



# BUS CONNECTS

## BUS PASSENGERS



Carrying  
**49,000**  
passengers in  
the AM peak  
hour

Carrying  
**85m**  
passengers  
per annum

## BUS CORRIDOR PERFORMANCE

Douglas Corridor  
AM Peak Bus frequency  
**3 mins**  
Patronage  
1,700



Summerhill North  
Corridor AM Peak  
Bus frequency  
**3 mins**  
Patronage  
2,061

## BUS NETWORK & VEHICLES

**200km**  
of cross city  
routes

**50km**  
orbital routes

**150km**  
radial routes



**100km**  
of bus lanes and  
bus priority measures



**220** double deck bus  
fleet required



**6** Strategic  
Park & Ride  
sites



## CONNECTING CITY & SUBURB



Connecting with **Cork Suburban Rail Network at Kent Station**, with Cork Light Rail and Park and Ride Network and providing **interchange between radial and orbital bus services**



**4,800**  
passengers interchanging  
between Cross City, Radial  
and Orbital bus services in  
AM peak hour



## COST ESTIMATE



Strategy cost  
estimate is  
approximately  
**€545m**



## 08 BUS CONNECTS

BusConnects will comprise the delivery of **crucial bus corridors, enhanced services, cashless fares and account-based ticketing.**

National Development Plan 2018-2027

Buses are an extremely efficient mode of transport and will remain the work horse of the public transport system in Cork. Their flexibility means that routes and frequencies can be adapted to support phases of new development or as circumstances dictate. Buses will also provide an increasingly important interchange service between the InterCity, suburban rail and light rail stations and the Park and Ride network.

Enhancing the bus network is consistent with the National Development Plan 2018-2027 which envisages a significantly enhanced BusConnects service for Cork by 2027. This Strategy envisages that the realigned bus network will carry around 45 million passengers per annum and 32,000 passengers during the AM morning peak. An indicative future bus network has been developed and refined in an iterative manner taking into account corridor travel demand on a radial, cross city and orbital basis and pinch point analysis work.

### The BusConnects Network

The enhanced BusConnects network will comprise of a significantly increased bus network, bus priority and around 220 new double decker vehicles. In total, the network will comprise of 200km of cross-city routes, 50km of orbital routes and 150km of radial routes and will provide interchange with the Cork Suburban Rail Network, Light Rail network and the proposed Park and Ride services located around the Strategic Road Network.

The BusConnects network set out in this chapter represents an indicative network that addresses the bus transport needs of the Cork metropolitan region. The final bus network for implementation will require more detailed planning to be undertaken prior to implementation and may differ from the indicative network.

In addition, bus services will be subject to regular review and changes may be introduced to reflect evolving development patterns and changing passenger needs.

### Core Radial Bus Network

The following outlines an indicative Core Radial Bus Network, which has been developed based upon the six guiding principles that underpinned the “initial idealised” network. The indicative Core Radial Bus Network connects the external corridors to the City Centre and has been refined to pair Cross-City travel demand to maximise the utilisation of the bus services on these corridors. A significant improvement in the frequency of bus services on these radial routes is also proposed, with most routes expected to operate at a frequency of 15 minutes or better.

The indicative Core Radial Bus Network is set out below:

1. Dublin-Hill – Togher;
2. Ballyvolane – Donnybrook;
3. Mayfield – Bishopstown;
4. Glanmire – Ballincollig;

5. Mahon – Apple;
6. Mahon – Blarney / Tower;
7. Rochestown – Apple;
8. Grange – Ballincollig (via City Centre); and
9. Frankfield – Farranree.

