



## What is Bus Rapid Transit?

Bus Rapid Transit (or BRT) has emerged in recent years as an effective, cost efficient and high quality public transport system. BRT offers fast, reliable, predictable and comfortable commuter journeys in modern, high quality vehicles. BRT seeks to emulate the service, performance quality, and amenity characteristics of a modern light rail-based transit system at a reduced cost.

This high quality integrated public transport mode uses buses on roadways or dedicated lanes to transport passengers quickly and efficiently to their destinations, while offering the flexibility and adaptability to meet changing transport demands in the future.

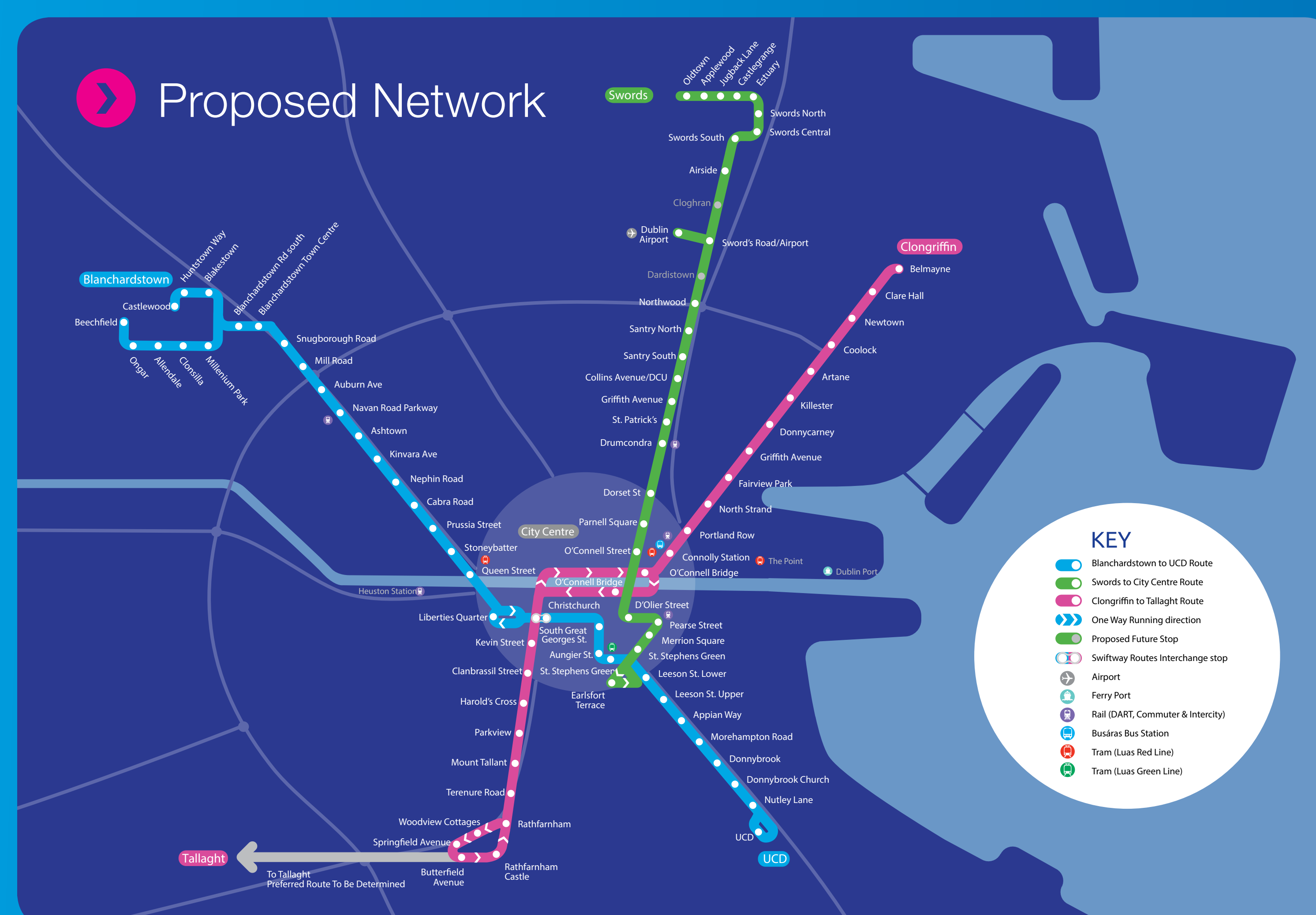


## Introducing Swiftway

Swiftway will be the name of the BRT service in Dublin. The three proposed corridors to be developed as Swiftway routes are:

- Swords/Airport to City Centre
- Blanchardstown to UCD
- Clongriffin to Tallaght

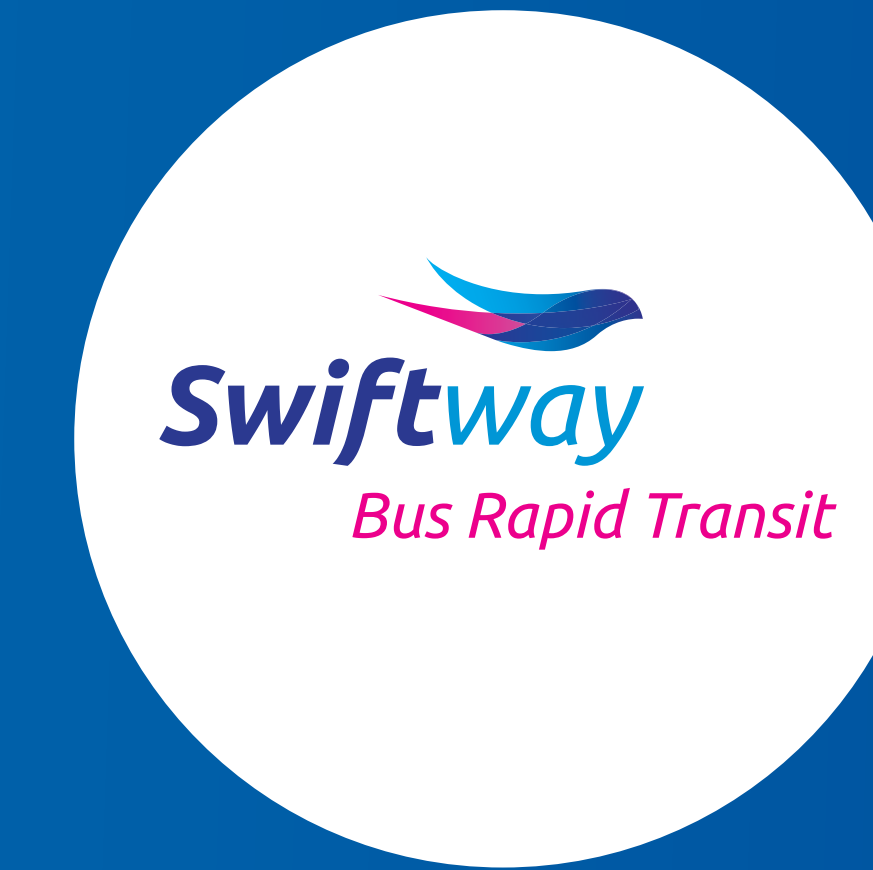
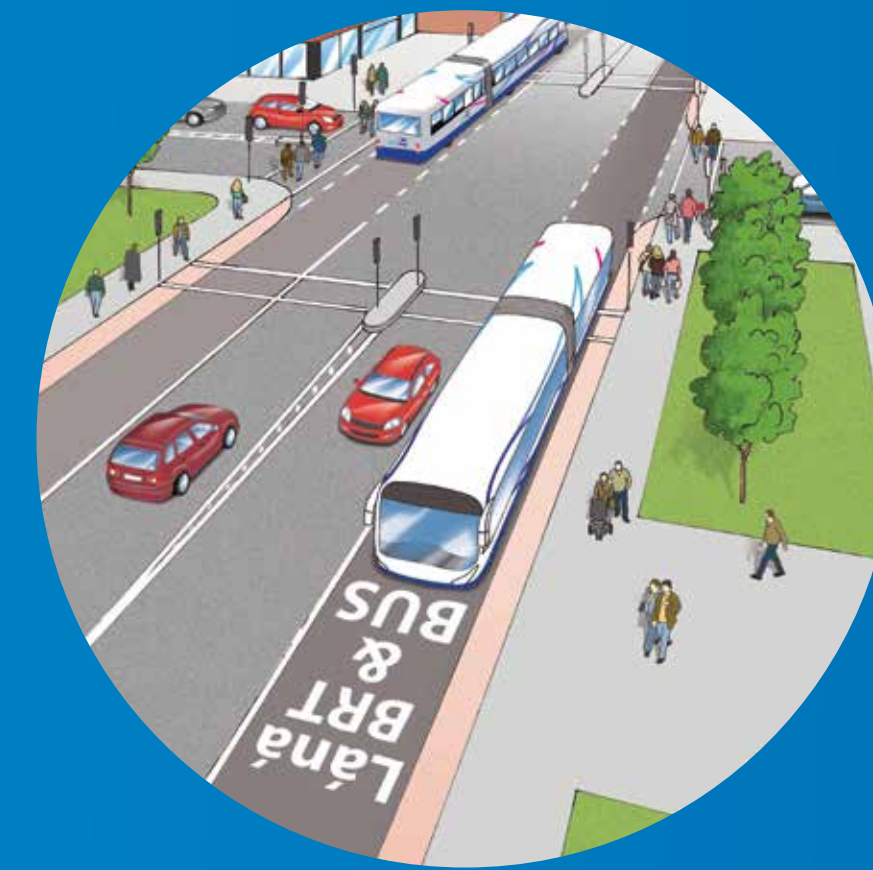
The Swiftway system will provide an attractive alternative to car transport, with fast and reliable journey times, and will form a key part of Dublin's overall public transport system.







