Metropolition Town Centres and Urban Expansion Areas

Urban Expansion Areas (UEAs) were identified by the Cork Area Strategic Plan as the best locations for the development of new communities in Metropolitan Cork. Each UEA has been divided into specific land use zonings and included within the respective municipal district local area plans.

Within the Metropolitan areas, UAEs are subject to the development of Masterplans by Cork County Council. Areas targeted for pedestrian priority improvements should include the town centres themselves, their adjoining residential areas and schools.

Given the high level of out-commuting experienced in the Metropolitan towns, the enhancement of walking routes to stations on the suburban rail network, and the design and layout of residential development, will be key to promoting safer and higher walking levels as part of linked trips.

New local road links will be provided in some areas to support access to planned UAEs at Ballyvolane, Water Rock, Ballynoe, Blarney/Stoneview and Ballincollig and the planned Monard Strategic Development Zone. The development of these areas in predominantly greenfield sites offer the opportunity to integrate high quality and pedestrian (and cycling) environments at the outset.

To support sustainable travel, proposed new carriageway layouts and junction geometries will be assessed against Design Manual for Urban Roads and Streets (DMURS) standards and principles to ensure consistency in quality.

District and Neighbourhood Walking Network

The Walking Strategy further identified a series of district and neighbourhood centres of which local improvements to the network and provision of local services within a 20-minute walking catchment should be targeted to support local walking trips and the need to travel longer distances.

These include the southern section of the Cork Docks area, Ballinlough and Beamount and the growing cluster of student accommodation at the Lee Fields.

Accessibility and Universal Design

Universal design is the design of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability and disability (including visual, auditory, physical, sensory and cognitive).

The principles of universal design will be considered in the development of the pedestrian network for the CMA.

Age Friendly Town Centres

Changes to age-profiles of the CMA will require that the public realm and transport network will need to adapt to consider the needs of older people, those with mobility, visual or hearing impairments and those with buggies. These include provision of attractive public seating areas particularly within shopping areas and mid-points between residential areas and town centres.

Innovative solutions including providing publicly-accessible toilets, addressing site-specific concerns and enforcement of illegal parking on footpaths will help address some common barriers to walking. Regular audits with a variety of stakeholder groups representing older people, pedestrian groups and those with disabilities are envisaged to identify and address site-specific issues.

Improvement in Walking Routes to Schools

There are high levels of car usage for relatively short trips to places of education, particularly for primary schools across the CMA. Walking will become a more attractive choice through the implementation of safe, legible, pleasant walking routes and improvements to the pedestrian and cyclist environment within the immediate vicinity of the school. These could include best practice examples such as the EU-funded ‘School Streets’ projects in Edinburgh and Hackney, and ‘Walking Buses’ from designated drop-off areas. Further detail is provided in the ‘Supporting Measures’ chapter.

EXAMPLE OF WALKING, PUBLIC TRANSPORT AND URBAN REALM IMPROVEMENTS IN DOUGLAS VILLAGE


OPERA LANE
GAP
SPECSAVERS
THERAPIE
SKECHERS

Wayfinding

Lack of awareness of routes and distances to destinations is often quoted as barrier to walking. Much of Cork's existing way-finding signage system consists of finger posts, that are inconsistently applied, often damaged and primarily aimed at visitors.

An integrated map-based system along the lines of the Legible London system is proposed to provide a wider range of users with a better understanding of the surrounding area, highlighting accurate distances and times to destinations and encourage users to choose their own walking route to their destination.

Improving Permeability

A permeable street network is a key component of supporting more accessible, walkable and cycle friendly environments. However, much of the residential development layout across the CMA in recent decades has tended to favour impermeable, cul-de-sac layouts leading to circuitous routes to local services, schools and public transport stops.

Quality permeability measures and traffic management measures including Home Zones, DIY Streets and traffic filters to restrict rat-running by vehicles and facilitating street play, should be considered in relation to all future developments.

