 4.68 89 YES
	 10 1.6.1.10 New Mersey Crossing e.g. Bromborough - Aigburth 11 1.6.1.11 M53 to M62 Linkage (Waterloo Tunnel) 12 1.6.1.12 Queensway Tunnel Resillience Measures 	2 1 2 2 7 1.73 2 1 0 1 4 1.0 1 1 0 1 3 0.75	0 2 2 4 1.33 0 0 1 1 0.33 0 0 2 2 0.67	-1 2 0 2 3 0.75 2 -2 0 0 0 -2 -0.5 0 0 0 0 0 0 0 0	-1 2 2 2 2 2 12 2.0 -1 2 0 2 2 5 0.83 0 2 0 1 1 4 0.67	2 2 2 2 8 2.0 2 2 2 1 0 5 1.25 2 1 1 0 0 2 0.5 1	2 -1 2 -2 3 2 -2 2 -2 2 2 2 2 0 7	0.6 R1 AC3 IN3 IN9 CO3 CO5	6 1.75 1.33 0.75 2.00 2 0.6 2 1.00 0.33 -0.50 0.83 1.25 0.4 5 0.75 0.67 0.00 0.67 0.5 1.4	3.32 129 NO 3.98 115 YES
Port Wirral	13 1.6.1.13 Mersey Tunnel Flood Resillience 1 1.6.2.1 Port Wirral Road Improvements and Signage Strategy 1 1.6.3.1 Airport Accessibility and Signage Strategy	1 1 0 1 3 0.75 2 0 2 2 6 1.5 0 0 0 1 1 0.25		0 0 0 0 0.0 0 0 0 0 1 1 0.25 0 0 0 0 0 0 0 0 0	0 2 0 1 1 4 0.67 -1 1 0 1 2 3 0.5 -1 1 1 1 2 4 0.67				5 0.75 0.67 0.00 0.67 0.5 1.4 4 1.50 0.33 0.25 0.50 1.25 1.6 1 0.25 1.33 0.00 0.67 0.75 1.6	3.98 115 YES 5.43 61 YES
Birkenhead Town Centre Gateways	1 1.6.3.1 Airport Accessibility and Signage Strategy 2 1.6.3.2 Access to Deeside 1 2.1.1.1 A41 Chester Street highway realignment	1 0 0 2 3 0.75 1 1 0 0 2 0.5	0 1 1 2 0.67 0 1 1 2 0.67	0 0 0 0 0.0 0 -1 0 0 1 0 0.0 1	2 1 2 1 2 8 1.33 -1 2 1 0 2 5 0.83	1 1 2 1 0 4 1.0 1 1 1 1 1 4 1.0 1	2 1 2 1 7 2 2 2 2 -1 6	1.4 CO3 CO6	2 0.75 0.67 0.00 1.33 1 1.4 5 0.50 0.67 0.00 0.83 1 1.2	5.15 69 YES 4.20 108 YES
	 2 2.1.1.2 Capacity and flow improvements on Borough Road / Singleton Avenue 3 2.1.1.3 A553 / Park Road East junction improvements 4 2.1.1.4 A553 capacity improvements 	1 1 0 0 2 0.5 1 1 0 0 2 0.5 1 2 0 0 3 0.75		-2 0 0 -1 -3 -0.75 0 -1 0 0 0 -1 -0.25 0 -2 0 0 -1 -3 -0.75 0	-1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67	1 1 1 1 4 1.0 1 1 1 1 1 4 1.0 1 1 1 1 1 4 1.0 1	0 2 2 -1 4 2 2 2 -1 6 0 2 2 -1 4	0.8 AC4 AC5 JU31 JU32 HI6 1.2 AC4 AC5 JU31 JU32 HI6	5 0.50 0.67 -0.75 0.67 1 0.8 5 0.50 0.33 -0.25 0.67 1 1.2 5 0.75 0.33 -0.75 0.67 1 0.8	2.88 137 NO 3.45 124 NO 2.80 142 NO
	 5 2.1.1.5 Chester Street junction improvements 6 2.1.1.6 Signage improvement to Birkenhead Priory and Tranmere Docks 	1 2 0 0 3 0.75	0 0 1 1 0.33 0 2 1 3 1.00	-1 0 0 1 0 0.0 1 1 0 0 1 2 0.5 1	-1 2 1 0 1 4 0.67 0 0 0 1 2 0.33	1 1 1 1 4 1.0 1 1 0 0 1 2 0.5 1		1.6 AC4 AC5 JU31 JU32 HI6	5 0.75 0.33 0.00 0.67 1 1.2 5 0.75 1.00 0.50 0.33 0.5 1.6	3.95 118 YES 4.68 87 YES
	7 2.1.1.7 Electric charging points in Birkenhead Town Centre 8 2.1.1.8 Signage/ better entrance to retail core 9 2.1.1.9 Birkenhead - local access road improvements	0 2 0 1 3 0.75 2 2 0 1 5 1.25 2 2 0 1 5 1.25	0 2 2 4 1.33	2 1 0 1 4 1.0 0 1 0 0 1 2 0.5 2 -1 0 0 1 0 0.0 2	0 1 0 0 1 2 0.33 1 1 0 1 2 7 1.17 -1 2 1 1 2 7 1.17	0 0 0 0 0.0 2 1 1 0 1 3 0.75 2 2 1 1 1 5 1.25 2	2 2 2 2 10	1.8 AC4 AC5 IN10 JU31 JU32 IN10 IN10 <t< td=""><td>5 0.75 0.67 1.00 0.33 0 1.8 5 1.25 1.33 0.50 1.17 0.75 2 11 1.25 0.67 0.00 1.17 1.25 1.4</td><td>4.55 95 YES 7.00 10 YES 5.73 53 YES</td></t<>	5 0.75 0.67 1.00 0.33 0 1.8 5 1.25 1.33 0.50 1.17 0.75 2 11 1.25 0.67 0.00 1.17 1.25 1.4	4.55 95 YES 7.00 10 YES 5.73 53 YES
Birkenhead Town Centre Streetscape	1 2.1.2.1 Improved public realm in retail core 2 2.1.2.2 Improved public realm Argyle Street	1 2 0 1 4 1.0 1 2 0 1 4 1.0	0 1 1 2 0.67 0 1 1 2 0.67	2 0 1 2 5 1.25 2 2 0 1 2 5 1.25 2	1 0 0 0 2 5 0.83	1 0 0 1 2 0.5 2 1 0 0 1 2 0.5 2	2 2 2 1 9 2 2 2 1 9		5 1.00 0.67 1.25 0.83 0.5 1.8 5 1.00 0.67 1.25 0.83 0.5 1.8	6.05 34 YES 6.05 34 YES
	 2.1.2.3 Cleveland Street / Market Street / Price Street public realm 2.1.2.4 Public realm improvements: Conway Street 2.1.2.5 Improved pedestrian crossing facilities along Argyle Street 	1 2 0 1 4 1.0	0 1 1 2 0.67	2 0 1 2 5 1.25 2 2 0 1 2 5 1.25 2 2 0 0 1 3 0.75 2	1 0 0 0 2 5 0.83 1 0 0 0 2 5 0.83 0 0 0 1 2 5 0.83	1 0 0 1 2 0.5 2 1 0 0 1 2 0.5 2 2 1 2 2 7 1.75 2	2 2 2 1 9 2 2 2 1 9 2 2 2 1 9	1.8 SU3 CTX3 ACT3 ACT4 ACT5	5 1.00 0.67 1.25 0.83 0.5 1.8 5 1.00 0.67 1.25 0.83 0.5 1.8 7 1.25 0.67 0.75 0.83 1.75 1.8	6.05 34 YES 6.05 34 YES 7.05 8 YES
	 2.1.2.6 Pedestrian overbridge of Borough Road, Whetstone Lane 2.1.2.7 Conway Park - Market Improved route 	2 2 0 1 5 1.25 1 1 0 0 2 0.5	0 1 1 2 0.67 0 1 1 2 0.67	2 0 0 1 3 0.75 2 2 0 0 2 4 1.0 2	1 0 0 1 2 6 1.0 1 0 0 1 2 6 1.0	2 1 2 2 7 1.75 2 2 1 1 1 5 1.25 2	2 2 1 1 8 2 2 2 2 10	1.6 SU3 CTX3 ACT2 ACT3 ACT4 ACT5 SAF1 SAF2 2.0 SU3 CTX3 ACT3 ACT4 ACT5 SAF1 SAF2	8 1.25 0.67 0.75 1.00 1.75 1.6 5 0.50 0.67 1.00 1.00 1.25 2	7.02 9 YES 6.42 23 YES
Bus / Rail Interchange Enhancements	8 2.1.2.8 Removal of cheap long stay parking in Birkenhead TC 1 2.1.3.1 Improvements to Bus Infrastructure at Birkenhead Park and Conway Park 2 2.1.3.2 Relocation of Birkenhead Bus Station	1 2 2 0 5 1.25 1 2 0 0 3 0.75 1 2 2 1 6 1.5	0 0 1 1 0.33	1 0 0 2 3 0.75 0 2 0 0 1 3 0.75 0 1 0 0 1 2 0.5 0	2 1 0 0 0 3 0.5 2 0 2 2 2 8 1.33 1 0 2 1 2 6 1.0	1 2 1 0 4 1.0 2	-1 1 2 2 3 2 1 2 1 8 2 1 2 1 8	1.6 TR1 TR12 SU2	1 1.25 -0.33 0.75 0.50 0.5 0.6 3 0.75 0.33 0.75 1.33 1 1.6 4 1.50 0.33 0.50 1.00 0.75 1.6	3.27 132 NO 5.77 48 YES 5.68 55 YES
	 3 2.1.3.3 Hamilton Square-Bus/Rail Interchange Improvements 4 2.1.3.4 Bus / Rail Interchange at Birkenhead North and Birkenhead Park 	1 2 0 1 4 1.0 1 2 0 1 4 1.0 1 2 0 1 4 1.0	0 1 1 2 0.67 0 0 1 1 0.33		2 0 2 2 2 9 1.5 2 0 2 2 2 9 1.5	1 2 1 0 4 1.0 2 1 2 1 0 4 1.0 2	2 1 2 1 8 2 1 2 1 8	1.6 TR1 TR12 AC4 CO6 SU2 PT2 1.6 TR1 TR12 AC4 CO6 JU2 SU2 WWP2	6 1.00 0.67 0.50 1.50 1 1.6 7 1.00 0.33 0.50 1.50 1 1.6	6.27 26 YES 5.93 44 YES
Woodside Regeneration	5 2.1.3.5 Bus Rail Interchange at Birkenhead Central 1 3.1.1.1 Woodside Ferry Terminal Enhancements 2 3.1.1.2 Reconfigure / Redevelop Woodside Gyratory roundabout	1 2 0 1 4 1.0 2 0 1 1 4 1.0 2 1 0 0 3 0.75	0 0 1 1 0.33 2 1 2 5 1.67 1 1 0 2 0.67	2 0 0 0 2 0.5 1 1 0 0 0 1 0.25 1 1 0 0 1 2 0.5 0	2 0 2 2 2 9 1.5 1 0 1 1 2 6 1.0 1 2 1 1 2 7 1.17	1 2 1 0 4 1.0 2 1 1 1 1 4 1.0 2 1 1 1 1 4 1.0 1	2 1 2 1 8 2 1 2 1 8 1 -1 1 -2 0	1.6 TR1 TR2 CO6 SU2 PT2 1.6 TR1 TR2 TR3 TR11 IN3 HI4 HI5 SU2 CTX2 PT1 PT4 ACT1 0.0 HI5 PT1	5 1.00 0.33 0.50 1.50 1 1.6 12 1.00 1.67 0.25 1.00 1 1.6 2 0.75 0.67 0.50 1.17 1 0	6.52 22 YES 4.08 113 YES
Hamilton Square Regeneration	3 3.1.1.3 Reconfigure / Redevelop Woodside Bus Station and relocate Bus Terminus 4 3.1.1.4 Access Road to Rosebrae Development Site	2 1 1 1 5 1.25 2 1 2 2 7 1.75 1 1 0 0 2 0	1 1 0 2 0.67 0 0 1 1 0.33 1 2 1 1 1	1 0 0 1 2 0.5 1 0 0 0 0 0 0 0 0 0 0 1 1 0.25 1	1 1 2 1 2 8 1.33 -1 2 1 0 2 4 0.67	1 1 1 0 3 0.75 1 1 2 0 0 3 0.75 2 1 1 0 0 3 0.75 2	2 -1 0 -2 0 2 2 1 -1 6	0.0 SU3 PT1	2 1.25 0.67 0.50 1.33 0.75 0 2 1.75 0.33 0.00 0.67 0.75 1.2 3 0.50 1.32 0.25 1.00 0.5 1.6	4.50 96 YES 4.70 86 YES
namilion square Regeneration	 1 3.1.2.1 Hamilton Street two-way outside Station 2 3.1.2.2 Remove mini-roundabouts at Hamilton Square 3 3.1.2.3 Remove Hamilton Street / Duncan Street road closure 	1 1 0 0 2 0.5 1 1 0 0 2 0.5 1 1 0 0 2 0.5	1 2 1 4 1.33 1 2 0 3 1.00 1 2 1 4 1.33	0 0 0 1 1 0.25 1 1 0 0 1 2 0.5 0 0 0 0 1 1 0.25 1	0 2 1 1 1 0 1.0 0 2 1 1 1 5 0.83 0 2 1 1 2 7 1.17	1 1 0 0 2 0.5 2 1 1 1 1 4 1.0 1 1 1 0 0 2 0.5 1	2 1 2 1 7	1.6 SU3 CTX3 VA6	3 0.50 1.53 0.25 1.00 0.5 1.6 2 0.50 1.00 0.50 0.83 1 1.4 2 0.50 1.33 0.25 1.17 0.5 1.4	5.16 68 YES 5.23 65 YES 5.15 69 YES
	 4 3.1.2.4 Improved public realm outside Hamilton Square rail station 5 3.1.2.5 Car park facility for Birkenhead Police Station 6 3.1.2.6 Improved public realm at Hamilton Square 	0 0 0 0 0.0 0 0 0 1 1 0.25 1 0 0 0 1 0.25	1 1 1 3 1.00 0 0 0 0 0.00 1 1 2 4 1.33	1 0 2 2 5 1.25 2 1 0 0 1 2 0.5 0 1 0 2 2 5 1.25 2	1 1 2 2 1 9 1.5 -1 1 0 0 1 1 0.17 1 0 0 0 1 4 0.67	1 0 1 1 3 0.75 2 0 2 0 0 2 0.5 1 1 0 1 1 3 0.75 2	2 2 2 1 9 2 1 1 0 5 2 2 2 1 9	1.8 SU3 CTX3 PT3 1.0 SU3 CTX3 VA6 SAF3	3 0.00 1.00 1.25 1.50 0.75 1.8 2 0.25 0.00 0.50 0.17 0.5 1 4 0.25 1.33 1.25 0.67 0.75 1.8	6.30 24 YES 2.42 146 NO 6.05 34 YES