## Key Characteristics



### Vehicle

- High quality, modern, attractive, comfortable and fully accessible vehicles
- 18m single articulated vehicle with multiple doors to facilitate fast boarding and alighting and increase reliability
- Capacity for 120 persons per vehicle

### Stops

- High quality design, with amenities similar to Luas as standard
- Level boarding from stop platforms on and off the vehicles
- Stops conveniently located to optimise catchment accessibility and service reliability
- Off-board ticketing through vending machines at stops and Leap Card ticket validation
- Real Time Passenger Information

### Segregation & Priority

- High quality, smooth and level running surface
- High level of separation from normal traffic
- Uses shared Bus/BRT lane or own BRT lane
- Priority at traffic signals and junctions

### Integration

- Development of a network of routes and services
- Interchanges and links with other transport nodes at key points
- Safe access to and from stops for both walking and cycling
- Cycling facilities provided at stops
- Integrated ticketing

### Branding/ Attractiveness

- Own distinctive brand identity to set it apart from conventional bus services
- Vehicles to have attractive livery matching the brand identity
- Coordinated use of the BRT brand at stops and on information material
- Purpose of branding is to promote a strong public and visual presence for the BRT service

### Cost

- Construction is generally about 1/4 to 1/3 of the cost of a light rail system
- The construction period for BRT is often shorter than for light rail meaning that the benefits can be delivered sooner
- Avoids major relocation of utilities and track construction

## Why Bus Rapid Transit on this corridor?

The Swords/Airport to City Centre corridor is a major transport artery with several key destinations along, or close to, the preferred route. These include Dublin Airport, Santry, Dublin City University, St. Patrick's College, Dublin City Centre, several hospitals, as well as the major growth area of Swords itself.