Opportunities to improve permeability to existing developed areas should be sought in conjunction with the implementation of the public transport, pedestrian and cycle network enhancements provided for within CMATS including:

- Provision of direct, high-quality pedestrian connections to high capacity public transport corridors, bus stops and major walking destinations;
- Provision of traffic-calmed Quietways for pedestrians and cyclists;
- Requiring quality design and pedestrian accessibility audits in planning applications for new residential areas;
- Provision of pedestrian and cycle crossings to link areas that are separated by roads or other physical barriers including the use of countdown signals at appropriate crossings; and
- Planning and design that ensures accessibility for persons with mobility challenges.

The NTA's Permeability Best Practice Guide is available to assist local authorities and other organisations in tackling the issues that impact on permeability providing a basis for addressing the legacy of severance in Irish urban areas.

Local Amenity Routes

The Walking Strategy is proposed to enhance the primary pedestrian network by increasing the permeability to existing and proposed amenity routes by better integrating them into strategic walking routes. Many of these are located in areas immediately adjacent to rivers and are proposed as Greenways in the Cycle Network Plan and include areas north of Ballincollig town centre, areas near the Old Passage line and the Lee Fields.

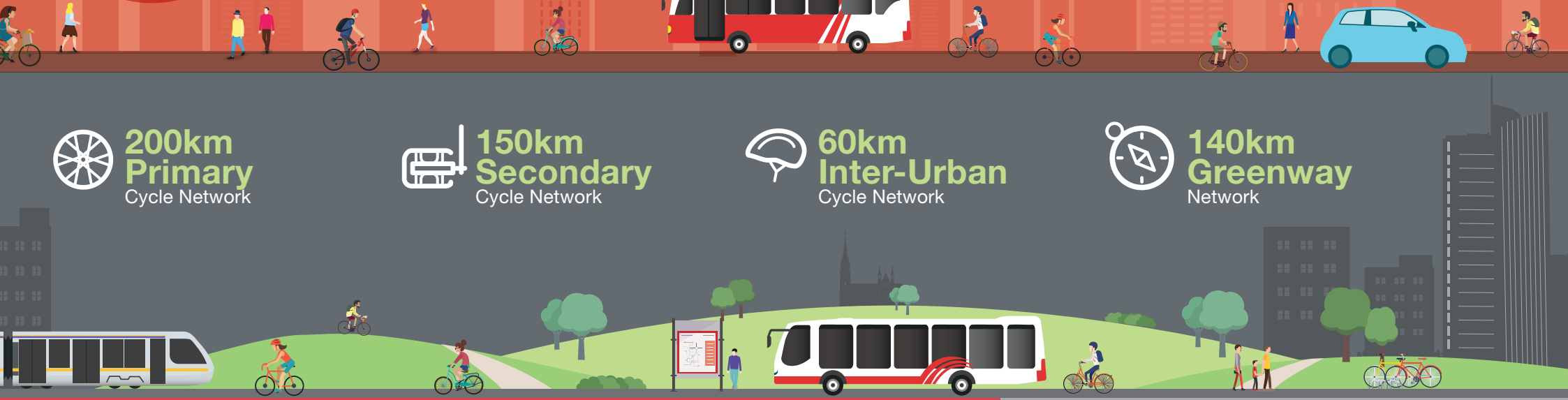
Minimising conflict between pedestrians and cyclists will become a more pressing concern as the popularity of these areas increase. Where full separation between pedestrian and cyclist movement is not possible, site-specific interventions including traffic calming of adjacent residential streets, low level bicycle rumble strips and considerate walking and cycling campaigns to reduce conflict may be appropriate.

CYCLING

19.5m
annual
cycling trips

Additional **56,000**
daily car trips potentially
transferable to cycing

13,000
cycling trips made in the **AM peak**
period easing congestion



200km
Primary
Cycle Network

150km
Secondary
Cycle Network

60km
Inter-Urban
Cycle Network

140km
Greenway
Network

Expansion
of Bicycle Sharing
Systems

20 mins **of activity a day**
reduces the risk of hearth disease,
type 2 diabetes and some cancers
by at least 20%

Enhanced End-of-Trip
facilities

positive impact
on mental health

Strategy cost estimate
is approximately
€230m
(+BusConnects
cycle elements)

07 CYCLING

The vision for the Cork Metropolitan Area Cycle Network Plan is to **provide a coherent, safe and attractive cycle network that will support a shift from the private car to cycling** for employment and education trips as well as provide a strong basis for increasing leisure and tourist cycling.