	7 3.1.2.7 Improved walk route between Woodside and Hamilton Square 8 3.1.2.8 Improve Argyle Street south approach to Hamilton Square	1 0 0 1 2 0.5 1 0 0 1 2 0.5	1 2 0 3 1.00 0 2 0 2 0.67	1 0 0 2 3 0.75 2 1 0 0 2 3 0.75 2 1 0 0 2 3 0.75 2	1 0 1 1 2 7 1.17 1 1 1 1 2 8 1.33	1 1 1 1 4 1.0 2 1 1 1 1 4 1.0 2	2 2 2 1 9 1 2 2 1 8	1.8 SU3 CTX3 VA1 SAF3	4 0.50 1.00 0.75 1.17 1 1.8 2 0.50 0.67 0.75 1.33 1 1.6	6.22 29 YES 5.85 46 YES
Wirral Waters Cross Dock Connectivity	 4.1.1.1 Replacement of Poulton Bridge with a Fixed Structure 4.1.1.2 Replacement of Duke Street Bridge 4.1.1.3 Wirral Cross-Dock Connectivity - Revised 	2 0 0 2 4 1.0 2 1 2 2 7 1.75 2 1 0 2 5 1.25	0 0 1 1 0.33 0 0 2 2 0.67 0 1 1 2 0.67	0 0 0 1 1 0.25 2 0 0 0 1 1 0.25 2 0 0 0 0 0.0 0	0 2 1 0 2 7 1.17 0 2 1 0 2 7 1.17 0 2 1 0 2 5 0.83	2 2 0 1 5 1.25 2 2 2 0 1 5 1.25 2 1 1 0 1 3 0.75 -1	2 -1 1 -1 3		3 1.00 0.33 0.25 1.17 1.25 0.6 3 1.75 0.67 0.25 1.17 1.25 0.6 3 1.25 0.67 0.00 0.83 0.75 -0.2	4.60 92 YES 5.68 56 YES 3.30 130 NO
	4 4.1.1.4 New north-south link and bridge 5 4.1.1.5 Relocate Birkenhead RO-RO	2 1 2 2 7 1.75 2 1 2 2 7 1.75	0 1 1 2 0.67 0 0 1 1 0.33	0 1 1 1 3 0.75 2 1 0 0 1 2 0.5 0	0 2 1 0 2 7 1.17 0 0 0 0 0 0.0	2 2 0 2 6 1.5 -1 0 1 0 0 1 0.25 1	0 -1 1 -1 -2 0 -1 -1 -2 -3	-0.4 AC1 IN2 IN3	3 1.75 0.67 0.75 1.17 1.5 -0.4 3 1.75 0.33 0.50 0.00 0.25 -0.6	5.43 63 YES 2.23 147 NO
Gateways to Wirral Waters	 4.1.2.1 A5139 Dock Road / A5088 Wallasey Bridge Road junction 4.1.2.2 Duke St / Dock Road / Gorsey Lane junction 4.1.2.3 A5027 Dock Road / A554 Tower Road / A554 Birkenhead Road junction 	2 1 1 2 6 1.5 2 1 1 2 6 1.5 2 1 1 2 6 1.5	0 1 1 2 0.67 0 1 1 2 0.67 0 1 1 2 0.67	-1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0	-1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67	1 2 1 1 5 1.25 2 1 2 1 1 5 1.25 2 1 2 1 1 5 1.25 2	1 1 2 -1 5 1 1 2 -1 5 1 1 2 -1 5		7 1.50 0.67 -0.25 0.67 1.25 1 7 1.50 0.67 -0.25 0.67 1.25 1 7 1.50 0.67 -0.25 0.67 1.25 1	4.83 73 YES 4.83 73 YES 4.83 73 YES
	 4 4.1.2.4 Duke St / Corporation Road junction 5 4.1.2.5 Relocate Wirral Waters Industrial Uses to remove severance 	2 1 1 2 6 1.5 2 1 1 2 6 1.5 1 1 1 1 1 1	0 1 1 2 0.67	-1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0 1 0 0 0 1 0.25 0	-1 2 1 0 2 4 0.67 0 2 1 0 2 5 0.83 -1 1 1 0 0 1 0.17	2 2 1 1 1 6 1.5 1	1 1 2 -1 5 1 1 -1 -2 0	0.0 AC1 IN2 WWV1 WWV2 WWV3 WWA2 WWS1	7 1.50 0.67 -0.25 0.67 1.25 1 7 1.50 0.67 -0.25 0.83 1.5 0	4.83 73 YES 4.25 107 YES
	 4.1.2.6 A554 Tower Road / Rendel Street junction 4.1.2.7 Rendel Street / Corporation Road junction 4.1.2.8 Duke Street / Corporation Road junction 	1 1 1 1 4 1.0 2 1 1 2 6 1.5 2 1 1 2 6 1.5	0 1 1 2 0.67 0 1 1 2 0.67 0 1 1 2 0.67	-1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0	-1 1 1 0 0 1 0.17 -1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67	1 1 1 1 4 1.0 1 1 2 1 1 5 1.25 2 1 2 1 1 5 1.25 2	1 1 2 -1 4 1 1 2 -1 5 1 1 2 -1 5	1.0 AC1 IN2 WWV1 WWV2 WWV3 WWA2 WWS1 1.0 AC1 IN2 WWV1 WWV2 WWV3 WWA2 WWS1 1.0 AC1 IN2 WWV1 WWV2 WWV3 WWA2 WWS1	7 1.50 0.67 -0.25 0.17 1 0.8 7 1.50 0.67 -0.25 0.67 1.25 1 7 1.50 0.67 -0.25 0.67 1.25 1	4.83 73 YES 4.83 73 YES
Wirral Waters Supporting Road Infrastructure	 4.1.3.1 Wallasey Bridge Road Improvements 4.1.3.2 Widening of Beaufort Road and Wallasey Bridge Road (City Boulevard) 4.1.3.3 A5030 Beaufort Road / A5088 Wallasey Bridge Road junction improvements 	2 1 1 2 6 1.5 2 1 1 2 6 1.5 2 1 1 2 6 1.5	0 1 1 2 0.67 0 1 1 2 0.67 0 1 1 2 0.67	-1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0	-1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67	1 2 1 1 5 1.25 2 1 2 1 1 5 1.25 2 1 2 1 1 5 1.25 2	1 1 2 -1 5 1 1 1 -1 4 1 1 2 -1 5	1.0 AC1 IN2 IN3 WWV1 WWV2 WWV3 0.8 AC1 IN2 IN3 WWV1 WWV2 WWV3 1.0 AC1 IN2 IN3 WWV1 WWV2 WWV3	6 1.50 0.67 -0.25 0.67 1.25 1 6 1.50 0.67 -0.25 0.67 1.25 0.8 6 1.50 0.67 -0.25 0.67 1.25 1	4.83 73 YES 4.63 91 YES 4.83 73 YES
	 4 4.1.3.4 Corporation Road / Cavendish Street / Cleveland Street junction improvements 5 4.1.3.5 A554 Tower Road / Canning Street Capacity Improvements 	2 1 1 2 6 1.5 2 1 1 2 6 1.5 2 1 1 2 6 1.5		-1 0 0 0 -1 -0.25 0 -1 -1 0 -1 -3 -0.75 0	-1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67	1 2 1 1 5 1.25 2 1 2 1 1 5 1.25 2 1 2 1 1 5 1.25 1		1.0 AC1 IN2 IN3 WWV1 WWV2 WWV3 1.0 AC1 IN2 IN3 WWV1 WWV2 WWV3 0.2 AC1 IN2 IN3 WWV1 WWV2 WWV3	6 1.50 0.67 -0.25 0.67 1.25 1 6 1.50 0.67 -0.75 0.67 1.25 0.2	4.83 73 YES 3.53 122 NO
	 4.1.3.6 Canning Street / Lord Street Capacity Improvements 4.1.3.7 New development access from Beaufort Road and Wallasey Bridge Road 4.1.3.8 A5027 Gorsey Lane / Kingsway Tunnel junction improvements 	2 1 1 2 6 1.5 2 1 1 2 6 1.5 2 1 1 2 6 1.5	0 1 1 2 0.67 0 1 0 1 0.33 0 1 1 2 0.67	-1 -1 0 -1 -3 -0.75 0 -1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0	-1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67	1 2 1 1 5 1.25 1 1 2 1 1 5 1.25 2 1 2 1 1 5 1.25 2	0 -1 2 -1 1 1 1 1 -1 4 1 1 2 -1 5	0.2 AC1 IN2 IN3 WWV1 WWV2 WWV3 IV2 IV2 IV2 IV3 WWV1 WWV2 WWV3 IV2 IV2 IV3 WWV1 WWV2 WWV3 IV2 IV3 WWV1 WWV2 WWV3 IV3 WWX1 WWX2 WWX3 IV3 WWX2 WWX3 IV3 WWX3 WX3 IV3 WX3 <t< td=""><td>6 1.50 0.67 -0.75 0.67 1.25 0.2 6 1.50 0.33 -0.25 0.67 1.25 0.8 6 1.50 0.67 -0.25 0.67 1.25 1</td><td> 3.53 122 NO </td></t<>	6 1.50 0.67 -0.75 0.67 1.25 0.2 6 1.50 0.33 -0.25 0.67 1.25 0.8 6 1.50 0.67 -0.25 0.67 1.25 1	3.53 122 NO
	 9 4.1.3.9 Dock Road Link widening 10 4.1.3.10 Tower Road Link widening 	2 1 1 2 6 1.5 2 1 1 2 6 1.5	0 1 0 1 0.33 0 1 0 1 0.33	-1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 1	-1 2 1 0 2 4 0.67 -1 2 1 0 2 5 0.83	1 2 1 1 5 1.25 -1 1 2 1 1 5 1.25 -1	-1 -2 1 -1 -4 -1 -2 1 -1 -4	-0.8 AC1 IN2 IN3 WWV1 WWV2 WWV3	6 1.50 0.33 -0.25 0.67 1.25 -0.8 6 1.50 0.33 -0.25 0.83 1.25 -0.8	2.70 143 NO 2.87 140 NO
Wirral Waters Active Travel Connectivity	 11 4.1.3.11 Two-lane dual carriageway between Poulton Bridge Road and grain warehouse 12 4.1.3.12 Dock Road to Corporation Road Dual Carriageway link (Duke St) 1 4.1.4.1 City Boulevard (green transport corridor Corporation Road and Beaufort Road) 	2 1 1 2 6 1.5 2 1 1 2 6 1.5 1 0 0 1 2 0.5	0 1 0 1 0.33 0 1 0 1 0.33 0 1 1 2 0.67	-2 0 0 -1 -3 -0.75 1 -2 0 0 -1 -3 -0.75 0 2 0 0 1 3 0.75 2	-1 2 1 0 2 5 0.83 -1 2 1 0 2 4 0.67 1 1 0 0 2 6 1.0	1 2 1 -1 3 0.75 2 1 2 1 -1 3 0.75 2 1 1 1 2 5 1.25 2	1 1 1 -2 3 1 1 1 -1 4 2 1 2 1 8		b 1.50 0.33 -0.75 0.83 0.75 0.6 6 1.50 0.33 -0.75 0.67 0.75 0.8 9 0.50 0.67 0.75 1.00 1.25 1.6	3.27 133 NO 3.30 130 NO 5.77 48 YES
	 4.1.4.2 Tower Road / Birkenhead Road ped / cycle link 4.1.4.3 Footbridge on Dockside Route 	1 0 0 1 2 0.5 2 0 0 1 3 0.75	0 1 1 2 0.67 0 1 1 2 0.67	2 0 0 1 3 0.75 2 2 0 0 1 3 0.75 2	1 1 0 0 2 6 1.0 1 1 0 0 2 6 1.0 1 1 0 0 2 6 1.0	1 1 1 2 5 1.25 2 1 1 1 2 5 1.25 2	2 2 2 1 9 2 2 2 1 9	1.8 TR3 TR4 TR13 AC6 SU2 VA7 WWA1 WWA2 WWS1	9 0.50 0.67 0.75 1.00 1.25 1.8 9 0.75 0.67 0.75 1.00 1.25 1.8	5.97 40 YES 6.22 30 YES
	 4 4.1.4.4 A5027 Duke Street public realm 5 4.1.4.5 Wallasey Bridge Road cycle route 6 4.1.4.6 Dock Road cycle route 	1 0 0 1 2 0.5 2 0 0 1 3 0.75 2 0 0 1 3 0.75	0 1 1 2 0.67 0 1 1 2 0.67 0 1 1 2 0.67	2 0 0 1 3 0.75 2 2 0 0 1 3 0.75 2 2 0 0 1 3 0.75 2 2 0 0 1 3 0.75 2	1 1 0 0 2 6 1.0 1 1 0 0 2 6 1.0 1 1 0 0 2 6 1.0	1 1 1 2 5 1.25 2 1 1 1 2 5 1.25 2 1 1 1 2 5 1.25 2	2 2 2 1 9 2 2 2 1 9 2 2 2 1 9 2 2 2 1 9	1.8 TR3 TR4 TR13 AC6 SU2 VA7 WWA1 WWA2 WWS1 SUS WWS1 SUS WWS1 SUS WWS1 SUS WWS1 SUS WWS1 WWS1 SUS WWS1 SUS WWS1 SUS WWS1	9 0.75 0.67 0.75 1.00 1.25 1.8 9 0.75 0.67 0.75 1.00 1.25 1.8 9 0.75 0.67 0.75 1.00 1.25 1.8	6.22 30 YES 6.22 30 YES
	7 4.1.4.7 Pedestrian crossings on Tower Road 8 4.1.4.8 Toucan crossings on Wallasey Bridge Road 9 4.1.4.9 River Birket route into West Float	1 0 0 1 2 0.5 1 0 0 1 2 0.5 1 0 0 1 2 0.5		2 0 0 1 3 0.75 2 2 0 0 1 3 0.75 2 2 0 0 1 3 0.75 2 2 0 0 1 3 0.75 2	1 1 0 0 2 6 1.0 1 1 0 0 2 6 1.0 1 1 0 0 2 6 1.0	1 1 1 2 5 1.25 2 1 1 1 2 5 1.25 2 1 1 1 2 5 1.25 2 1 1 1 2 5 1.25 2	2 2 2 1 9 2 2 2 1 9	1.8 TR3 TR4 TR13 AC6 SU2 VA7 WWA1 WWA2 WWS1 WWS1 1.8 TR3 TR4 TR13 AC6 SU2 VA7 WWA1 WWS2 WWS1	9 0.50 0.67 0.75 1.00 1.25 1.8 9 0.50 0.67 0.75 1.00 1.25 1.8 9 0.50 0.67 0.75 1.00 1.25 1.8	5.97 40 YES 5.97 40 YES