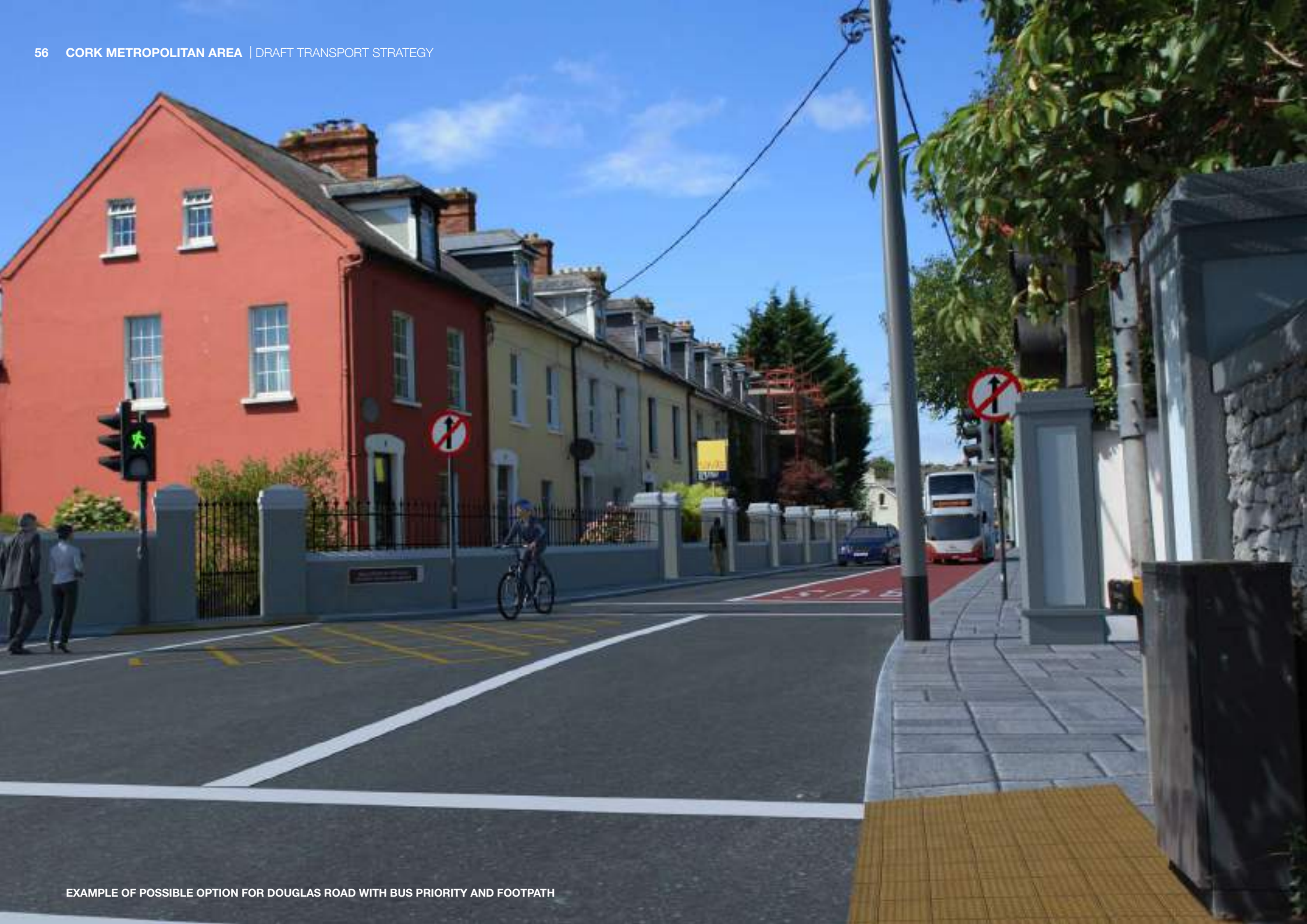
### Orbital Bus Network

The indicative Orbital Bus Network comprises four orbital services which are proposed to serve a multiple of key destinations outside of the City Centre including Little Island and CIT. The upgraded orbital network will cover approximately 50km of services providing additional connectivity, support Urban Expansion Areas and interchange with radial bus services. The four orbital routes comprising the indicative Core Bus Network are as follows;

- Northern Inner Orbital Route;
- Northern Outer Orbital Route;
- Southern Inner Orbital Route; and
- Southern Outer Orbital Route.

The Northern Inner Orbital Route will serve the north side of Cork City serving Little Island, Tivoli Docks, Mayfield, Blackpool and Knocknaheeny before crossing the River Lee and connecting with the City's western suburbs.

The Northern Outer Orbital Route will provide connectivity with future residential development north of Ballyvolane and Old Whitechurch Road.