Cork Metropolitan Cycle Network Plan 2017

Cycling is a low cost, sustainable and growing mode of transport in the Cork Metropolitan Area. The NDP 2018-2027 commits to the delivery of walking and cycling networks for all of Ireland's cities. Translating this at a regional level, the Cork Cycling Network Plan for the CMA and surrounding towns was published in 2017 and forms the basis for much of this chapter.

Additional cycle links have been proposed to align with the CMATS proposed public transport networks including BusConnects and new orbital link roads. These upgraded routes will be characterised by high quality facilities designed to National Cycle Manual standards and in many cases, full or light segregation, where possible, from other modes including the provision of quiet ways and greenways. Local traffic calming, improved priority and signalling at junctions and lower speed limits will be required in some instances, particularly at complex junctions in an urban context.

Other supporting infrastructure measures to further develop a cycling culture in Cork will include the further roll out of bike share schemes including consideration of dockless bikes, shower and changing facilities, and a significant uplift in residential, visitor and workplace cycle parking.

Cork Metropolitan Cycle Network Plan 2017

The 2017 Metropolitan Cycle Plan is the starting point for the CMATS Cycle Network. The 2017 Plan was devised to increase cycling mode share from its present low base and to provide a clear plan for the development of the cycling network to encourage greater levels of cycling trips to places of employment, education, recreation and leisure.

The routes outlined in the 2017 Network Plan have largely been retained and updated to include new primary routes. These include future high-quality, segregated routes developed and integrated into the design and development of the Northern Distributor Road and Southern Distributor Road and a new link from Dunkettle to Little Island to enhance connectivity.

The proposed network was developed on the basis of the following:

- Transport and land use proposals set out in the policies and plans for the area;
- Assessment of existing cycling infrastructure within the area;
- Guidelines set out in the National Cycle Manual;
- Agreed targets for mode share; and
- Detailed assessment of travel demand within the area using outputs from the cycling model.

Key priorities for development of the Cycle Network Plan are as follows:

- Designating a coherent network of east-west and north-south cycle routes across the area which will provide access to all major trip generators;
- The first priority in terms of access will be employment areas and third level education followed by schools. These priorities have been established to support proposed modal shift targets. Cycle links to new development areas have also been prioritised;
- Providing the highest possible Level of Service on identified corridors of high demand;
- Identifying and maximising opportunities for high quality greenways and quietways;
- Responding to feedback from key stakeholders and the public.

Based on the recommendations within the National Cycle Manual a number of different infrastructure types are proposed at various locations within the network, including:

- Cycle Lanes: Incorporates a dedicated space adjacent to the kerb or car parking and can take the form of mandatory or advisory cycle lanes;
- Mixed Streets: Suitable in low traffic environments where the cyclist shares the road space with motorists;

- Cycling and Bus Lanes: Cycle lanes can be provided alongside the bus lane or cyclists can cycle with the buses within the bus lane;
- Cycle Tracks: Cycle tracks are different from cycle lanes in that they are physically segregated from motorised traffic in some way whether by a barrier or through a level change; and
- Cycle Trails or Greenways: Roads and paths through green areas and parks that are segregated from vehicular roads.
- Quietways: Quietways are convenient cycle routes on lower trafficked residential streets and greenways. They are designed to be well-signposted, direct and easy to follow for those who would prefer to cycle on quieter, calmer routes.

Primary Cycle Network

Primary routes have been designated as such because they experience the highest level of demand. Primary routes are typically direct and provide medium-long radial connections to key destinations across the CMA. These routes are supplemented by secondary and feeder routes which may provide access to residential catchments. Some key primary cycle routes to be improved within the CMA include:

- Segregated routes along the City Docks waterfront areas including the EuroVelo Route 1 from Cork City Centre to Tivoli and Little Island;
- Sallybrook/Glanmire - City Centre via Lower Glanmire Road (see below);
- Model Farm Road to Glasheen Road;
- Old Youghal Road;
- Kinsale Road – Airport;
- Douglas Road;
- Skehard Road;
- Station Road, Carrigtwohill;
- Northern Distributor Road; and
- Southern Distributor Road.