	10 4.1.4.10 Cycle Route along Canning Street 11 4.1.4.11 Wirral Waters Pedestrian wayfinding strategy	1 0 0 1 2 0.5 1 0 0 1 2 0.5 1 0 0 1 2 0.5	0 1 1 2 0.67 0 1 1 2 0.67 0 2 2 4 1.33	2 0 0 1 3 0.75 2 2 0 0 1 3 0.75 2 2 0 0 1 3 0.75 2	1 1 0 0 2 6 1.0 1 1 0 0 2 6 1.0 1 1 0 0 2 6 1.0	1 1 1 2 5 1.25 2	2 1 2 1 8	1.6 TR3 TR4 TR13 AC6 SU2 VA7 WWA1 WWA2 WWS1	9 0.50 0.67 0.75 1.00 1.25 1.6 9 0.50 0.67 0.75 1.00 1.25 1.6 9 0.50 1.33 0.75 1.00 1.25 1.8	5.77 48 YES 6.63 16 YES
	12 4.1.4.12 Cover the Wallasey Tunnel Approach 13 4.1.4.13 Extend Victoria Park to Dock Road 14 4.1.4.14 Duke Street Astive Travel Improvements	0 0 0 0 0 0.0	0 1 2 3 1.00	2 0 1 2 5 1.25 2 2 1 2 2 7 1.75 2 3 0 0 3 4 10 3	1 1 0 0 0 4 0.67 0 0 0 0 1 3 0.5	1 0 0 0 1 0.25 2 2 0 0 1 3 0.75 2	2 -1 2 -2 3 2 1 1 1 7	0.6 TR3 TR4 TR13 AC6 SU2 VA7 WWA1 WWA2 WWS1 1.4 TR3 TR4 TR13 AC6 SU2 VA7 WWA1 WWA2 WWS1	9 0.25 0.33 1.25 0.67 0.25 0.6 9 0.00 1.00 1.75 0.50 0.75 1.4 0 0.50 0.67 1.00 1.00 1.25 1.8	3.35 128 NO 5.40 64 YES
Wirral Waters Public Transport Connectivity	 14 4.1.4.14 Duke Street Active Travel Improvements 15 4.1.4.15 Green Link: Wirral Waters to Birkenhead Park 1 4.1.5.1 Rapid Transit - Wirral Waters to Liverpool 	1 0 0 1 2 0.5 1 0 0 1 2 0.5 2 0 2 2 6 1.5	0 0 1 1 2 0.67 0 0 1 1 0.33 0 1 2 3 1.00	2 0 0 2 4 1.0 2 2 1 1 2 6 1.5 2 2 1 0 1 4 1.0 0	1 1 0 0 2 6 1.0 1 1 0 1 2 7 1.17 2 2 2 2 2 10 1.67	2 2 2 1 7 1.75 2	2 -1 2 -2 3	0.6 TR1 TR5 TR11 AC1 AC6 AC7 IN2 IN3 CO2 CO6 SU2 VA7 WWP1 WWP3 WWP4	9 0.50 0.87 1.00 1.00 1.25 1.8 9 0.50 0.33 1.50 1.17 1.25 1.8 15 1.50 1.00 1.00 1.67 1.75 0.6	6.55 18 YES 7.52 3 YES
Hind Stroot Access Improvements	2 4.1.5.2 Rapid Transit - New Brighton to Rock Ferry via Wirral Waters 3 4.1.5.3 Bus routes diverted via Wirral Waters (410, 411, 413, 414) 1 5 1 1 1 Assess to Hind Street Mollington Link Board	2 0 2 2 6 1.5 2 0 2 2 6 1.5	0 1 1 2 0.67 0 1 1 2 0.67	2 1 0 1 4 1.0 0 2 1 0 0 3 0.75 0	2 1 2 2 9 1.5 2 1 2 2 9 1.5	1 2 2 2 0 6 1.5 2		0.6 IR1 IR5 IR11 AC1 AC3 AC6 AC7 IN2 IN3 CO2 CO6 SU2 VA7 WWP1 WWP3 WWP4	16 1.50 0.67 1.00 1.50 1.5 0.6 12 1.50 0.67 0.75 1.50 1.5 1.4	6.77 14 YES 7.32 5 YES
Hind Street Access Improvements Southern Access Improvements	1 5.1.1.1 Access to Hind Street - Mollington Link Road 1 5.2.2.1 Green Lane Roundabout capacity improvements 2 5.2.2.2 Duncan Street jnc capacity improvements	1 1 0 1 3 0.75 1 1 0 1 3 0.75	0 1 1 2 0.67 0 1 1 2 0.67	0 0 0 1 1 0.25 1 -1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0	-1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67	0 1 1 0 2 0.5 2 0 0 1 0 1 0.25 1	2 2 2 -1 7 1 1 2 -1 4	1.4 HI5 HI6 AC5	2.00 0.07 0.25 1.33 1.5 1 0.75 0.67 -0.25 0.67 0.5 1.4 0.75 0.67 -0.25 0.67 0.25 0.8	3.73 119 YES 2.88 137 NO
	3 5.2.2.3 Ivy Street jnc capacity improvements 4 5.2.2.4 Campbeltown Road capacity improvements 5 5.2.2.5 Improve ped linkage to B'head town centre from south	1 1 0 1 3 0.75 1 1 0 1 3 0.75 2 1 0 1 3 0.75	0 1 1 2 0.67 0 1 1 2 0.67 0 2 1 3 1.00	-1 0 0 0 -1 -0.25 0 -1 0 0 0 -1 -0.25 0 2 0 0 0 2 0.5 2	-1 2 1 0 2 4 0.67 -1 2 1 0 2 4 0.67 1 1 1 1 2 8 1.33				0.75 0.67 -0.25 0.67 0.5 1.4 0.75 0.67 -0.25 0.67 0.5 1.4 1.00 1.00 0.50 1.32 1.35 2	3.73 119 YES 3.73 119 YES 7.08 7 YES
	6 5.2.2.6 A41 / A552 / flyover area remodelling 7 5.2.2.7 Improved access to Birkenhead Priory	2 2 2 2 2 8 2.0 0 0 0 0 0 0.0	0 2 1 3 1.00 0 1 1 2 0.67	1 2 1 2 6 1.5 2 0 0 0 0 0.0 0	1 1 1 1 2 8 1.33 1 2 1 0 2 8 1.33 0 1 0 0 1 2 0.33 2 2 1 1 2 8 1.33	2 2 1 2 7 1.75 2	2 0 2 -2 4	0.8 CO4 VA1 AC4 AC5 JU31 JU32 HI6 VA5	2.00 1.00 1.50 1.33 1.25 2 2.00 1.00 1.50 1.33 1.75 0.8 0.00 0.67 0.00 0.33 0.25 1.6	8.38 2 YES 2.85 141 NO
A41 Sustainable Connectivity	8 5.2.2.8 A41 Southern Bus Access Improvements 1 5.2.3.1 Green link: Rock Ferry to Seacombe via Former Rail Corridor	2 1 0 1 4 1.0 1 0 0 1 2 0.5 1 0 1 1 3 0.75	0 1 2 3 1.00	2 0 0 0 2 0.5 0	2 2 1 1 2 8 1.33 2 0 1 2 2 9 1.5 2 0 1 2 2 9 1.5	1 1 1 0 3 0.75 2 1 1 2 2 6 1.5 2 1 1 2 2 6 1.5 2	1 2 2 1 8 1 1 1 1 6 1 2 1 2 2	1.6 IN3 CO4 SU2 CTX2 ACT1 SU2 CTX1 CTX2 CTX1 CTX2 CTX5 VA1 ACT1 1.6 TR3 TR4 TR13 AC6 IN1 IN3 CO1 SU2 CTX1 CTX2 CTX5 VA1 ACT1 1.6 TR3 TR4 TR13 AC6 IN1 IN3 CO1 SU2 CTX1 CTX2 CTX5 VA1 ACT4	1.00 0.67 0.50 1.33 0.75 1.6 0.50 1.00 1.25 1.50 1.5 1.2 0.75 1.33 0.75 1.50 1.5 1.6	5.85 46 YES 6.95 11 YES 7.43 4 VES
Access to Wirral International Business Park		1 0 1 1 3 0.75 2 0 1 2 5 1.25 2 0 2 2 6 1.5	1 1 1 4 1.33 1 1 2 4 1.33 0 1 2 3 1.00	2 0 1 3 0.75 2 2 1 1 1 5 1.25 0 -1 0 0 0 -1 -0.25 1	2 0 1 2 2 9 1.5 2 0 2 1 2 7 1.17 0 2 1 1 2 7 1.17	1 2 2 6 1.5 2 1 1 2 1 5 1.25 2 1 2 1 1 5 1.25 2	1 -1 1 2 8 1 -1 1 0 3 2 2 0 -1 5	1.0 IN3 IN4 IN3 AC0 IN1 IN3 CO1 SU2 CIX1 CIX2 CIX5 VA1 AC11 0.6 TR3 TR4 TR13 AC6 IN1 IN3 CTX1 VA1 IN3	0.73 1.33 0.75 1.50 1.5 1.6 1.25 1.33 1.25 1.17 1.25 0.6 1.50 1.00 -0.25 1.17 1.25 1	6.85 13 YES 5.67 57 YES
New Brighton Public Transport Enhancements		1 0 0 1 2 0.5 1 0 0 1 2 0.5 -1 0 0 0 1 2 0.5	0 1 1 2 0.67 0 1 1 2 0.67 0 1 1 2 0.67	2 0 0 1 3 0.75 0 2 0 0 1 3 0.75 0 1 0 1 2 4 10 2	2 0 2 1 2 7 1.17 0 2 1 1 2 7 1.17 2 1 1 2 2 8 1.33 2 1 1 2 2 8 1.33 1 0 0 1 2 6 1.0	1 2 2 1 6 1.5 2 1 2 1 0 4 1.0 2 2 1 2 2 7 1.75 4	2 2 2 1 9 2 2 2 1 9 2 2 2 1 9	1.8 TR1 TR12 AC4 CO6 1.8 AC7 JU36 SU2 1.6 SU3 SU3	0.50 0.67 0.75 1.33 1.5 1.8 0.50 0.67 0.75 1.33 1 1.8 -0.25 0.67 1.00 1.00 1.75 1.6	6.55 18 YES 6.05 34 YES 5.77 48 VES
Removing Severance Access Improvements	1 8.2.1.1 Saughall Massie Link Road - New Infrastructure 2 8.2.1.2 Saughall Massie Road- Infrastructure Upgrade	-1 0 0 0 -1 -0.25 2 0 1 2 5 1.25 2 0 1 2 5 1.25	0 1 2 3 1.00 0 1 2 3 1.00	-1 -1 -1 0 -3 -0.75 1 -1 1 0 0 0 0.0 1	-1 2 1 1 2 6 1.0 -1 2 1 0 2 5 0.83	2 2 -1 1 4 1.0 2 1 1 1 4 1.0 2 1 1 1 4 1.0 2	2 1 -1 0 4 2 2 1 0 7	0.8 IN6 JU19 JU28 JU41 1.4 IN6 JU19 JU28 JU41	1.25 1.00 1.00 1.75 1.6 1.25 1.00 -0.75 1.00 1 0.8 1.25 1.00 0.00 0.83 1 1.4	4.30 101 YES 5.48 60 YES
Other Public Transport Enhancements	2 0 2 4 2 14	1 0 1 1 3 0.75 1 0 0 1 2 0.5 1 0 0 1 2 0.5	0 1 1 2 0.67 0 1 1 2 0.67 0 1 1 2 0.67	-1 0 0 0 -1 -0.25 1 -1 0 0 0 -1 -0.25 1 2 0 0 0 2 0 0	2 1 1 2 2 8 1.33 2 1 1 2 2 8 1.33 1 0 0 1 2 6 1.0 -1 2 1 1 2 6 1.0 -1 2 1 0 2 5 0.83 -1 2 1 0 2 5 0.83 -1 2 1 0 2 5 0.83 2 1 2 2 9 1.5	1 1 1 1 4 1.0 2 2 1 1 1 5 1.25 2 2 2 1 1 6 1 E 3	2 2 1 0 7 2 2 1 0 7 2 2 1 1 0	1.4 IN6 AC8 IN6 IN6 AC8 IN6 IN6 <td>-0.25 0.67 1.00 1.00 1.75 1.6 1.25 1.00 -0.75 1.00 1 0.8 1.25 1.00 0.00 0.83 1 1.4 0.75 0.67 -0.25 0.83 1 1.4 0.50 0.67 -0.25 0.83 1.25 1.4 0.50 0.67 0.50 1.50 1.5 1.6</td> <td>4.40 98 YES 4.40 98 YES 6.27 26 VES</td>	-0.25 0.67 1.00 1.00 1.75 1.6 1.25 1.00 -0.75 1.00 1 0.8 1.25 1.00 0.00 0.83 1 1.4 0.75 0.67 -0.25 0.83 1 1.4 0.50 0.67 -0.25 0.83 1.25 1.4 0.50 0.67 0.50 1.50 1.5 1.6	4.40 98 YES 4.40 98 YES 6.27 26 VES
Sales i abile transport Enhancements	2 8.3.1.2 Heswall Station Bus / Rail Interchange, Linkage and Parking 3 8.3.1.3 Brimstage Bus Connectivity 4 8.3.1.4 New rail spur and station - Heswall	1 0 0 1 2 0.5 1 0 0 1 2 0.5 1 0 0 1 2 0.5	0 1 1 2 0.67 0 0 0 0 0.00	2 0 0 0 2 0.5 0 2 0 0 0 2 0.5 0 2 0 0 0 2 0.5 0	-1 2 1 0 2 5 0.83 -1 2 1 0 2 5 0.83 2 1 2 2 2 9 1.5 2 1 2 2 2 9 1.5 2 1 2 1 2 8 1.33 2 0 2 2 2 8 1.33 2 0 0 1 2 7 1.17 1 1 0 0 1 5 0.83 1 1 2 1 2 7 1.17	2 2 1 1 6 1.5 2 2 2 1 1 6 1.5 2 2 2 1 1 6 1.5 2	2 2 1 1 8 2 2 1 1 8 2 2 2 1 9	1.6 TR1 TR2 TR12 CO7 JU23 JU38 JU43 SU2	0.50 0.00 0.50 1.33 1.5 1.8	5.63 58 YES
Other Schemes	4 8.3.1.4 New rail spur and station - Heswall 1 8.3.2.1 Active Travel Connectivity to Local Centres 2 8.3.2.2 Residential Road Streetscape	2 0 1 1 4 1.0 2 0 0 1 3 0.75 1 0 0 0 1 0.25	0 0 1 1 0.33 0 1 1 2 0.67 0 1 1 2 0.67	2 1 -1 0 2 0.5 0 1 1 0 1 3 0.75 2 1 1 1 2 5 1.25 2	2 0 2 2 2 8 1.33 2 0 0 1 2 7 1.17 1 1 0 0 1 5 0.82	2 2 1 1 6 1.5 2 2 2 1 1 6 1.5 2 2 1 1 2 6 1.5 2	2 -1 0 -1 2 2 2 2 1 9 2 2 2 1 0	0.4 TR1 Image: Control of the control o	1.00 0.33 0.50 1.33 1.5 0.4	5.07 72 YES 6.63 16 YES
	3 8.3.2.3 Improved and integrated Taxi Coverage	1 0 0 1 2 0.5	0 1 0 1 0.33	1 0 0 1 2 0.5 0	1 1 2 1 2 7 1.17	2 2 1 1 6 1.5 2	1 2 2 1 8	1.6 TR6 TR9 TR10	0.25 0.67 1.25 0.83 1.5 1.8 0.50 0.33 0.50 1.17 1.5 1.6	5.60 59 YES