EXAMPLE OF POSSIBLE OPTION FOR DOUGLAS ROAD WITH BUS PRIORITY AND FOOTPATH



This route will utilise the proposed Cork Northern Distributor Road (NDR) which is required to be multi-modal to cater for bus movements as well as segregated cycle and pedestrian infrastructure. There are two proposed orbital services for the south side of the city. The Inner Southern Orbital will run from Little Island, through the Jack Lynch Tunnel providing a much needed public transport alternative to the N40, serving Mahon, Turners Cross, Cork University Hospital and Cork Institute of Technology.

The Outer Southern Orbital will run from the Rochestown Road (near Harty's Quay), to Garyduff, Maryborough Hill, Grange Road (via the proposed East-West road link), Pouladuff (via potential local distributor routes), Togher Road, Sarsfield Road and Cork University Hospital. The Outer Southern Orbital route will not cross or interact with the N40 between Mahon and CIT thereby maximising service efficiency through avoidance of delays. Transfer with radial routes at designated interchange points will provide a greater choice of destinations and accessibility.

As stated earlier, some of the above indicative details may change in the final bus network for implementation.

### Cross City Network

A 200km Core Radial Bus network has been refined to pair cross-city travel demand to maximise the utilisation of the core bus services. In order to effectively and efficiently route the cross-city services through Cork City Centre, a number of guiding principles were applied:

- Align with Cork City Centre Movement Strategy where practicable;

- Target key interchange locations; and
- Minimise divided services on one-way sections or routes where possible.

A future review of the one-way systems that inhibit bus movement and connectivity, which is outside of the scope of the Strategy, is proposed.

This will include a review of the key locations including the South Mall, George's Quay and Anglesea Street.

Key interchange locations were chosen due to their ability to accommodate large number of public transport services either through bus lanes or full bus priority. The key interchange locations are as follows:

- St. Patrick's Street;
- MacCurtain Street;
- Grand Parade / South Mall; and
- Parnell Place Bus Station.

### Supporting Radial Bus Services

In order to ensure comprehensive network coverage, additional supporting radial bus services will be developed. These supporting services typically have lower frequencies than the Core Radial Bus Network, but cater for a wider catchment across the Metropolitan area. This includes strategic employment pharmaceutical cluster at Ringaskiddy which will now be served by a new bus service going via Carrigaline to Cork City as well benefiting from higher frequency on the existing Ringaskiddy-Monkstown-Douglas-City route. The radial bus services will provide further opportunities for interchange to Suburban Rail, Light Rail and other bus services on the Core Bus Network.

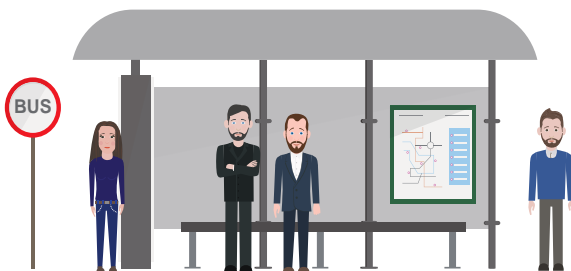
The proposed radial bus routes are as follows:

- Glanmire - City Centre;
- Cork Airport - Kent Station;
- Pouladuff - City Centre;
- Kerry Pike - Apple Campus - City Centre;
- Ringaskiddy – Passage West - City Centre;
- Ringaskiddy – Carrigaline - City Centre; and
- Midleton - City Centre.

