METROLINK

Integrated Transport. Integrated Life.

Collins Avenue Station
EPR Summary

March 2024

Bonneagar Iompair Éireann
Transport Infrastructure Ireland

NTA
Údarás Náisiúnta Iompair
National Transport Authority

Rialtas na hÉireann
Government of Ireland

Tionscadal Éireann
Project Ireland
2040

METROLINK

Title

Collins Avenue Station - EPR summary

In October 2016, the National Transport Authority (NTA) commissioned ARUP Consulting Engineers to carry out an Options Assessment Study to identify the Emerging Preferred Route (EPR) for the New Metro North (NMN) scheme.

The objective of NMN was to provide a safe, high frequency, fast, efficient and sustainable public transport light rail service connecting Swords, Dublin Airport and Dublin City Centre.

The options assessment split the route into 3 sections:
- Study Area A – City Centre;
- Study Area B – Ballymun/Airport; and
- Study Area C – Swords.

Within each study area, various potential route options were examined.

The location for Collins Avenue Station was considered in the Study Area B

Collins Avenue Station - EPR summary

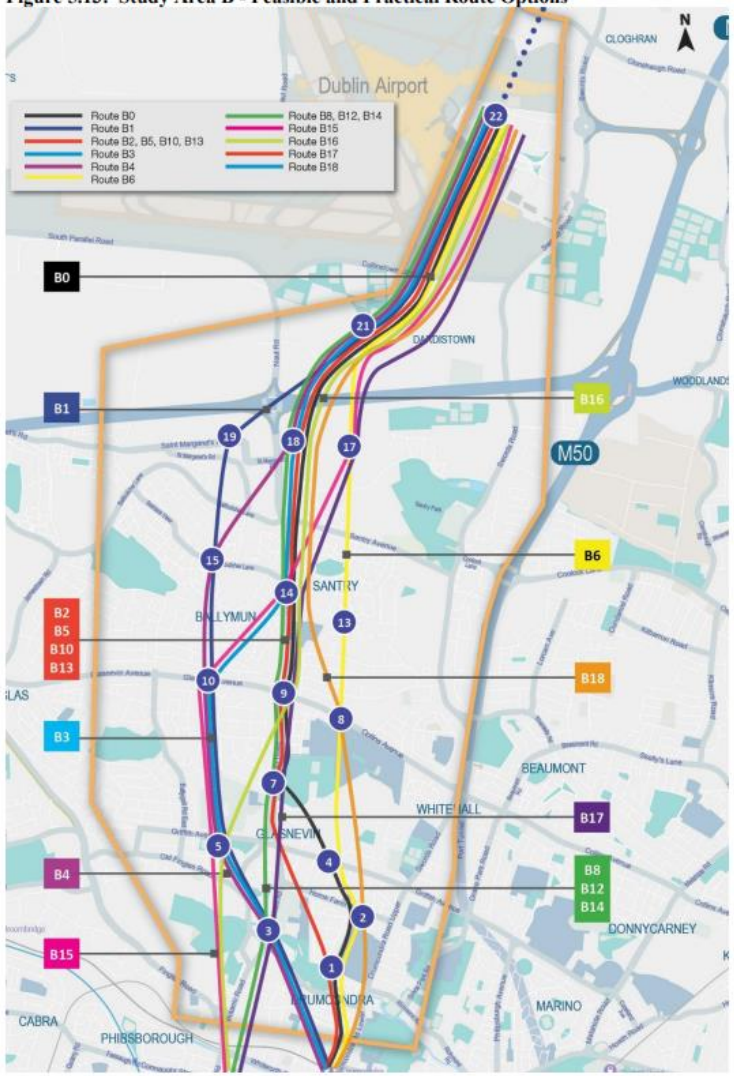
Within Study Area B, Metro Station Zones (MSZ's) were identified.

MSZ's were defined as broad areas which serve areas of high transport demand, could facilitate access to areas of high employment density, serve key trip attractors and may also provide opportunity for interchange with other high capacity transport modes as part of the developing integrated public transport network for the Greater Dublin Area.

The initial MSZs identified in this process were subjected to a high level qualitative and quantitative assessment to rule out MSZs which could clearly not be used to form feasible and practical route options.

Collins Avenue Station - EPR summary

Figure 5.13: Study Area B - Feasible and Practical Route Options



Following the MSZ sift, a total of 16 feasible MSZ's remained.

A further sift was then undertaken based on the following criteria:

- Potential for interchange
- Potential Trip Demand
- Key Trip Attractors
- Directness

3 Options progressed to the next stage

- B6 with a station at Collins Avenue West
- B10 with a station at Collins Avenue Junction with Ballymun Road
- B12 with a station at Collins Avenue Junction with Ballymun Road

Collins Avenue Station - EPR summary

Following the Stage 1 MCA, the recommended route options from each study area section were collated to provide 'end-to-end' scheme route options, which are taken forward to the Stage 2 MCA.