D. Proformas

Overview											
Package No.	Type of Pa				Package Name						
1 Package Back	Active Tr	ravel Expanding Active Travel									
Description	.g. o ana	Expanding Active Travel will deliver several interventions that will increase the attractiveness of walking and cycling around Wirral. This package will provide enhanced active travel infrastructure for Wirral through upgrading routes, providing new routes, signposting and promoting cycling/walking trips.									
Package Obje	ctives	This package will aim to alternative to car travel. improved and new cycle	The package	e will focus on impr	oving health and w	ellbein	g for resid				
Schemes with	nin this Package										
Ref.	Name	me Scheme Description Spatial Pr		Spatial Priority	Deliv Phas	•	Estimated Cost Range				
1.2.1.3	A533 Fender Lane to A553 / A554 roundabout cycle lane	This scheme is to provid Lane to A553 / A554 rou for cyclists alongside vel	ındabout, im		Wirral Waters EZ	1		£3m-£10m			
1.4.1.1	Wirral Circular Trail improvements - Coastal Cycle Strategy	Improve the amount and road cycle paths and inc cycle routes, while provide connections along the co	rease resilie ding improve past.	nce of coastal ed signposting and	Borough-wide	1		£3m-£10m			
1.4.1.2	Implementation of Birket Scheme - Pasture Road to Reeds Lane, Moreton	Provide a new cycle and adjacent to the Birket, be Reeds Lane.	etween Past	ure Road and	Local Town Centres	1		£1m-£3m			
1.4.1.3	Wirral CityBike Scheme	Introduce the CityBike so with bicycle stations loca enhance and promote cy	ited in key lo	cations to	Borough-wide	1		£3m-£10m			
1.4.1.4	Active Travel Routes across the M53	Deliver new crossings of with improved cycling ro	utes in urbar	n areas.	Borough-wide	1		£3m-£10m			
1.4.1.5	Cycle Route to Arrowe Park and the Hospital	Connect the existing cyc Station and Woodchurch continuous east to west	n with Birken route.	head, providing a	Local Town Centres	1		£1m-£3m			
1.4.1.6	Wirral Cycle Route Network - Connecting the Dots (previously SUDs)	Provide new sustainable pedestrians that will imp network and provide gre destinations and areas.	rove the exis	sting active travel	Borough-wide	1		£1m-£3m			
8.3.2.1	Active Travel Connectivity to Local Centres	This scheme will improve centres and the attractive within Local or District co	eness of the		Borough-wide	1		£1m-£3m			
8.3.2.2	Residential Road Streetscape	Improve accessibility to the attractiveness of pub	reas and improve	Borough-wide	1		£1m-£3m				
Scheme Deliv	ery										
Lead Delivery	Organisation	Delivery Partners			Role of partners						
Wirral Council		Merseytravel, City Bike			Co-operate effecti deliver scheme ele schemes.	•					
Timescales: S	Short (2020-2024)										
Phasing	1	Bid and Approval	20/21		Planning and Construction		22/23				
Land Owners	hip and Planning	Dependencies			Project Risks						
Unknown at thi	is stage	None			None						
	ding & Progression										
Scheme Size (estimated cost)	£20m-£50m	Revenue Funding Requ	uirement?	N/A	Funding sources	i	LCR STEI	P Fund/LGF			
Package align	ment with LCR Transport St	rategy objectives									
1. Economic Gro	wth	Some package alignment with strategic objectives	4. Local acces	ss and connectivity	Excellent package objectives	alignn	nent with s	trategic			
2. Supporting Vis	itor Economy	Good package alignment with strategic objectives	Excellent package alignment with strategic objectives								
3. Environmental		Excellent package alignment with strategic objectives	6. Deliverabili	ity	Excellent package alignment with strategic objectives						

Overview											
Package No.	Type of Pa	nckage			Package Name						
2	Highways Imp			Remo	oving Highway Constraints						
Package Bac	kground										
Description		This package comprises of several highways improvement schemes that would remove highway constraints through improving capacity at pinch points and improving signage to direct traffic along identified routes.									
Package Obje	ectives	The objectives of this package would be to remove highway constraints that generate congestion on the network and cause increased journey times. Improved signage would ensure traffic is routed appropriately and relieve congestion in sensitive areas, e.g. Eastham Village.									
Scheme withi	in this Package										
Ref.	Name	Scheme Description			Spatial Priority	Deliver Phase	ry	Estimated Cost Range			
1.3.1.1	A540 Heswall Pinch Point Improvements	This scheme would provincrease capacity and re A540.	educe conge	estion on the	Local Town Centres	1		£3m-£10m			
1.4.2.2	Clatterbridge to Mersey Waterfront Corridor Improvements (A5137/B5137)	Corridor improvements from Heswall to M53 J4 Waterfront. This scheme improvements and high and pedestrians.	, to the Unile e will include	ever site, to the junction	Local Town Centres	2		£3m-£10m			
1.6.2.1	Port Wirral Road Improvements and Signage Strategy	Provide improved access through improved signal which would restrict access HGVs.	ge from the	highway network,	A41 Corridor	2		£1m-£3m			
1.6.3.1	Airport Accessibility and Signage Strategy	Improved signage to Liv Airports from Wirral.	Manchester	Borough-wide	2		£1m-£3m				
Package Deli	very										
Lead Delivery	organisation	Delivery Partners			Role of partners	5					
Wirral Council		Highways England	Support Wirral Council in the implementation of highway improvements.								
Timescales: I	Medium (2025-2030)										
Phasing	2	Bid and Approval	20/22		Planning and Construction	23	3/24				
Land Owners	hip and Planning	Dependencies			Project Risks						
Unknown at th		None			None						
Package Size (estimated cost)	£10m-£20m	Revenue Funding Req	uirement?	N/A	Funding source	16	GF/High hallenge	•			
Alignment wi	th LCR Transport Strategy o	bjectives									
1. Economic Growth		Excellent package alignment with strategic objectives 4. Local access and connectivity			Excellent packagobjectives	ge alignr	ment wit	h strategic			
2. Supporting Vis	sitor Economy	Some package alignment with strategic objectives 5. Social impacts			Some package alignment with strategic objectives						
3. Environmental		Some package alignment with strategic objectives	6. Deliverabili	ty	Good package alignment with strategic objectives						