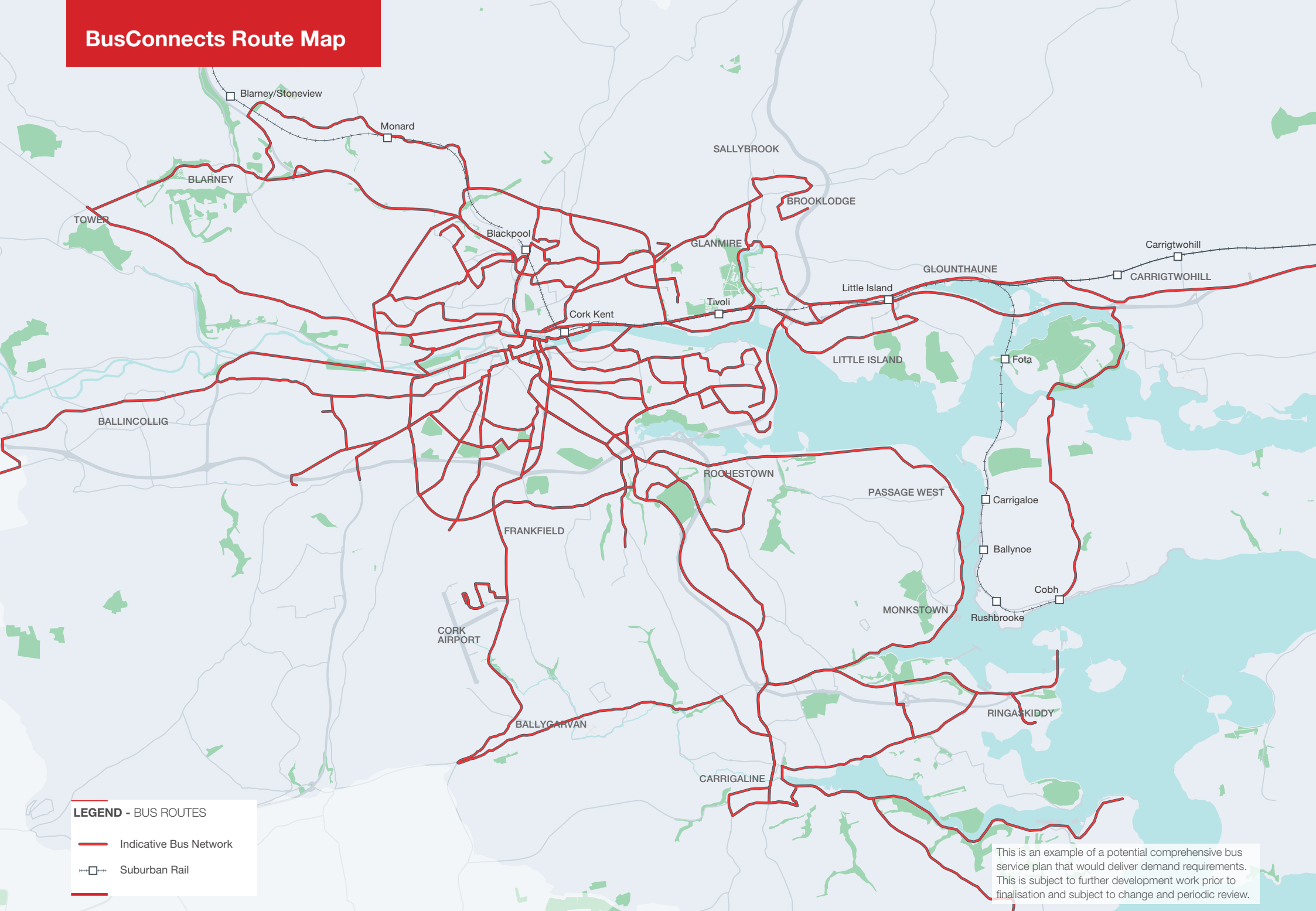
### Supporting Measures

The new core bus network in Cork will be significantly upgraded to BusConnects standards to include:

- More Real Time Passenger Information (RTPI) along bus corridors;
- Real Time integration of on-board Automatic Vehicle Location (AVL) with Intelligent Traffic Systems (ITS) to prioritise public transport movements at signalised junctions.
- Provision of new footpaths to access reconfigured bus stops;
- Significant expansion of bus shelter provision particularly where connecting or interchange services are provided;
- Consideration will be given to the expansion of 24-hour services;
- Smart ticketing to enable integration with other modes of transport including bicycle shared systems, car clubs and parking facilities;
- Consideration will be given to the accessibility requirements of bus stops and fleet.



# BusConnects Route Map





Cork's street and arterial road network has limited capacity, which makes **providing public transport priority challenging.**

- Connections to the Suburban Rail Network, Light Rail Network and Park and Ride facilities;
- Cashless fares to reduce delays caused by collection of cash fares;
- Transition of CMA's bus fleet to zero-carbon fuel sources and other low emissions technologies, with no diesel-only buses purchased from July 2019, while promoting commercial bus services and the small public service vehicle industry to pursue low emission fleet; and
- Interchange and improved way-finding measures.