Primary routes are depicted in red on the network map. In some cases, these will be shared with dedicated bus lanes where carriageways are too narrow to accommodate segregated infrastructure.

Secondary Cycle Network

The secondary route network provides connections from residential areas and areas of employment to the primary network. They comprise of a combination of off-road cycle routes, cycle lanes, shared bus and cycle lanes and traffic-calmed roads. They often run parallel to primary routes, providing an alternative link. Some key secondary routes to be improved include:

- Evergreen Street/Abbey Street/ Douglas Street;
- Lower Pouladuff Road to Togher Road;
- Lee Road and Inniscarra Road; and
- Dublin Hill to Ballyhooly Road.

Secondary routes are depicted in blue on the network map.

Greenway Cycle Network

Greenway networks comprise of traffic free or low-trafficked routes and typically comprise of re-purposed derelict railway lines, routes through parks or alongside rivers. Access to greenways can be supported through filtered permeability from residential or other built up areas. Some key indicative areas for greenways* include:

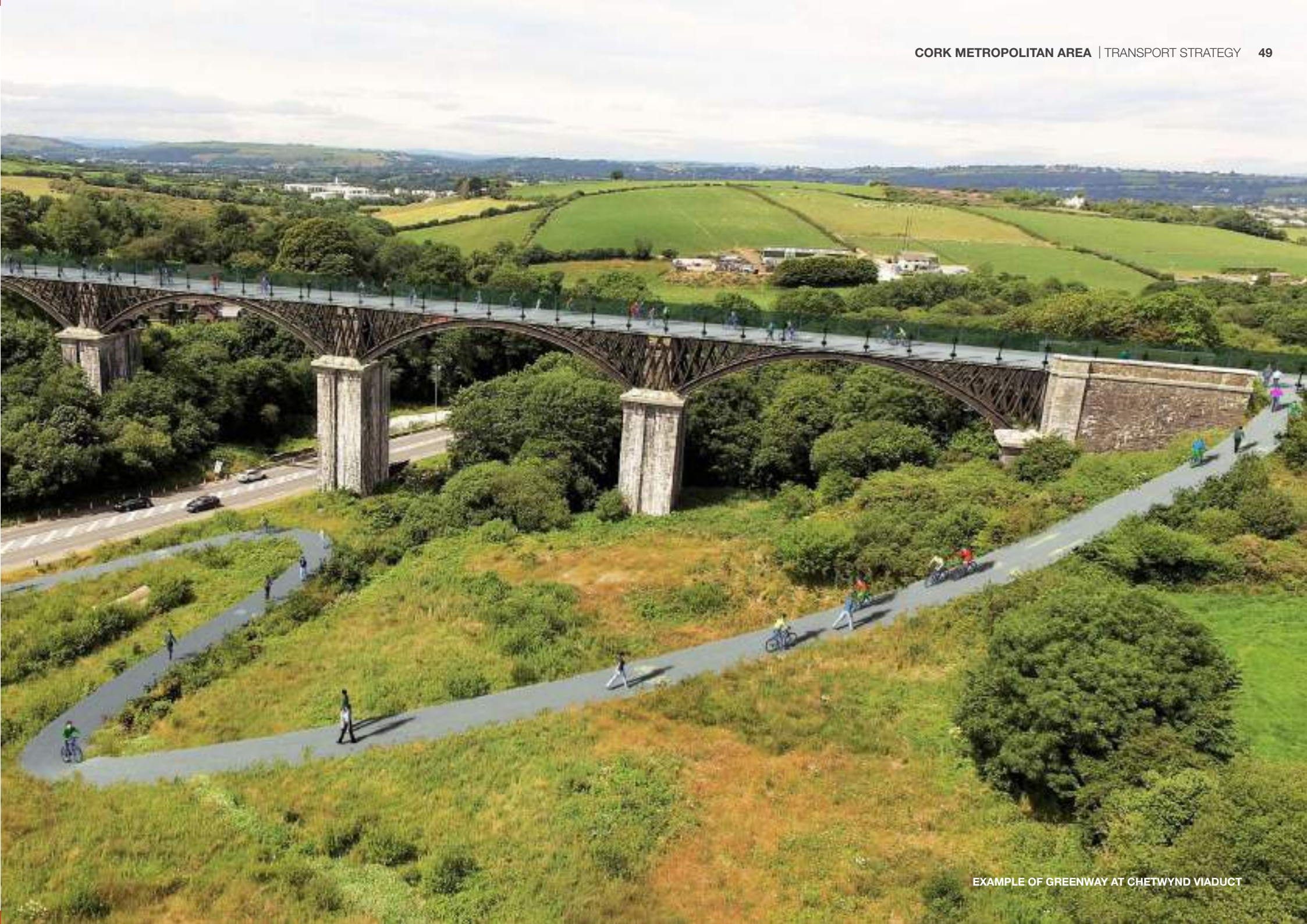
- A proposed east-west 'Lee to Sea' greenway incorporating the Lee Fields, city quays, the Marina and the Old Passage railway line;
- A Greenway linking City-Tivoli-Glanmire-Little Island-Carrigtwohill and Midleton (Part of the EuroVelo 1 route) with a potential extension to Youghal via the old railway line;
- A route following the Tramore River including Douglas, Tramore Valley Park and Togher;
- Passage West to Carrigaline;
- Curraheen River Greenway;
- Old Bandon/Kinsale Railway incorporating the Chetwynd Viaduct (below);
- Blarney Greenway Route;
- A route between Carrigrohane Road and Tower; and
- Midleton-Ballinacurra- Whitegate*