Overview										
Package No.	Type of Pa		Wii	Package Name rral Line Enhancen	nents					
Package Back		chinancements	7711	Tai Line Linancen	icitis					
Description		Merseyrail network. The	uce several measures that will e schemes proposed will enhand and greater interchange with othe	e station facilities	and accessibility	•				
Package Obje		The aims of this package will be to raise rail patronage along the Merseyrail network and reduce car usage within Wirral, particularly along the A41 Corridor. This will be achieved through increasing the attractiveness of rail travel, to deliver an improved standard of service along the Wirral Line.								
Schemes with	nin this Package				Delivery	Catimated				
Ref.	Name	Scheme Description		Spatial Priority	Delivery Phase	Estimated Cost Range				
1.5.1.1	Station facilities and waiting environment enhancements	shelters and ticket mach waiting environment for	new and improved waiting nines on platforms to improve passengers, and improved the attractiveness of rail for	Borough-wide	1	£10m-£20m				
1.5.1.2	Wirral Line Park and Ride Enhancements		er increased parking capacity multi-modal options as an ng the A41 corridor.	Borough-wide	1	£1m-£3m				
1.5.1.3	Town Meadow/Ledsham New Stations			Local Town Centres	2	£20m-£50m				
1.5.1.4	Green Lane Station refurbishment	the station, including dis	a complete refurbishment of abled access, upgraded unter and two seated waiting	Local Town Centres	1	£3m-£10m				
1.5.1.5	Park and Ride at Birkenhead Central Station	at Birkenhead Central, in	a new Park and Ride facility ncluding a new forecourt and facilitating more multi-modal	Birkenhead Town Centre	1	£3m-£10m				
1.5.1.6	Meols Station Accessibility	This scheme would delive throughout the station.	ver step-free access	Local Town Centres	1	£3m-£10m				
2.1.3.1	Improvements to Bus infrastructure at Birkenhead Park and Conway Park Stations	facility at Birkenhead Pa	ver a new bus interchange ork and Conway Park to nailway stations and encourage	Birkenhead Town Centre	1	£1m-£3m				
2.1.3.3	Hamilton Square Statio Bus/Rail Interchange Improvements	interchange facilities at I	mprovements to the bus/rail Hamilton Square to provide multi modal trips through etween modes.	Hamilton Square and Woodside	1	£1m-£3m				
2.1.3.4	Bus/Rail Interchange at Birkenhead North Station	the rail station, including waiting area, toilets, refr	a number enhancements at a new ticket office, improved eshment facilities, as well as in local bus services and other	Wirral Waters EZ	1	£1m-£3m				
2.1.3.5	Bus/Rail Interchange at Birkenhead Central Station	interchange at Birkenhe provide greater connecti	he delivery of a new bus/rail ad Central station which would ivity between the Merseyrail ervices, enhancing multi-modal	Birkenhead Town Centre	1	£1m-£3m				
7.1.1.1	Bus/Rail Interchange at New Brighton Station	in Liscard and improved	ers. Options for rail-based park fully and improved	New Brighton	1	£1m-£3m				
8.3.1.1	Bus/Rail Interchange at West Kirby Station	with enhanced waiting fa	tween bus and rail services, acilities for passengers and ites between bus stops and	Local Town Centres	1	£1m-£3m				
Package Deliv										
Lead Delivery	Organisation	Delivery Partners		Role of partners						
Merseytravel		Wirral Council, Bus Ope Merseyrail	Co-ordinate successful delivery of the new publi transport enhancements. Network Rail could be asked to provide a portion of match funding.							
Timescales: S	Short (2020-2024)									
Phasing	1	Bid and Approval	20/21	Planning and Construction	23/24					
Land Owners	hip and Planning	Dependencies		Project Risks						

Unknown at this stage Package Funding & Progression		Network Rail support			None			
Package Size	£20m-£50m	Revenue Funding Requirement? N/A		N/A	Funding sources	LGF, Network Rail PSF4, LCR STEP		
Alignment with LCR Transport Strategy objectives								
1. Economic Grow	v th	Some package alignment with strategic objectives	4. Local access and connectivity		Excellent package alignment with strategic objectives			
2. Supporting Visi	tor Economy	Some package alignment with strategic objectives	5. Social impa	octs	Good package alignment with strates objectives			
3. Environmental		Good package alignment with strategic objectives	6. Deliverability		Excellent package alignment with strategic objectives			

Overview							
Package No.	Type of Pa				Package Name		
4 Package Back	Rail upgrade and e	enhancements		Borderla	ands Line Transfor	mation	
Description	ground	This package includes s focuses on increasing fr potential integration with transport connectivity to	equency/capacit the Merseyrail	ty on the line, on the line, on the property of the property o	establishing new s backage also inclu	tations and exp des improving	loring
Package Obje	ctives	The package would aim the number of direct trai trips such as at Heswall congestion across Wirra	ns to Liverpool. will assist to rec	The developm	ent of interchange	stations for mu	ulti-modal
Schemes with	in this Package						
Ref.	Name	Scheme Description			Spatial Priority	Delivery Phase	Estimated Cost Range
1.5.2.1	Introduce New Borderlands Line Stations	Borderlands (Wrexham- stations along the route developments that have	This scheme would provide new rail stations on the Borderlands (Wrexham-Bidston) rail line. The new stations along the route would serve new developments that have occurred along the line such as at Beechwood, Woodchurch and Deeside			2	£20m- £50m
1.5.2.2	Extend Borderlands Line to Birkenhead North	improve direct connection	Extend services to terminate at Birkenhead North to mprove direct connections between North Wales, Vestern Wirral and Birkenhead.			2	£20m- £50m
1.5.2.3	Borderlands Line Frequency Increase		This scheme would increase the frequency of diesel operated services in the short term between Bidston and Wrexham			1	n/a
1.5.2.4	Borderlands Line Electrification (Extension of Merseyrail)	This scheme could include full electronification of the route or (more likely) would include use of battery power to enable trains on the Borderlands route to continue to Liverpool without interchange penalties to passengers. This will enable passenger and freight movement from Birkenhead Docks and provide onward through linkages to the Merseyrail network.			Borough-wide	2	n/a
8.3.1.4	New rail spur and station - Heswall	This scheme would prov Borderlands Line into He provide a new station to	eswall Town Cer	ntre and	Local Town Centres	3	£50m- £100m
8.3.1.2	Heswall Station Bus/Rail interchange, linkage and parking	Improve the facility for b station whilst improving station and ability to Par	the waiting facili		Local Town Centres	1	£3m-£10m
Package Deliv Lead Delivery		Delivery Partners			Role of partners		
Network Rail /	Merseytravel	Merseyrail, Wirral Counc	cil		Make the case to Network Rail for the need for intervention and support Network Rail/Merseytravel to progress the schemes.		
Timescales: S	hort - Long (2020 - 2030+)						
Phasing	1/2/3	Bid and Approval	2020-2025		Planning and Construction	2025+	
	nip and Planning	Dependencies			Project Risks		
Unknown at thi	s stage ling & Progression	Demand on the Borderla	ands Line		None		
Package Size	£100m-£500m	Revenue Funding Req	uirement? N/A	A	Funding sources		twork Rail CR STEP
Alignment wit	h LCR Transport Strategy o	bjectives					
1. Economic Grow	vth	Excellent package alignment with strategic objectives	4. Local access an	d connectivity	Excellent package alignment with strategic objectives		
2. Supporting Visi	itor Economy	Some package alignment with strategic objectives	5. Social impacts		Excellent package alignment with strategic objectives		
3. Environmental		Some package alignment with strategic objectives	6. Deliverability		Some package alignment with strategic objectives		

Overview					D 1 N		
Package No. 5	Type of Pa Cross-River c				Package Name ross-River Strateg	1 \/	
Package Bac		OfficeClivity			1035-Kiver Strateg	J y	
Description		This package focuses of schemes within the pactransit, as well as maximal for a new access link be	ckage are focuse mising vehicle ca	d across publi pacity of the I	c transport interve Mersey Tunnels. T	entions for there are fu	rail, bus and rap irther ambitions
Package Obje	ectives	The aims of this package Tunnels. Improving accomprove journey times a	ess between Wir	rral and Liverp		-	•
Schemes with	nin this Package						
Ref.	Name	Scheme Description			Spatial Priority	Delivery Phase	Estimate Cost Range
1.6.1.2	Re-purposing of Queensway Tunnel for Public Transport only	This scheme would clos general traffic and act a with connectivity for a ra Wirral to travel to Liver	as a public transp apid transit syste	ort corridor	Borough-wide	3	
1.6.1.6	Use of Queensway Service Tunnel for Rapid Transit	This scheme would be to utilise the Queensway Service Tunnel as a route for a rapid transit system connecting Wirral to Liverpool.			Borough-wide	3	£20m- £50m
1.6.1.12	Queensway Tunnel Resilience Measures	the tunnel to bring it up	This scheme would include general improvements to he tunnel to bring it up to date and ensure it can cope with it's proposed level of use.			1	
1.6.1.3	Kingsway Capacity Increase	measures through maxi	This scheme would look to increase capacity measures through maximising speeds and approaches to the tunnel on both sides.			1	
1.6.1.4	Kingsway Toll Plaza Remodelling / Removal	This scheme would aim to increase the Kingsway Tunnel's capacity through remodelling/removing the toll plaza on Wirral and instead utilising ANPR technology to administer the toll system.			Borough-wide	1	£10m- £20m
1.6.1.9	Wirral Line Connectivity - Wirral Lane to Northern Line Link	This scheme would connect the Wirral Line to the City Line/Northern Line, removing the requirement for an interchange on the Liverpool Loop.			Borough-wide	3	£10m- £20m
1.6.1.10	New Mersey Crossing e.g. Bromborough - Aigburth	This scheme would deliver a new Mersey Crossing,			Borough-wide	3	£500m- £1bn
6.1.1.1	New access link into WIBP from Liverpool	This scheme would pro Wirral International Bus This has potential linka Mersey tidal barrage.	siness Park from	Liverpool.	Wirral International Business Park	3	£3m-£10
1.6.1.13	Mersey Tunnel Flood Resilience	This scheme would imp the tunnels to ensure th future.			Borough-wide	1	£10m- £20m
Package Deli							
Lead Delivery	organisation	Delivery Partners			Role of partners		
Liverpool City	Region CA	Merseytravel, Wirral Co	ouncil, Liverpool (City Council	Support LCR CA options and takin further developm to bring forward by	g schemes ent. Work	s forward for with private sect
Timescales: S	Short - Long (2020 - 2030+)		2000 2000	4 0000	Diameter	000	0.0004 1
Phasing	1/3	Bid and Approval	2020-2022 phase 3	se 1, 2030-	Planning and Construction		3-2024 phase 1 4+ phase 3
	hip and Planning	Dependencies			Project Risks		
Unknown at th	iis stage ding & Progression	None			None		
Package Fund Package Size (estimated cost)		Revenue Funding Req	quirement? N/A	A	Funding source	s Maj	F, Large Local ors Fund, Privat etor investment rrage)
Alignment wi	th LCR Transport Strategy o						
1. Economic Gro	wth	Excellent package alignment with strategic objectives	4. Local access an	d connectivity	Excellent packag objectives	e alignmer	nt with strategic
2. Supporting Vis	sitor Economy	Some package alignment with strategic objectives	ackage nt with 5. Social impacts		Good package alignment with strategic objectives		
3. Environmental		Some package alignment with strategic objectives	Some package lignment with 6. Deliverability		Some package alignment with strategic objectives		