### Regional Bus Network

Regional bus services provide an important element of the Strategy throughout the metropolitan area and beyond. It is proposed to continually improve the existing network of regional services, with a view to expanding on service frequency to meet the growing demand as required.

### Metropolitan Bus Services

The provision of local bus services within the metropolitan towns will be reviewed during the period of this Strategy. Such services can provide local benefits through linking residential areas with town centres, schools, rail stations and employment areas.

Local metropolitan town services could comprise of new bus services developed specifically to service the local area or comprise an expansion/re-routing of existing regional bus services.

In certain cases, the provision of regional services could be routed to provide for improved integration and interchange with suburban rail stations and local public transport services.

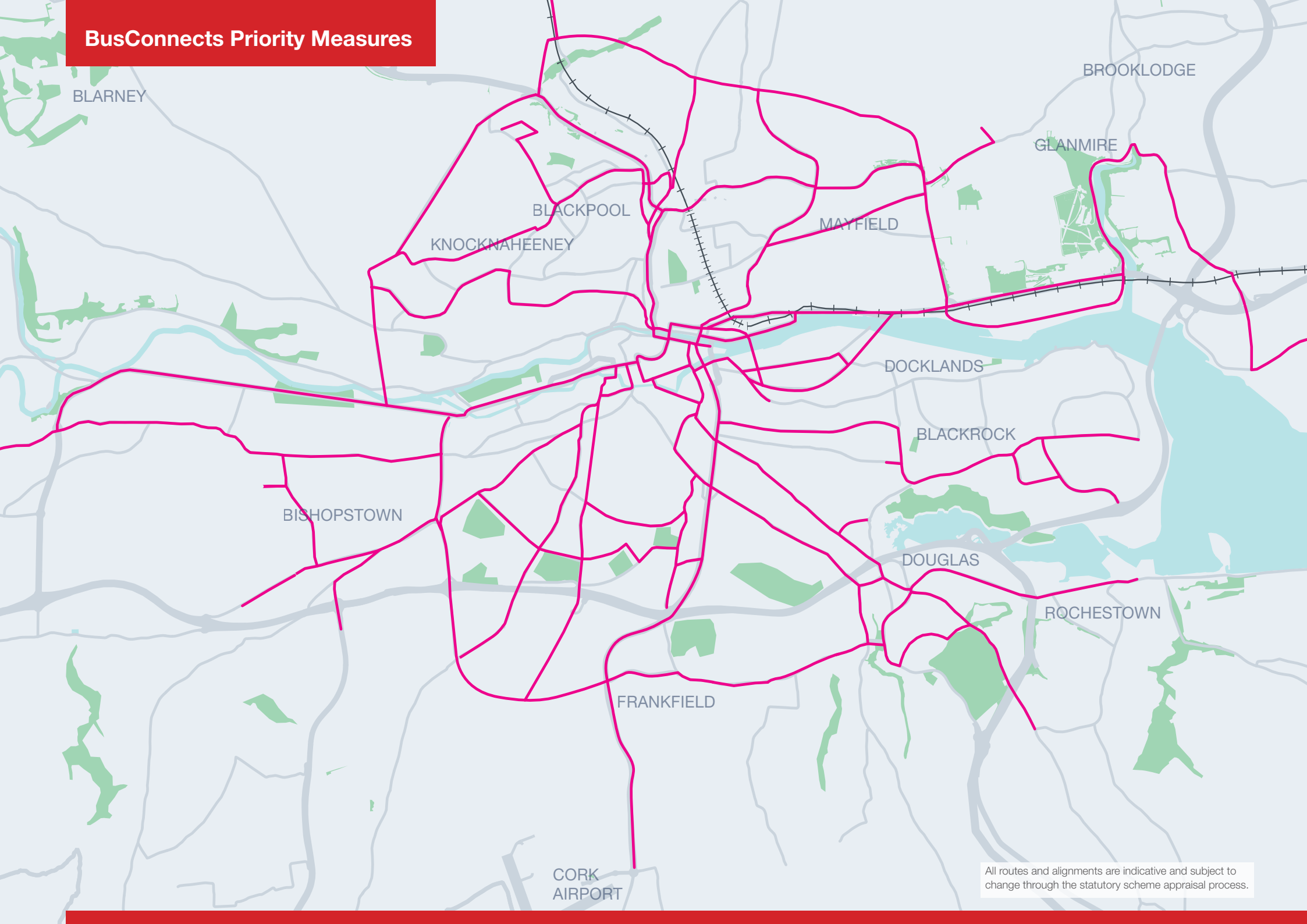
To complement the proposed bus network and local metropolitan town services, the National Transport Authority runs a service known as Local Link. The aim of Local Link is to address rural social exclusion and integrate bus services where possible with existing routes. Door-to-door routes are a particular feature of Local Link services which offer a great service to those with reduced mobility and/or have no access to public transport in rural areas. There are Local Link services operating throughout the Cork Metropolitan Area and beyond.