Additional greenways and/inter-urban routes to those outlined above, may be investigated subject to changes in the proposed population and employment distribution as part of the proposed periodical 5 year CMATS review.

It is noted that that both local authorities are pursuing funding to complete a bridge over the N40 to link Frankfield and Grange with the Tramore Valley Park.

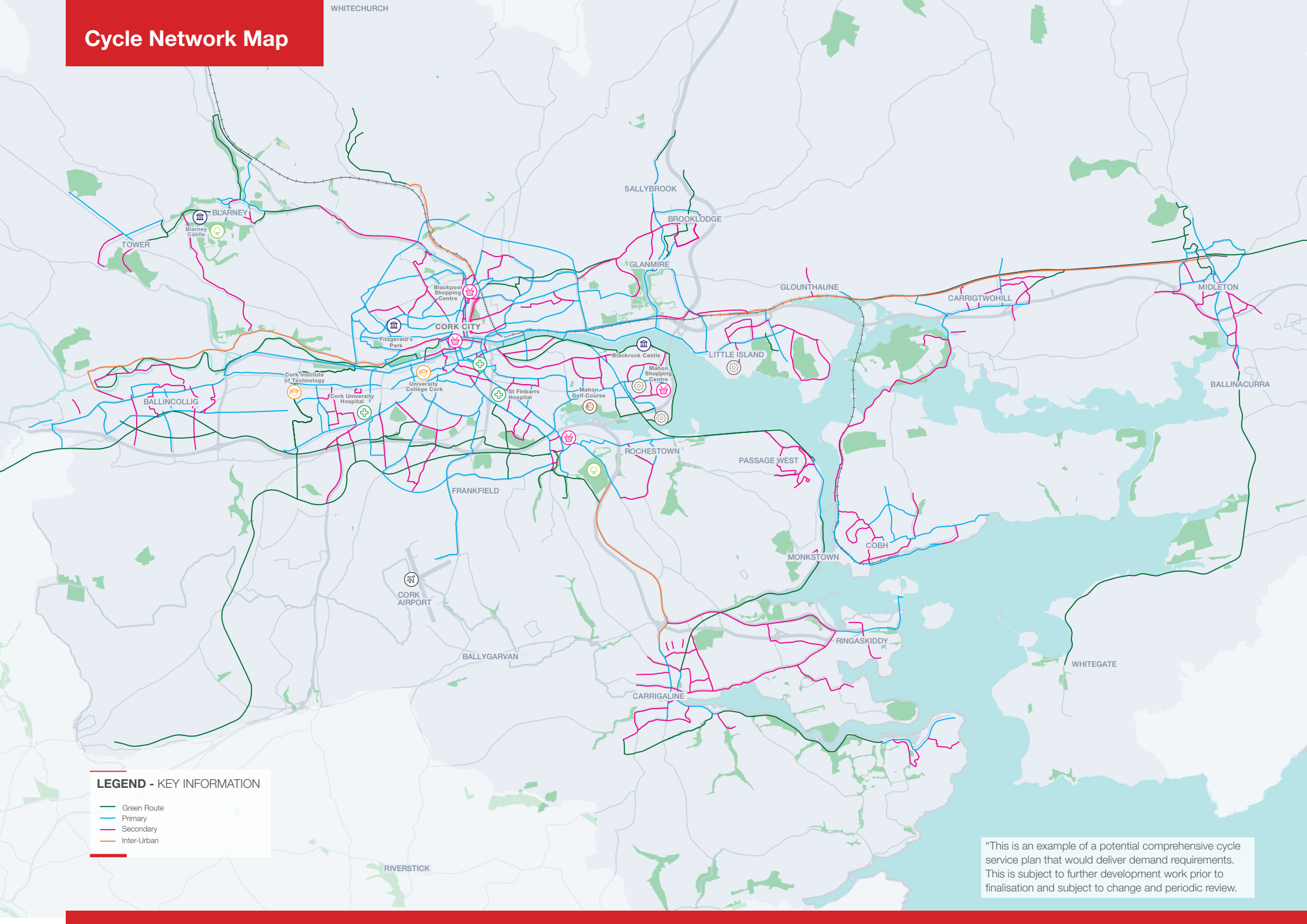
A bridge would support onward connections to the City Centre and Docklands area and will need to be supported by appropriate local traffic calming, dedicated infrastructure measures on the South Douglas Road and potentially, permeability measures through the St Finbarr's Hospital site.

* Subject to compliance with EU habitats and/or Birds Directives



EXAMPLE OF GREENWAY AT CHETWYND VIADUCT

Cycle Network Map



LEGEND - KEY INFORMATION

- Green Route
- Primary
- Secondary
- Inter-Urban

"This is an example of a potential comprehensive cycle service plan that would deliver demand requirements. This is subject to further development work prior to finalisation and subject to change and periodic review.

Inter-Urban Network

The Inter-Urban cycle route proposals consists of links between the Metropolitan towns and the Cork City network. These routes will comprise of low trafficked routes on selected minor or de-trunked roads and in some cases, off-road facilities, often referred to as quiet ways, along a road verge as is common in Denmark, Germany and Holland. Key parts of the inter-urban network include:

- Midleton to Dunkettle / Lower Glanmire Road (parallel to rail corridor);
- Blackpool to Monard (via Old Mallow Road);
- Utilisation of the N28 from Ringaskiddy to Cork City once M28 motorway is in place; and
- Ballincollig Regional Park to Sundays Well (via Lee Road).

Feeder Cycle Network

Feeder routes connect with primary and secondary routes and greenways and are typically cycle-friendly advisory routes where traffic calming and management measures allow cyclists and motorists to mix safely. Some key feeder connections identified in the Plan include:

- Residential streets in Blackrock and Ballintemple to the Old Passage Line-South Docks Greenway;
- A feeder route linking the Ballybrack Valley with the proposed Park and Ride at Carr's Hill and a greenway to Carrigaline;
- Links from Cobh residential areas to primary network;
- Links from residential areas in Passage West and Monkstown to existing Greenway;
- Residential areas in Ballincollig to the River Lee Greenway;
- Residential streets around CIT, CUH, Bishopstown and Model Farm Road; and
- Local links from residential areas in Blarney, Stoneview, Tower and Monard to the proposed Blarney Greenway.