strategic objectives

Overview							
Package No.	Type of Pa Public Realm / Highwa			Birkenhe	Package Name ad Town Centre C	Sateways	
Package Bacl		aye improvemente		Diritorinio		Jaiomayo	
Description		This is a package of infr Centre through the impr addressing a number of wayfinding into Birkenhe	ovement of junctions th	the gateway road at experience cap	arrival points in th	e town centre.	This includes
Package Obje	ectives	This package will enable in need of redevelopme safe road layout and im	nt, improve	accessibility to the	town centre, and	•	
Schemes with	nin this Package						
Ref.	Name	Scheme Description			Spatial Priority	Delivery Phase	Estimated Cost Range
2.1.1.1	A41 Chester Street highway alignment	This scheme would imp to increase capacity and corridor, and to remove	d connectivit	y along the A41	Birkenhead Town Centre	1	
2.1.1.5	Chester Street junction improvements	•	This scheme would provide junction capacity mprovements to the Chester Street junction.			1	
2.1.1.6	Signage improvement to Birkenhead Priory and Tranmere Docks	,			Birkenhead Town Centre	1	£10m- £20m
2.1.1.7	Electric charging points across borough	This scheme would provide electric charging points across Wirral to improve the infrastructure available for electric vehicles.			Borough-wide	1	
2.1.1.8	Signage/better entrance to retail core	This scheme would improve the signage and entry points to the retail core of Birkenhead Town Centre.			Birkenhead Town Centre	1	
2.1.1.9	Birkenhead - local access road improvements	improvements that would	This scheme would provide local access road improvements that would aim to improve vehicle movements, enhancing access into Birkenhead town centre			1	
Package Deliv	very						
Lead Delivery	Organisation	Delivery Partners			Role of partners	3	
Wirral Council	/ Wirral Growth Company	Private sector, Wirral Cl Merseytravel	namber of C	ommerce,	Support Wirral C schemes further case for funding.		•
Timescales: S	Short (2020 - 2025)						
Phasing	1	Bid and Approval	2020-2022		Planning and Construction	2023-202	24
Land Owners	hip and Planning	Dependencies			Project Risks		
Unknown at th	is stage ding & Progression	None			None		
Package Full	allig & Progression						
Package Size (estimated cost)	£10m-£20m	Revenue Funding Req	uirement?	N/A	Funding source	LGF, ST	ĒΡ
Alignment wit	th LCR Transport Strategy o	bjectives					
1. Economic Gro	wth	Some package alignment with strategic objectives	4. Local acces	ss and connectivity	Excellent packagobjectives	ge alignment wit	h strategic
2. Supporting Vis	itor Economy	Good package alignment with strategic objectives	5. Social impa	acts	Excellent package alignment with strategic objectives		
3. Environmental		Some package alignment with strategic objectives	6. Deliverabili	ty	Excellent package alignment with strategic objectives		

Overview							
Package No.	Type of Pa				Package Name		
7 Package Back	Public Realm Im	provements		Birkenhea	d Town Centre St	reetscape	
Description	ground	This package will provid through an improved ac between the retail and c environment.	tive travel pu	ıblic realm. An im _l	proved streetscap	e would increas	e movement
Package Obje	ctives	This package will introdu and cycling activity in the attractive retail offer to re commercial and retail co	e area. The lesidents and	oackage will supp	ort the town centre	e to provide a m	ore
Schemes with	in this Package						Fatimatad
Ref.	Name	Scheme Description			Spatial Priority	Delivery Phase	Estimated Cost Range
2.1.2.1	Improved public realm in retail core	This scheme would proving the retail core to enhance pedestrians and cyclists the retail core.	nce connec	ivity for	Birkenhead Town Centre	1	
2.1.2.2	Improved public realm Argyle Street	This scheme would prov for Argyle Street to conn	This scheme would provide an improved streetscape or Argyle Street to connect the Hind Street levelopment, Birkenhead Central station and etail/commercial core.			1	
2.1.2.3	Cleveland Street / Market Street / Price Street public realm	for Cleveland Street / Pr	This scheme would provide an improved streetscape or Cleveland Street / Price Street / Market Street to rovide high-quality public realm and increase footfall in the area.			1	
2.1.2.4	Public Realm Improvements: Conway Street	This scheme would provide public realm mprovements along Conway Street to increase pedestrian and cyclist connectivity and increase ootfall along the route.			Birkenhead Town Centre	1	£10m- £20m
2.1.2.5	Improved pedestrian crossing facilities along Argyle Street	This scheme would improve pedestrian crossing facilities along Argyle Street to reduce severance and improve connectivity for pedestrians and cyclists.			Birkenhead Town Centre	1	
2.1.2.6	Pedestrian overbridge on Borough Road, Whetstone Lane	This scheme would provide a pedestrian overbridge on Borough Road to improve connectivity and safety for pedestrians and cyclists.			Birkenhead Town Centre	2	
2.1.2.7	Conway Park - Market Improved Route	,			Birkenhead Town Centre	1	
1.5.1.7	Remodelling and Public Realm Improvements: Conway Park and Europa Boulevard	This scheme involves re Europa Boulevard and in provide an attractive ope	mproving the	public realm, to	Birkenhead Town Centre	1	
Package Deliv	very						
Lead Delivery	Organisation	Delivery Partners			Role of partners	•	
Wirral Council	/ Wirral Growth Company	Private sector, Wirral Ch Merseytravel	namber of Co	ommerce,	Support Wirral Council in the development of schemes further and the development of a case for funding.		
Timescales: S	Short (2020 - 2025)						
Phasing	1	Bid and Approval	2020-2022		Planning and Construction	2023-202	4
Land Ownersl	nip and Planning	Dependencies			Project Risks		
Unknown at thi Package Fund	s stage ling & Progression	None			None		
Package Size (estimated cost)	£10m-£20m	Revenue Funding Req	uirement?	N/A	Funding source	s LGF, STE and Cycli	EP, Walking ng fund
Alignment wit	h LCR Transport Strategy o						
1. Economic Grov	vth	Good package alignment with strategic objectives	4. Local acces	s and connectivity	Good package alignment with strategic objectives		
2. Supporting Visi	itor Economy	Good package alignment with strategic objectives	5. Social impa	cts	Good package alignment with strategic objectives		
3. Environmental		Excellent package alignment with strategic objectives	6. Deliverabilit	у	Excellent package alignment with strategic objectives		

Overview Package No.	Type of Pa			Package Name		
8	Regeneration / Public		Regenerating	Woodside and Ha	milton Square	
Package Bac	Improven kground	ients	ů ů		•	
Description	V	Square areas of Birkenh	series of schemes focused on the area has several keep provides a series of public result of the area.	y features such as	Hamilton Squa	re and the
Package Obje	ectives	Square. The schemes in inward investment. The	is to serve as a catalyst for the cluded in the package aim to schemes focus on enriching the will serve as a catalyst for ar	increase footfall in he existing assets	nto the area and such as Hamilt	l attract
Schemes witl	hin this Package			ŭ		
Ref.	Name	Scheme Description		Spatial Priority	Delivery Phase	Estimated Cost Range
3.1.1.1	Woodside Ferry Terminal Enhancements - new Pontoon	This scheme would enhate Terminal, providing a neattractiveness of the ferropatronage.	w pontoon to improve the	Hamilton Square and Woodside	2	£10m- £20m
3.1.1.2	Reconfigure / Redevelop Woodside Gyratory roundabout	This scheme would com alterations to Woodside to reconfigure and redev	Gyratory roundabout in order	Hamilton Square and Woodside	2	
3.1.1.3	Reconfigure / Redevelop Woodside Bus Station and relocate Bus Terminus	This scheme proposes r Terminus at Woodside, station, and reconfigurat immediate vicinity.	Hamilton Square and Woodside	2		
3.1.1.4	Access Road to Rosebrae Development Site	access road to the Rose	This scheme would consist of the development of an access road to the Rosebrae Development Site.			
3.1.2.1	Hamilton Square two-way outside station	This scheme proposes t traffic system outside Ha Hamilton Street, potentia	Hamilton Square and Woodside	1		
3.1.2.2	Remove mini-roundabouts at Hamilton Square	This scheme proposes t roundabouts at Hamiltor	Hamilton Square and Woodside	1	£10m-	
3.1.2.3	Remove Hamilton Street / Duncan Street road closure	This scheme would com the Hamilton Street/Dun look to re-link the streets	Hamilton Square and Woodside	1	£20m	
3.1.2.4	Improved public realm outside Hamilton Square rail station	This scheme would constrealm improvements out station to tie in with enhances scheme would invo	Hamilton Square and Woodside	1		
3.1.2.6	Improved public realm at Hamilton Square		on Square to enhance the	Hamilton Square and Woodside	1	
3.1.2.7	Improved walk route between Woodside and Hamilton Square	This scheme would consimprovements to walking and Hamilton Square. T	sist of a series of g routes between Woodside his will enhance mobility, rerance and create a more	Hamilton Square and Woodside	1	
3.1.2.8	Improve Argyle Street south approach to Hamilton Square			Hamilton Square and Woodside	1	
Package Deli	very					
Lead Delivery	<i>y</i> Organisation	Delivery Partners		Role of partners		
Wirral Council		Wirral Growth Company Merseytravel	, The Peel Group,	Co-operate effect deliver scheme el	•	I Council to
Timescales: \$	Short / Medium (2020 - 2030			Planning and	2022 202	24 / 2028-
Phasing	1/2	Bid and Approval	2020-2022 / 2025-2026	Construction	2023-202	-T / ZUZU-
Land Owners Unknown at th	hip and Planning his stage	Dependencies None		Project Risks None		
	ding & Progression					
Package Size (estimated cost)	£20m-£50m	Revenue Funding Req	uirement? N/A	Funding sources	and Cycl	EP, Walking ing fund, s Challenge

Alignment with LCR Transport Strategy objectives							
1. Economic Growth	Some package alignment with strategic objectives	4. Local access and connectivity	Excellent package alignment with strategic objectives				
2. Supporting Visitor Economy	Excellent package alignment with strategic objectives	5. Social impacts	Good package alignment with strategic objectives				
3. Environmental	Good package alignment with strategic objectives	6. Deliverability	Good package alignment with strategic objectives				

Overview Package No.	Type of Pa	ackage		Package Name		
9 Dooksee Book	Highways Enha	ancements	Gate	ways to Wirral Wa	ters	
Package Back Description	kgrouna		a series of enhancements to k rovides junction improvements	• •		
Package Obje	ctives	gateway junctions identi	nprove traffic flows and mover fied in this package. This wou ds the placemaking of the are	ld benefit both mot	torists and pede	strians, as
Schemes with	nin this Package					
Ref.	Name	Scheme Description		Spatial Priority	Delivery Phase	Estimated Cost Range
4.1.2.1	A5139 Dock Road / A5088 Wallasey Bridge Road junction	Road junction to reduce to Wirral Waters	nprise of a junction 39 / A5088 Wallasey Bridge congestion at a key gateway eet provides one of the key	Wirral Waters EZ	1	
4.1.2.3	Duke Street / Dock Road / Gorsey Lane junction	north / south pedestrian areas and employment, hubs. This scheme wou	routes between residential education and transport	Wirral Waters EZ	1	
4.1.2.4	A5027 Dock Road / A554 Tower Road / A554 Birkenhead Road junction	improvements to the A5	enhead Road junction to	Wirral Waters EZ	1	£10m- £20m
4.1.2.5	Duke Street / Corporation Road junction	the Duke Street / Corpo	de junction improvements to ration Road junction to improve pedestrian facilities.	Wirral Waters EZ	1	
4.1.2.6	Relocate Wirral Waters Industrial Uses to remove severance		Waters Industrial Uses would and within Wirral Waters and as the area.		3	
4.1.2.8	Rendel Street / Corporation Street	improvements to the Re	sist of a series of junction endel Street / Corporation ateway to Wirral Waters.	Wirral Waters EZ	1	
Package Deliv	/ery					
Lead Delivery	Organisation	Delivery Partners		Role of partners		
Wirral Council		The Peel Group		Support Wirral Council in the implementation of junction improvements and enhanced public realm.		
Timescales: S	Short / Long (2020 - 2035)			Diamaina and		
Phasing	1/3	Bid and Approval	2020-2022	Planning and Construction	2023-2024	4
	hip and Planning	Dependencies		Project Risks		
Unknown at th	ıs stage	None		None		
Package Fund	ding & Progression					
Package Size (estimated cost)	£10m-£20m	Revenue Funding Req	uirement? N/A	Funding sources	LGF, STE	Р
Alignment wit	h LCR Transport Strategy o	objectives				
1. Economic Grov	wth	Excellent package alignment with strategic objectives	4. Local access and connectivity	Good package ali objectives	gnment with stra	ategic
2. Supporting Vision	itor Economy	Some package alignment with 5 Social impacts		Excellent package alignment with strategic objectives		
3. Environmental		Some package alignment with strategic objectives	6. Deliverability	Good package ali objectives	gnment with stra	ategic