Within metropolitan centres, the focus should be on identification and implementation of bus priority measures through town centres and noted pinch-points. These should be considered in tandem with proposed public realm projects and/or the realisation of distributor roads to remove through traffic from town centres. In some cases, shuttle buses from Interchange points to serve centres of employment - for example, at Ballincollig, Midleton train station and Little Island - may be merited.

### Coach Operations

Cork sits at the confluence of the Wild Atlantic Way and Ireland's Ancient East. Coaches bring many visitors to Cork City and surrounding Metropolitan towns and villages including Midleton, Blarney and Cobh, including cruise ships. To ensure that the CMA can facilitate a growing number of visitors (including day visitors from its surrounding hinterland and county towns and villages) a range of measures are required. These include improving way finding and an integrated coach management scheme to support traffic management measures at key destinations across the CMA.

## BusConnects Priority Measures



All routes and alignments are indicative and subject to change through the statutory scheme appraisal process.





EXAMPLE OF INBOUND BUS LANE ON SUMMERHILL NORTH

Further assessment of the existing operations of coach services alighting and boarding arrangements at local authority level is required, with a view to resolving existing impacts on the on-street environment and conflict with other road users.

### Bus Priority

Prioritising bus services above general traffic is critical to the delivery of an efficient, frequent and reliable bus system and is a major part of the overall BusConnects programme.

The proposed increase in bus services and vehicle numbers will benefit a significant proportion of the Cork's population but will not succeed if bus priority is not implemented in full as buses will be held up in general traffic.

The existing bus priority measures through Cork City are particularly limited with 14km of bus lanes currently being provided. The proposed bus priority measures include approximately 100km of new bus lanes, representing an increase in bus lanes by a factor of 700%.

The extent of the proposed bus lanes aligns with the proposed Core Bus Network, ensuring efficient, reliable and frequent services can be accommodated. For identified key bus routes, the objective, in principle, is to provide end-to-end bus priority in each direction, where practicable. On some parts of the National Road Network, further investigation, analysis and agreement with TII will be required, to determine the optimal bus priority outcomes.

In some areas of the network, measures including the removal of some on-street car parking and the compulsory purchase of some private land will be required to facilitate bus priority lanes and footpaths to provide access to the bus network itself. Bus gates, protected laybys and bus priority at signalised junctions will be further considered as a means of prioritising bus services above general traffic.

The implementation of these measures will lead to a significant improvement in punctuality and bus journey time reliability. Some key arterial routes will be served by multiple bus routes, which will see some corridors served by a bus approximately every 3 minutes in the peak travel periods.

In the north of the city, new services to serve future development areas will similarly see increased frequencies on the Summerhill North corridor. Greater levels of connectivity will be provided with the new rail station at Blackpool offering onward rail services to employment centres at Cork City, Little Island and Carrigtwohill.

### Ballincollig to Mahon Light Rail Corridor

A later section of this Strategy sets out proposals for a light rail scheme extending from Ballincollig to Mahon, serving CIT, CUH, UCC, Kent Station, Docklands and Mahon Point.

In advance of the development of this light rail corridor, and to allow the development consolidation to support its delivery, it is intended to serve this route with a high frequency bus service and to develop bus priority measures along the route to enable a high level of performance in advance of its transition to light rail.

However, during the early period of the Strategy, it is intended to identify and protect an alignment for the light rail scheme, allowing development consolidation along the corridor.