Key features of a BRT system are frequency of service and fast, reliable journey times. The proposed Swiftway service is intended to initially operate at a frequency of approximately every four minutes during peak commuter periods on the busiest sections of the route.

It is likely that there will be a separate Swiftway service starting and terminating at Dublin Airport and running to the City Centre.

The introduction of BRT is also intended to deliver overall benefits to the bus network in terms of efficiency and capacity. This will include for some complementary bus network reorganisation, while other bus services will also benefit significantly from the BRT priority infrastructure provided on the corridor.

The proposed Swords/Airport to City Centre Swiftway scheme will also provide overall enhancements and benefits to pedestrians and cyclists travelling along or intersecting the route. This will include the provision of segregated cycle tracks or improved cycle lanes along the route, cycle parking, as appropriate, at Swiftway stops and improvements to permeability and pedestrian routes from surrounding areas to stops.







## Route Options Assessment Process

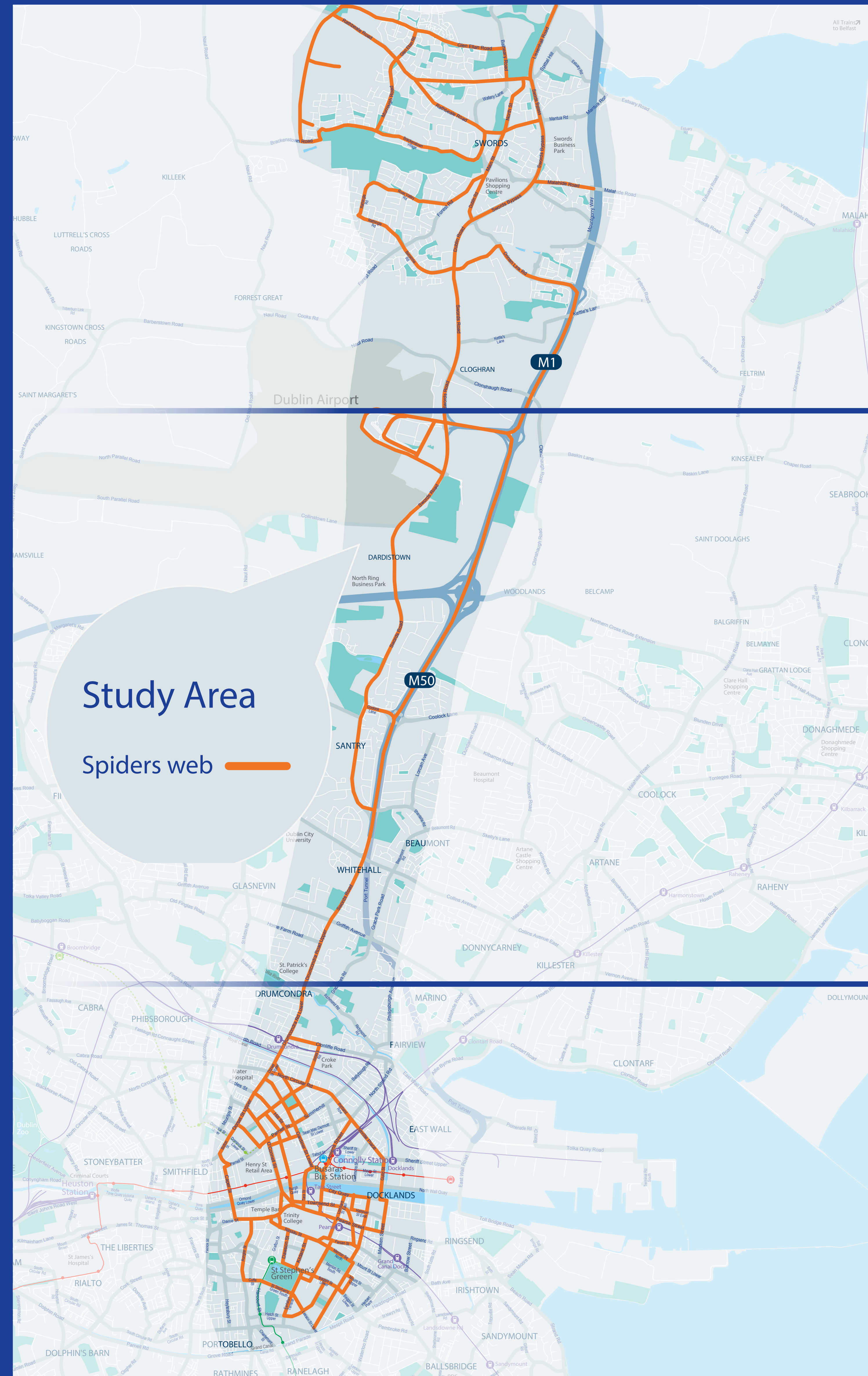
For the purposes of route option assessment, the Swords/Airport to City Centre corridor was divided into three sections as follows:

- Swords North to Dublin Airport
- Dublin Airport to Drumcondra
- Drumcondra to St. Stephens Green

Within each section, a 'spiders web' of possible route options have been assessed and an a preferred route identified for the relevant section. The orange route options on this map indicate a 'spiders web' of routes that were examined and the information boxes alongside provide some details on the assessment of those routes.

All route options identified were compared against each other using a range of criteria under the headings of economy, integration, accessibility, safety and environmental impact. The process is outlined below.

▼	1	Define Study Area
▼	2	Identify all possible options (Note: Not possible to serve everywhere with one BRT option)
▼	3	Reduce and narrow down all possible options
▼	4	Carry out a comparative analysis of remaining route options against a range of criteria
➤	5	Determine the Preferred Route



### ➤ Swords North to Dublin Airport

- Numerous possible options and combinations of options were considered within this section.
- Many were ruled out on a combination of space constraints and the extent of catchment area served.
- In north-west Swords, the Glen Ellan Road was preferred over the potential link through the green between Pine Grove Park and Broadmeadow Road. This was due to the significant amount of private land take required along Rathbeale Road to facilitate the route and the potential impact on the use of the green area. This route also serves a large existing catchment and residential lands currently being developed in Oldtown.
- A route along the Swords Bypass was preferred over Swords Main Street due to width constraints and the needs of other road users on Main Street.
- Other routes such as Rathbeale Road / Bridge Street had similar width restrictions.
- The Preferred Route has been identified as the route serving the largest catchment with the lowest impact on private land-take and public amenity.

### ➤ Dublin Airport to Drumcondra

- Several route options were investigated for Dublin Airport. The preferred route for the Airport Swiftway service uses existing bus priority infrastructure within the Airport campus.
- The route follows the R132 Swords Road from Dublin Airport to Santry.
- For the Santry section, two corridors were assessed, with one option passing through Santry Village centre and the second option bypassing Santry on the N50 between Coolock Lane Roundabout and Whitehall.
- The option through the centre of Santry would require significant land take from adjacent property owners, both residential and commercial. There would also be some loss of on-street car parking and a reduction in capacity for general traffic.
- The option bypassing Santry Village centre would see the BRT service turn from the R132 onto Coolock Lane, where a stop for Santry North would be located. This stop would serve the northern and central areas of Santry. The BRT route would then run from Coolock Lane Roundabout to a Santry South stop located adjacent to the Shantalla Road N50 overbridge. As well as serving the south parts of Santry, this stop would also serve parts of Beaumont and Whitehall.
- The route option bypassing the centre of Santry is considered the better option as it would result in less impact on properties and provides greater service reliability, whilst still serving Santry with suitably located stops.