Overview							
Package No.	Type of Pa Highways Impi			Wirral Wat	Package Name ers Cross-Dock Co	nnectivity	
Package Back		ovements		vviiiai vvai	ers Cross-Dock Co	Tillectivity	
Description	Y	The current condition of continued growth in moved development throughout	ement that	is necessary to ma		-	
Package Object	ctives	This package aims to over Docks to provide greate access to proposed emp	r capacity in	the area to meet	future demand, an		
Schemes with	in this Package						
	Name	Scheme Description			Spatial Priority	Delivery Phase	Estimated Cost Range
4.1.1.1	Replacement of Poulton Bridge with a fixed structure		The scheme would replace the existing Poulton Bridge with a fixed structure.			3	
4.1.1.2	Replacement of Duke Street bridge	with the size dependent	This scheme would replace the Duke Street Bridge, with the size dependent on Wirral Waters masterplan and whether Duke Street is dualled.			2	£20m- £50m
4114	New north-south link and bridge	This scheme would prov connecting Gorsey Lane to Beaufort Road with as over East Float.	at the junct	tion with the A59	Wirral Waters EZ	3	230111
Package Deliv	erv				'		
Lead Delivery	Organisation	Delivery Partners			Role of partners		
Wirral Council		The Peel Group			Support Wirral Council in the implementation of highway improvements.		
Timescales: M	ledium / Long (2025 - 2035)					
Phasing	2/3	Bid and Approval	2025-27		Planning and Construction	2029-203	32
Land Ownersh	nip and Planning	Dependencies			Project Risks		
Unknown at thi	s stage	None			None		
Package Fund	ling & Progression						
Package Size (estimated cost)	£20m-£50m	Revenue Funding Req	uirement?	N/A	Funding sources	LGF	
Alignment witl	h LCR Transport Strategy o	bjectives					
1. Economic Grow	rth	Excellent package alignment with strategic objectives	4. Local acces	ss and connectivity	Excellent package alignment with strategic objectives		
2. Supporting Visit	tor Economy	Some package alignment with strategic objectives	5. Social impa	octs	Good package alignment with strategic objectives		
3. Environmental		Some package alignment with strategic objectives	6. Deliverabili	ty	Some package alignment with strategic objectives		

Overview Package No.	Type of Pa	ckage			Package Name		
11	Highway Impro			Wirral V	Vaters Supporting Hi	ghways	
Package Back Description	ground	The predicted growth in greater capacity and inci	reased footfa	all in the area. This	package provides a		
Package Object		The provision of improve of Wirral Waters and attained and severance, whilst imdevelopment associated	ract investment ract investment	ent and people into nectivity for pedest	the area. This pack	age will reduc	e congestion
Ref.	in this Package Name	Scheme Description			Spatal Priority	Delivery Phase	Estimated Cost Range
4.1.3.1	Wallasey Bridge Road Improvements	Wallasey Bridge Road is highway corridor, it is als and cyclists to access er This scheme would enha infrastructure and provid	so used by m mployment a ance active t	nany pedestrians nd transport hubs. ravel	Wirral Waters EZ	1	
4.1.3.2	Beaufort Road and Wallasey Bridge Road (City Boulevard)	corridor along Beaufort F create City Boulevard. T	This scheme involves creating a new multi-modal corridor along Beaufort Road and Corporation Road to create City Boulevard. This would run alongside the cransit corridor utilising the former rail alignment.			2	
4.1.3.3	A5030 Beaufort Road / A5088 Wallasey Bridge Road junction improvements	Bridge Road junction is a diameter roundabout wh	The existing A5030 Beaufort Road / A5088 Wallasey Bridge Road junction is a constrained 30 metre liameter roundabout which is in need of improvement both for vehicle capacity and for pedestrians and exclists trying to cross it.			3	£20m- £50m
4.1.3.4	Corporation Road / Cavendish Street / Cleveland Street junction improvements	This scheme would consist of a series of junction mprovements to increase capacity on the network, meeting future demand generated by the Enterprise Zone.			Wirral Waters EZ	3	
4.1.3.7	New development access from Beaufort Road and Wallasey Bridge Road	This scheme would provide new vehicular access into the development site from Beaufort Road and Wallasey Bridge Road, including servicing and delivery traffic.			Wirral Waters EZ	3	
4.1.3.8	A5027 Gorsey Lane / Kingsway Tunnel junction improvements	To provide junction impr Gorsey Lane / Kingsway would introduce signal of this point.	Tunnel junc	tion, this scheme	Wirral Waters EZ	1	
Package Deliv	ery						
Lead Delivery	Organisation	Delivery Partners			Role of partners		
Wirral Council		The Peel Group			Support Wirral Cour highway / junction ir		
Timescales: S	hort, Medium, Long (2020 -	2035)					
Phasing Land Ownersh	1 / 2 / 3 nip and Planning	Bid and Approval Dependencies	2020-2025,	2028-2030	Planning and Construction Project Risks	2023-2	2024, 2032-2034
Unknown at this		None			None		
Package Fund	ing & Progression						
Package Size (estimated cost)	£20m-£50m	Revenue Funding Requ	uirement?	N/A	Funding sources		Highways nge Fund
Alignment wit	h LCR Transport Strategy ol	ojectives					
1. Economic Grow	vth	Excellent package alignment with strategic objectives	4. Local acces	ss and connectivity	Good package align	ment with stra	ategic objectives
2. Supporting Visi	tor Economy	Good package alignment with strategic objectives	5. Social impa	acts	Excellent package alignment with strategic objectives		
3. Environmental		Some package alignment with strategic objectives	edic 6. Deliverability		Some package alignment with strategic objectives		

Overview Package No.	Time of De	ackage	Package Name		
Package No. 12	Type of Pa Active Travel Im		Package Name	avel	
Package Bac		provements	i waters Active Tra	avei	
Description	Ŭ	This package looks to provide a series of active travel links/corridors and enhanced safety for pedestrians/cy will provide enhanced pedestrian crossings and cycle high-quality public realm features. This package aims to improve the provision and safet	velists in the area. Toutes, and new gr	This includes scl reen links that be	nemes that enefit from
Package Obje	ectives	enhancing pedestrian crossings and cycle routes. Enhancing pedestrian crossings and cycle routes. Enhanced corridors will make the area more attractive for and visitors, forming a catalyst for growth. This package travel modes.	nancing public realr inward investment	n and developin and to potential	g new residents
Schemes witl	hin this Package				
Ref.	Name	Scheme Description	Spatial Priority	Delivery Phase	Estimated Cost Range
4.1.4.1	City Boulevard (green transport corridor Corporation Road and Beaufort Road	This scheme involves the development of a green transport corridor, named City Boulevard from Canning Street, along Corporation Road and Beaufort Road.	Wirral Waters EZ	2	
4.1.4.2	Tower Road / Birkenhead Road pedestrian / cycle link	college and housing at Wirral Waters.	Wirral Waters EZ	1	
4.1.4.3	Footbridge on Dockside Route	The scheme would provide a footbridge on the dockside route next to college development, improving accessibility for active modes in the area.	Wirral Waters EZ	2	
4.1.4.4	A5027 Duke Street public realm	This scheme involves a series of public realm enhancements along the A5027 Duke Street, making the area more attractive to live, work and invest in.	Wirral Waters EZ	2	
4.1.4.5	Wallasey Bridge Road cycle route	This scheme would provide a cycle route along Wallasey Bridge Road cycle and improved cycle links with the existing network, including the National Cycle Network and Leasowe.	Wirral Waters EZ	2	
4.1.4.6	Dock Road cycle route	This scheme involves the provision of a new Dock Road cycle route from Tower Road to Wallasey Bridge Road.	Wirral Waters EZ	2	
4.1.4.7	Pedestrian crossings on Tower Road	crossings on Tower Road to reduce severance in the area and provide greater accessibility to Wirral	Wirral Waters EZ	1	
4.1.4.8	Toucan crossings on Wallasey Bridge Road	This scheme would provide new toucan crossings on Wallasey Bridge Road to reduce severance in the area and provide greater accessibility to Wirral Waters.	Wirral Waters EZ	3	£3m-£10n
4.1.4.9	River Birket route into West Float	This scheme would provide a new green corridor along the River Birket into West Float for pedestrians and cyclists.	Wirral Waters EZ	3	
4.1.4.10	Cycle Route along Canning Street	This scheme would provide a new cycle route along Canning Street to enhance the active travel infrastructure in the area and improve accessibility into Wirral Waters via active modes.	Wirral Waters EZ	1	
4.1.4.11	Wirral Waters Pedestrian wayfinding strategy	This scheme would develop a strategy to enhance pedestrian wayfinding around Wirral Waters. This would include improved signage and pedestrian infrastructure, building upon other proposed active travel schemes for Wirral Waters.	Wirral Waters EZ	1	
4.1.4.13	Extend Victoria Park to Dock Road	This scheme would extend Victoria Park to Dock Road, providing a high quality parkscape that enables active travel modes to access Wirral Waters from the north.	Wirral Waters EZ	2	
4.1.4.14	Duke Street Active Travel Improvements	A series of Duke Street Active Travel Improvements are proposed to enhance the pedestrian and cyclist infrastructure around Wirral Waters. This includes improved cycleways and widening of pedestrian footways.	Wirral Waters EZ	2	
4.1.4.15	Green Link: Wirral Waters to Birkenhead Park	This scheme would provide a Green Link between Wirral Waters and Birkenhead Park. This link would incorporate high-quality active travel infrastructure and enhanced public realm providing accessibility to Wirral Waters from the south.	Wirral Waters EZ	2	
Package Deli	very				
Lead Delivery	Organisation	Delivery Partners	Role of partners		

Wirral Council		The Peel Group			Support Wirral Council in the implementation of active travel infrastructure and related schemes.	
Timescales: S	hort, Medium, Long (2020 -	2035)				
Phasing	1/2/3				Planning and Construction	2023-2024, 2032- 2034
Land Ownersh	nip and Planning	Dependencies			Project Risks	
Unknown at thi		None			None	
Package Fund Package Size	age Funding & Progression age Size					LGF, STEP, Walking
(estimated cost)	£3m-£10m	Revenue Funding Req	uirement?	N/A	Funding sources	and Cycling fund
Alignment wit	h LCR Transport Strategy o	bjectives				
1. Economic Grow	/ th	Some package alignment with strategic objectives	4. Local access and connectivity		Excellent package alignment with strategic objectives	
2. Supporting Visi	tor Economy	Good package alignment with strategic objectives	5. Social impacts		Excellent package alignment with strategic objectives	
3. Environmental		Good package alignment with strategic objectives	6 Deliverability		Excellent package alignment with strategic objectives	

Overview Package No.										
13	Public Transport E			Wo	orld-Class Public Transport					
Package Backg Description	round	This package contains a series of schemes that are focused on improving public transport across Wirral. There are a number of bus related measures that include integrated ticketing and greater connectivity with other modes. The package also includes aspirations to develop a rapid transit network to serve a population where the existing Merseyrail network fails to serve and the future growth of Wirral Waters.								
Package Objectives		The objectives of this package are to increase public transport patronage and develop a 'world class' public transport network in Wirral that encourages multi-modal trips with integrated ticketing. This aims to reduce dependence on the car and provide public transport that will meet future demand generated by development, specifically around Wirral Waters.								
Schemes within	n this Package									
Ref.	Name	Scheme Description			Spatial Priority	Delivery Phase	y Estimated Cost Range			
1.5.4.1	Integration of Merseyside ticketing with Deeside and Cheshire West	The scheme would deliv availability for routes cor residential locations outs Region to Wirral.	nnecting key	employment and	Borough-wide	1	£3m-£10m			
1.6.3.2	Access to Deeside (PT)	The scheme would deliv provision, including addi taxis to meet travel dema Deeside, particularly for	tional bus se and between	rvices and shared Wirral and	Borough-wide	1	£100,000- £500,000			
2.1.3.2	Relocation of Birkenhead Bus Station	This scheme would relocate the current area for town centre, relocating the suited for bus movements.	or new deve	lopment in the	Birkenhead Town Centre	1	£10m-£20m			
4.1.5.1	Rapid Transit - Wirral Waters to Liverpool	This scheme would prov scheme to connect Wirra potential use of the exist Tunnels.	al Waters to	Liverpool with	Wirral Waters EZ	3	£20m-£50m			
4.1.5.2a	Rapid Transit - New Brighton to Rock Ferry via Wirral Waters - Phase 1	This scheme would prov scheme that would conn Ferry, via Wirral Waters	ect New Brig . This would	hton to Rock capture an area	Wirral Waters / Birkenhead Town Centre	1	£3m-£10m			
4.1.5.2b	Rapid Transit - New Brighton to Rock Ferry via Wirral Waters - Phase 2	which the existing Merse and provide connectivity network at Birkenhead /	to the wider	public transport	Wirral Waters / Birkenhead Town Centre	2	£3m-£10m			
4.1.5.3	Bus routes diverted via Wirral Waters (410, 411, 413, 414)	This scheme would divert several bus routes from New Brighton, Woodside and Seacombe via Wirral Waters to enhance bus connectivity across the area.			Wirral Waters EZ	1	n/a			
7.1.1.2	New Brighton Accessibility Improvements (Parking Review/Land Train)	This scheme would increase investment in car parking and utilisation strategies of the car parking provided at the other end of the promenade with measures in place to access the town during peak periods, as part of the Wirral Visitor Economy.			New Brighton	1	£1m-£3m			
8.3.1.3	Brimstage Bus Connectivity	This scheme will improve associated bus infrastructure providing access to job of from Heswall.	cture upgrade	es to stops,	Local Town Centres	1	£1m-£3m			
8.3.2.3	Improved and integrated Taxi and DRT Coverage	This scheme would impr Wirral, and utilise new to time, integrated taxi cove	echnologies t	_	Borough-wide	1	£1m-£3m			
Package Delive	ry									
Lead Delivery C	Organisation	Delivery Partners			Role of partners					
Merseytravel		Wirral Council, Cheshire West and Chester Council, Bus Operators, The Peel Group			Support Wirral Council in the development of schemes further and the development of a case for funding.					
Timescales: Short, Medium, Long (2020 - 2		035)								
Phasing	1/2/3	Bid and Approval 2020-2025, 2028-2030			Planning and 2023-2024, 2032-2034 Construction					
	p and Planning	Dependencies			Project Risks					
Unknown at this	siage	None			None					
Package Funding & Progression										
Package Size (estimated cost)	£50m - £100m	Revenue Funding Requ	uirement?	Yes	Funding sources	LG	GF			