Supporting Measures

Cork City Cycle Hire Scheme and other Bicycle Sharing Schemes

A public bicycle sharing scheme can be very effective in widening the catchment area of public transport and addressing the 'last kilometre' of a trip. The Cork Share Bike Scheme was launched in December 2014 and currently comprises 31 stations and 300 bikes across the City Centre.

The success of the scheme to date suggests significant potential for expansion. Expansion of the scheme will be on an incremental basis with a particular focus on the strategic cycle network, high capacity public transport corridors and stations, and inner suburban areas.

Supplementary funding streams, including site-specific development contributions from large office, student accommodation and other mixed-use development within planned regeneration areas such as the Cork Docklands, will be considered to support incremental expansion and low-car or car free development.

Other bicycle sharing scheme systems including dockless bicycles will also be considered, particularly in areas outside the City Centre and inner suburbs where expansion of the existing Cork Bikes scheme is unlikely to be feasible in the short to medium term. These schemes should be supported by a significant uptake in cycle parking provision in district centres, places of education and neighbourhood / local centres.

Cycle Parking

There is widespread evidence of inappropriate cycle parking, with bicycles chained to lamp-posts, balconies, staircases, railings and street signage in urban areas across the CMA, indicating significant unmet demand for formal cycle parking facilities.

To support existing and future demand, a significant uplift in provision of high quality, short stay cycle parking in the City Centre, metropolitan town centres, and neighbourhood centres, rail and bus stations, public buildings, shopping areas and workplaces is required.

Cycle parking standards for new employment, education and residential developments will be reviewed.

Larger, long-stay cycle parking hubs in urban centres and at bus and rail stations across the CMA that are secure and sheltered can help foster a cycling culture and support linked trips, particularly for commuters.

Bike Lockers and Hangars

Lack of secure cycle parking is a proven barrier to cycling. Individual bike lockers and shared on-street hangars offer security to bicycle owners and provide an innovative solution to cycle parking requirements particularly where internal storage space is limited.

Wheel Ramps

Access from hillside residential areas to open spaces, shopping areas and greenway routes in many of the inner suburban areas of Cork City and metropolitan towns like Cobh requires cyclists to negotiate steps. Wheel ramps can help cyclists more easily move bikes up ramps while minimising pedestrian/ cyclist conflict in narrow shared areas.

Showers and Changing Facilities

The addition of end-of-trip facilities in workplaces such as showers and changing facilities can significantly enhance the attractiveness of cycling (and running), particularly for longer distances or in inclement weather.

Targeting an uplift in these end-of-trip facilities will be considered by both local authorities when revising statutory Development Plans. Workplaces should also be encouraged to avail of government grants to retrofit premises to facilitate showers and cycle parking or consider contributing to shared facilities.

EXAMPLE OF PROPOSED PRIMARY CYCLE NETWORK

Permeability and Wayfinding
Lack of permeability is a key constraint for cyclists and pedestrians throughout the CMA. Low cost measures such as filtered permeability will be used to unlock access, reduce severance and rat-running and form direct connections to local services and longer distance dedicated cycle routes, including the proposed east-west 'Lee to Sea Greenway'.

Both local authorities will undertake permeability studies within existing built-up areas to identify short, medium and long-term opportunities to retro-fit cycling (and walking) permeability and align funding streams with those set aside for local ward level environmental improvements.

Clear and legible cycle route signage is proposed in parallel to the development of the cycle network and can include on-carriageway signage to minimise street clutter. Map-based wayfinding systems should also be considered on the docking stations of bike share schemes as is the case in other European cities.

Promotional Events
The use of cycling promotional material including school and workplace cycling challenges, dedicated cycling apps, regular maintenance and cycle training is supported. To increase the likelihood of their success, promotional events should be closely aligned with physical infrastructure improvements.

The possibility of Cork hosting one-off events such as Car Free Day, EU Mobility Week, Ciclovia and conferences such as POLIS, ECOMM and Velo-City should be actively pursued with the Cork Convention Bureau.