# SUBURBAN RAIL

## PASSENGERS

Catering for up to  
**2,500**  
passengers  
per direction  
per hour

**16m**  
passengers  
per annum



## JOURNEY TIMES AND DISTANCE

**25 mins**  
from Midleton to  
Kent Station

**12mins**  
from Blarney to  
Kent Station

**25mins**  
from Cobh to  
Kent Station

**50mins**  
from Midleton /  
Cobh to Mallow



**62km**  
of suburban rail network between  
Midleton, Cobh and Mallow



## RAIL NETWORK & VEHICLES

**8 new stations**  
plus improvements to Cobh,  
Mallow and Kent Stations.



**62km suburban  
rail network**  
between Midleton, Cobh and Mallow.

**10 km**  
of dual track to Midleton.

**22**  
new two-car  
trains required



**Electrification**  
of suburban rail network.



## CONNECTING CITY & SUBURB

Connecting with Cork Light Rail  
Network at Kent Station and the  
Cork suburban bus network

**>3,000**  
passengers  
interchanging between  
Rail, Bus and Luas at  
Kent Station in AM Peak.

**4,000**  
2-way through-  
running through  
Kent in AM  
peak hour



## COST ESTIMATE



Strategy cost  
estimate is  
approximately  
**€274m**





## 09 SUBURBAN RAIL

A Cork Transport Strategy is being finalised by the relevant Local Authorities in partnership with the NTA which includes proposals for .... **enhancements to the commuter rail service in Cork including additional stations and rail fleet.**

National Development Plan 2018-2027

The rail network provides direct and reliable access to Cork City Centre from a significant portion of its east and northern Metropolitan Cork catchment area. This Strategy proposes to maximise opportunities offered by the existing suburban rail network to support the travel needs across the CMA. Maximising the potential of the rail corridor will support better integration of land use planning and public transport.

This approach is consistent with Cork County Council's adopted planning policy framework to intensify residential and commercial activity at Cobh, Midleton, Carrigrohilly and, in part, provides justification for new greenfield development at the UAs of Blarney/Stoneview, Wate Rock and Monard. The provision of new train stations at Blackpool and Tivoli is consistent with Cork City's Council's Development Plan objective to significantly intensify development around these locations.

A key element of this Strategy will be to enable through services at Kent Station. This will increase connectivity between the Mallow - Cork lines and the Midleton/Cobh - Cork lines without the need to change platforms at Kent Station. The availability of an existing passing platform at Kent Station means that this objective can be achieved relatively quickly within the short term.

### InterCity Services

The Cork-Dublin rail corridor is the top performing InterCity service in the State in terms of patronage. Anecdotal evidence suggests that the seating areas are over capacity, particularly at the morning peak between Limerick Junction and Heuston. The National Development Plan and 2016 Rail Review Report proposes number of relevant improvements to this line including the following:

- Examination of opportunities for improvements in journey times and investment in high-speed rail between Belfast, Dublin, Limerick-Junction and Cork;
- Examine opportunities to increase the frequency of InterCity services at peak times between Cork and Dublin;
- Electrification of the rail line once the current InterCity carriages outlive their useful life - estimated by the mid-2020s; and
- Improving InterCity journey time between Dublin and Cork to least at 2 hours.

The Strategy notes that the Cork 2050 document suggests that a rail journey time of under 1.5 hours is desirable. In terms of CMATS however, the over-riding priority is to ensure that the provision of additional suburban rail stations and services will not preclude the ability of Irish Rail to increase the speed or frequency on the existing InterCity line.

### Suburban Rail Network

The over-arching objective of the enhanced suburban rail services is to maximise development opportunities offered by the existing railway line in order to support a greater level of coordination between land use and transport planning. The consolidation of development within an easily walkable and cycleable catchment area of existing and proposed stations is critical to the success (or otherwise) of this Strategy.

Continued investment in the rail network is required to ensure steady state operations and that services continue to operate efficiently. In order to provide the enhanced level of service identified by the Strategy, the development principles and supporting infrastructure set out in the following sections are required.

### Consolidation of Land Uses Around the Existing Rail Corridor

There is available capacity on the Cork railway suburban corridor that will be harnessed in the short term to support future population and employment growth within Metropolitan Cork and to provide a much more frequent and viable service. Within Cork City, there are a number of advanced planning proposals to support a much greater intensity and variety of uses around brownfield land within easy walking distance of Kent Station.