### ➤ Drumcondra to St. Stephen's Green

- Numerous possible options passing through the City Centre area were considered.
- A route along Dorset Street is preferred, as it follows the existing Swords QBC on the most direct route to O'Connell Street. Options of routing the service through Gardiner Street were assessed, but width restrictions at the northern end of the street would make it difficult to provide the necessary level of BRT priority.
- The preferred option of routing the BRT scheme through O'Connell Street, D'Olier Street, Townsend Street / Pearse Street and Westland Row was primarily based on serving key destinations and balancing the BRT requirements with the needs of other road users.
- Various routes were excluded based on a combination of space constraints, remoteness from key destinations, and ability to provide a reliable BRT service.
- The overall preferred route is considered to best provide an optimal BRT service with good interchange facilities with other public transport modes.





## Preferred Route and Stop Locations

The preferred route starts on the Glen Ellan Extension Road in the north-west of Swords continuing along Glen Ellan Road, Balheary Road and Castlegrange Road with stops provided at Oldtown, Applewood, Jugback Lane and Castlegrange Road.

From Castlegrange Road, the preferred route follows the R132, with stops provided at the Estuary, Seatown (Swords North), Malahide Road (Swords Central) and Pinnock Hill (Swords South) junctions. These stops will serve adjacent residential areas as well as the commercial centre of Swords.

From Swords, the preferred route continues along the R132 stopping at Airside, serving the River Valley area and Airside Retail Park. There is also potential for a future stop at Cloghran.

It is anticipated that services from Swords will stop at an Airport stop located on the R132 with a separate service to/from the City Centre terminating within the airport campus.

From the airport, the preferred route follows the R132 with a future stop proposed at Dardistown. A stop will be located at the entrance to Northwood to cater for existing residential and employment demand in the area.

Approaching Santry the preferred route turns onto Coolock Lane and then onto the N50. Two stops will be provided to serve the Santry area as well as areas of Coolock and Beaumont.

Continuing on the R132, the next stop is located at the Collins Avenue junction which will serve Dublin City University. In Drumcondra, a stop will be located outside St. Patrick's College. The next stop will be located at Drumcondra Station to facilitate interchange with suburban rail services.

The preferred route continues along Dorset Street with a stop located south of Gardiner Street serving residential areas in the vicinity, as well as the Mater Hospital.

From Dorset Street, the preferred route turns onto North Frederick Street and continues onto Parnell Square East where the next stop is located.

The preferred route continues along O'Connell Street, where a stop will be located to serve the north City Centre commercial core, and provide interchange with Luas and other bus services.