Alignment with LCR Transport Strategy objectives								
1. Economic Growth	Excellent package alignment with strategic objectives	4. Local access and connectivity	Excellent package alignment with strategic objectives					
2. Supporting Visitor Economy	Good package alignment with strategic objectives	5. Social impacts	Excellent package alignment with strategic objectives					
3. Environmental	Good package alignment with strategic objectives	6. Deliverability	Some package alignment with strategic objectives					

Overview										
Package No.	Type of Pa Highways impl			Δ/1 Q i	Package Name te Access Improvements					
Package Back		ovements		A41 01	te Access improve	erricino.				
Description		This package provides a series of schemes focused on improving access along the A41 to key employment and development sites, and from the south into Birkenhead Town Centre. The package consists of several schemes aimed at increasing capacity, improving pedestrian connectivity and altering the existing road network to enhance the area.								
Package Obje	ctives	The package has the potential to improve accessibility to public transport across the borough and enhance mode split for journeys to work by bus/rail, as well as increase footfall along the corridor, linking to Birkenhead town centre and the key employment sites along the A41 corridor.								
Schemes with	nin this Package									
Ref.	Name	Scheme Description			Spatial Priority	Delivery Phase	Estimated Cost Range			
5.1.1.1	Access to Hind Street - Mollington Link Road	This scheme would con Mollington Link Road, a flyover.			A41 Corridor	2	£10m- £20m			
1.6.1.7	Queensway Toll Plaza Re- modelling / Removal	This scheme would aim capacity through remod in Wirral and instead uti administer the toll syste	elling/remov ilising ANPR	ng the toll plaza	A41 Corridor	1	£10m- £20m			
5.2.2.2	Green Lane Roundabout capacity improvements	This scheme would comimprovements to Green capacity, flow and journ Strategic Corridor. Journ peak periods will be imp	Lane rounda ey time relial ney times on	about to increase bility of the A41 the A41 during	A41 Corridor	1	£3m-£10m			
5.2.2.4	Ivy Street junction capacity improvements	The scheme would comimprovements to the lvy increase capacity, flow the A41 Strategic Corrid	ion in order to	A41 Corridor	1	£1m-£3m				
5.2.2.5	Campbeltown Road capacity improvements	This scheme proposes improvements to			A41 Corridor	1	£1m-£3m			
5.2.2.6	Improve pedestrian linkage to Birkenhead Town Centre from south	This scheme would involve a series of improvements to pedestrian linkages to Birkenhead Town Centre from the south.			A41 Corridor	1	£1m-£3m			
5.2.2.7	A41 / A552 / Flyover remodelling	This scheme would consist of a series of alterations to the A41/A552 and involve remodelling the flyover area.			A41 Corridor	1	£10m- £20m			
5.2.2.9	A41 Southern Bus Access improvements	This scheme proposes the delivery of new or enhanced bus services, including where appropriate infrastructure improvements, connecting rail stations and town centres with employment sites and retail parks along the A41 Corridor.			A41 Corridor	1	£1m-£3m			
Package Deliv	/arv									
rackage Delik	very									
Lead Delivery	Organisation	Delivery Partners			Role of partners	i.				
Wirral Council		Merseytravel			Support Wirral Council in the implementation of schemes to improve accessibility along the A41 corridor.					
Timescales: S	Short (2020 - 2025)									
Phasing	1/2	Bid and Approval	2020-2022		Planning and Construction	2023-	2024			
_	hip and Planning	Dependencies None			Project Risks None					
OHKHOWH AT Th	ıs slaye	INOUE			INOTIE					
Package Fund	ding & Progression									
Package Size (estimated cost)	£50m-£100m	Revenue Funding Requirement? Yes			Funding source	s LGF	LGF			
Alignment wit	h LCR Transport Strategy o	bjectives								
1. Economic Grov	wth	Excellent package alignment with strategic objectives	4. Local acces	s and connectivity	Excellent packag objectives	e alignment	with strategic			

2. Supporting Visitor Economy	Good package alignment with strategic objectives	5. Social impacts	Excellent package alignment with strategic objectives		
3. Environmental	Some package alignment with strategic objectives	6. Deliverability	Excellent package alignment with strategic objectives		

Overview									
Package No.	Type of Pa				Package Name				
15 Package Back	Active Travel / Public Tra	nsport Improvements		A41 S	sustainable Connectivity				
Description	ground	This package enhances sustainable connectivity between the A41 Corridor and the wider Birkenhead area. This is achieved through the provision of new green links between areas to enhance connectivity, and the aspirations for a rapid transit system along the former dock rails							
Package Obje	ctives	The aims of this package is to promote sustainable modes of travel along the A41 Corridor and provide improved linkage along the A41 Corridor to key sites such as the Waterfront and Wirral Waters. The package would provide better connectivity and aim to promote alternative travel modes to driving.							
Schemes with	in this Package								
Ref.	Name	Scheme Description			Spatial Priority	Delivery Phase	Estimated Cost Range		
5.2.3.1	Green Link: Rock Ferry to Seacombe via Former Rail Corridor	This scheme proposes that between Rock Ferry rail corridor.	•	_	A41 Corridor	2	£3m-£10m		
5.2.3.2	Green Link: Woodside to Seacombe via waterfront	This scheme proposes in link between Woodside waterfront.	•	_	A41 Corridor	2	£3m-£10m		
5.2.3.3	Use of former Dock Railway for Rapid Transit	This scheme proposes the development of a series of transit routes on disused railway for rapid transit.			A41 Corridor	2	£10m- £20m		
Package Deliv	very								
Lead Delivery Organisation		Delivery Partners			Role of partners				
Wirral Council		Merseytravel			Support				
Timescales: N	Medium (2025 - 2030)								
Phasing	2	Bid and Approval	2025-2026		Planning and 2028-2030		0		
Land Owners	hip and Planning	Dependencies			Project Risks				
Unknown at th	· · · · · · · · · · · · · · · · · · ·	None			None				
Package Fund	ling & Progression								
Package Size (estimated cost)	£20m-£50m	Revenue Funding Requirement? N/A			Funding sources LGF, STEP				
Alignment wit	h LCR Transport Strategy o	bjectives							
1. Economic Growth		Excellent package alignment with strategic objectives 4. Local access and connectivity		Good package alignment with strategic objectives					
2. Supporting Visitor Economy		Excellent package alignment with strategic objectives	ignment with 5. Social impacts		Good package alignment with strategic objectives				
3. Environmental		Some package alignment with strategic objectives	6. Deliverability		Excellent package alignment with strategic objectives				

Overview									
Package No.	Type of Pa				Package Name				
16 Package Back	Highways impl	rovements		Hoyla	ke Golf Tourism Access				
Description	ground	and as part of the Maste will support economic g	Developing a world class international golf resort in Hoylake is a long term aspiration of the Count as part of the Master Plan, enhanced road access at Saughall Massie is required. The pack will support economic growth and development by ensuring reliable and efficient access to the development for tourism and leisure, as well as for employment and housing.						
Package Obje	ctives	Infrastructure improvements would support the development of the Golf Resort and associated economic benefits (employment, residential and tourism). The package would also provide high quality linkages to local and strategic networks.							
Schemes with	in this Package								
Ref.	Name	Scheme Description			Spatial Priority	Delivery Phase			
8.2.1.1	Saughall Massie Link Road New Infrastructure	This scheme would provand into Hoylake town croute across the railway	entre, provid	-	Local Town Centres	1	£3m-£10m		
8.2.1.2	Saughall Massie Link Road Infrastructure Upgrade	This scheme would upg Saughall Massie Road I West Kirby. The improv pedestrian and cycle fac of the resort and improv	np Lane and Ide high quality	Local Town Centres	1	£3m-£10m			
8.2.1.3	Heron Road Improvements	increased lane capacity	Improvement works such as realignment and increased lane capacity are required to improve the alignment and safety of road users.				£3m-£10m		
8.2.1.4	Other local access road improvements	This scheme would provimprovements for local increase highway capac	s in the area to	Local Town Centres	2	£3m-£10m			
Package Deliv	ery								
Lead Delivery Organisation		Delivery Partners			Role of partners				
Wirral Council		Private sector			Support Wirral Council in the making the case for development to unlock Hoylake's golf tourism market and wider economy.				
Timescales: S	short (2020 - 2025)								
Phasing	1/2	Bid and Approval	2020-2022		Planning and Construction	2024-20	25		
	nip and Planning	Dependencies			Project Risks				
Unknown at thi	s stage	None			None				
Package Fund	ling & Progression								
Package Size (estimated cost)	£20m-£50m	Revenue Funding Requirement? N/A			Funding sources	urces LGF			
Alignment wit	h LCR Transport Strategy o	bjectives							
1. Economic Growth		Excellent package alignment with strategic objectives	4. Local access and connectivity		Good package alignment with strategic objectives				
2. Supporting Visitor Economy		Excellent package alignment with strategic objectives	5. Social impacts		Good package alignment with strategic objectives				
3. Environmental		Some package alignment with strategic objectives	6. Deliverability		Excellent package alignment with strategic objectives				

Overview	T (D				D 1 N					
Package No.						Package Name enerating New Ferry				
	ige Background									
Description	ground	This package is focused on the regeneration of New / Rock Ferry and the waterfront at this point. To achieve this, the Rock Ferry bypass would be downgraded to remove severance and make the area more accessible for pedestrians.								
Package Obje	ctives	This package aims to provide a catalyst for the regeneration of New / Rock Ferry and reduce severance between the urban area and the waterfront. Through downgrading the Rock Ferry bypass this can provide the opportunity to improve the area's public realm and attract inward investment into the area.								
Schemes within this Package										
Ref.	Name	Scheme Description			Spatial Priority	Delive Phase	-	Estimated Cost Range		
8.1.1.1	Downgrading New / Rock Ferry Bypass: Reconnecting communities	This scheme would dow to remove severance be the waterfront, making it pedestrians and encoura community in the area.	Local Town Centres	₃ £50r		£50m- £100m				
Package Deliv	ery									
Lead Delivery	Organisation	Delivery Partners			Role of partners					
Wirral Council		Merseytravel			Support Wirral Council to explore the feasibility of the scheme and how alternative transport modes can be used.					
Timescales: L	ong (2030 - 2035)									
Phasing	3	Bid and Approval	2030-2032		Planning and Construction		2033-2034			
Land Ownersh Unknown at thi	nip and Planning	Dependencies None			Project Risks None					
	ling & Progression	None			None					
Package Size (estimated cost)	£50m-£100m	Revenue Funding Requ	uirement?	N/A	Funding sources	s L	LGF, STEP			
Alignment with LCR Transport Strategy objectives										
1. Economic Growth Some package alignment with strategic objectives 4. Local access and connectivity objectives Good package alignment with strate objectives					tegic					
2. Supporting Visi	itor Economy	Some package alignment with strategic objectives	5. Social impa	octs	Excellent package alignment with strategic objectives			strategic		
3. Environmental		Good package alignment with strategic objectives	Excellent package alignment with stopping objectives			strategic				