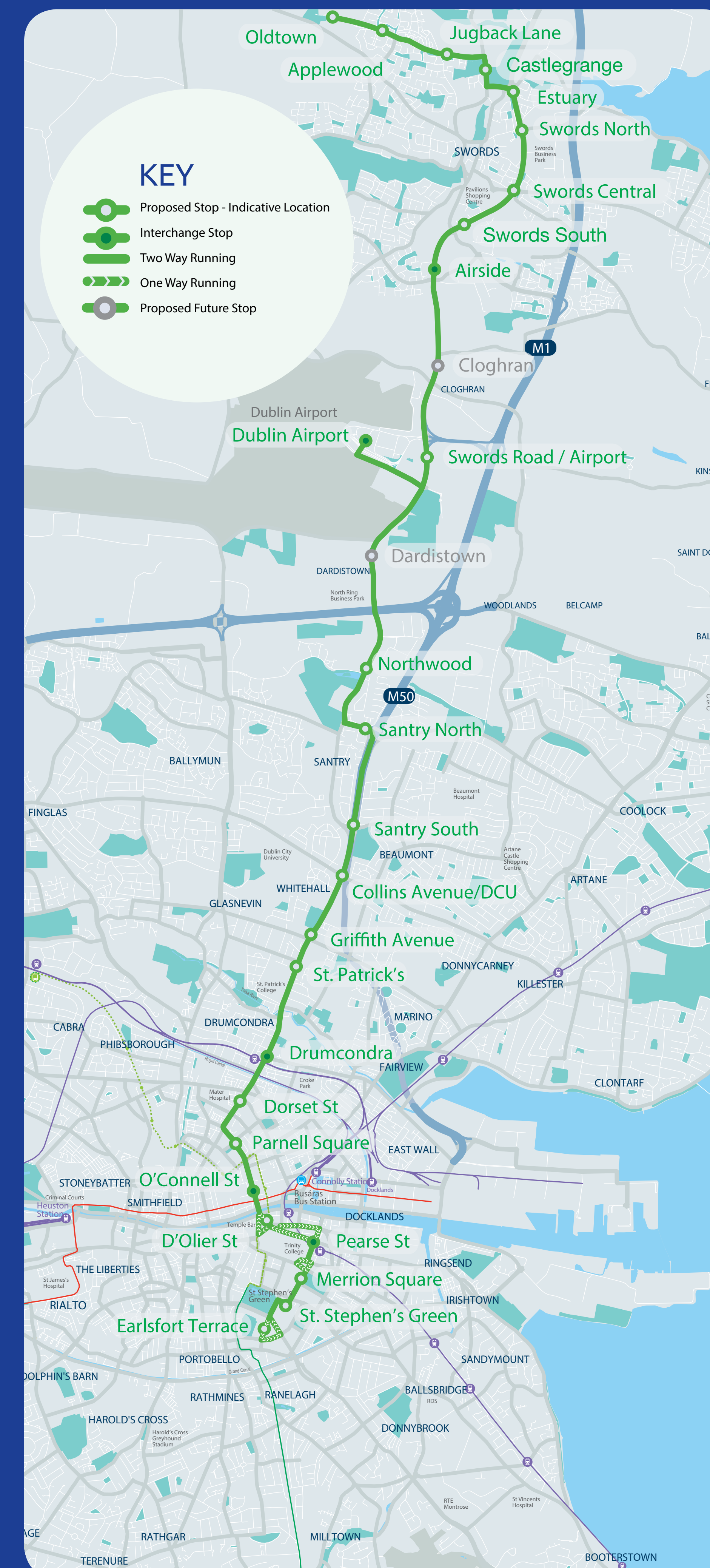
South of the River Liffey, a one-way loop system is envisaged around D'Olier Street, College Street, and Westmoreland Street. Southbound, the preferred route runs along D'Olier Street, and travelling northbound the preferred route travels along College Street and Westmoreland Street.

The southbound stop will be located on D'Olier Street with the corresponding northbound stop located on Westmoreland Street to serve the south City Centre area including Temple Bar and Trinity College.

From here the preferred route travels along Townsend Street before turning onto Lombard Street. Northbound vehicles along this section will be routed via Pearse Street. A stop will be located at the junction of Pearse Street and Westland Row in order to provide interchange with rail services at Pearse Station.

The preferred route continues along Westland Row, Merrion Street Lower and onwards to Merrion Square West. Northbound, the preferred route will follow Clare Street and Lincoln Place. The Merrion Square stop will serve the south east business district and Grafton Street retail core.

From Merrion Square, the route continues straight through Ely Place and onto the next stop on Hume Street near St. Stephen's Green. The final stop will be located on Earlsfort Terrace, across from the National Concert Hall.



## What happens next?

Following the completion of the public consultation, the proposed scheme design will be progressed, taking into account observations and submissions made as part of this public consultation. An application, including an Environmental Impact Statement and a Compulsory Purchase Order for the acquisition of land necessary for the construction of the scheme, will be made to An Bord Pleanála for planning consent in Quarter 1 of 2015. A statutory consultation will take place following the lodgement of the planning application.

Subsequent to the planning stage, the detailed scheme design will be finalised and tender documents for infrastructure procurement, associated systems and vehicle fleet acquisition will be prepared. Subject to funding approval, the proposed scheme will then proceed to procurement and construction stages. It is anticipated that, if approval to proceed is granted, the construction period would be about two and a half years.