A total of 10 end-to-end route options were assessed at this stage.

Option 9 (a combination of A4, B12 and C4) was selected as the Emerging Preferred Route (EPR) for New Metro North the following primary reasons:

- In terms of Economy, it delivers **substantially more benefits** than most of the options resulting in the joint highest BCR;
- It performs among the **best in terms of public transport usage** i.e. boardings over 24 hours, which in turn provides a positive economic return;
- In terms of Integration, it **integrates better with the wider transport network** with better potential for seamless interchange with other modes, particularly heavy rail in the city centre and bus in Swords, than other options considered;
- Again, in terms of Integration, it **integrates better with current Land Use Policy** particularly in Ballymun and Swords; and
- In terms of Environment, while there are some impacts in terms of Landscape and Visual and Archaeology, Architecture and Cultural Heritage, these **impacts can be mitigated through design**.

B12 includes a station at Collins Avenue Junction

Collins Avenue Station - EPR summary

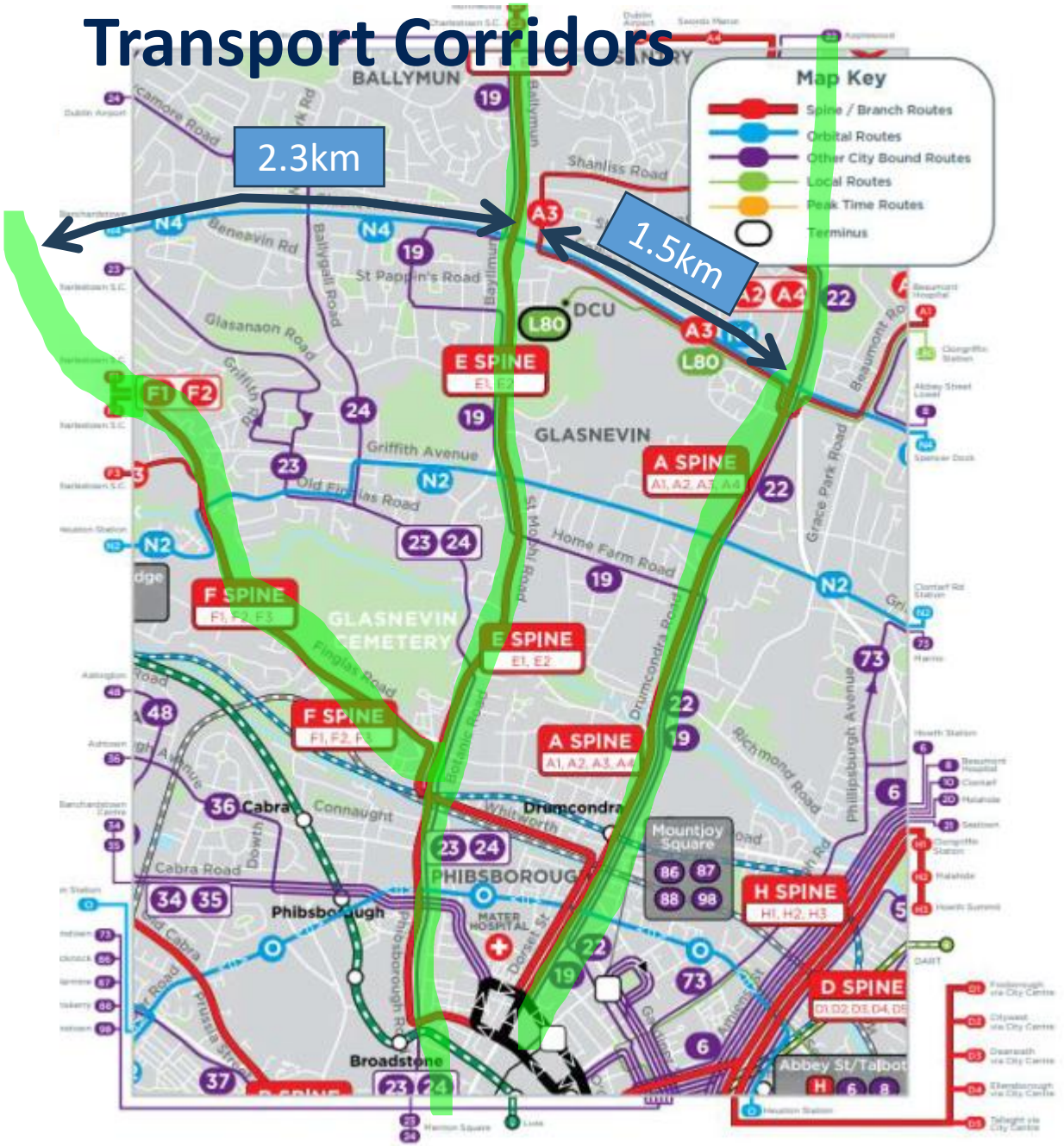
This EPR was then subjected to further testing to identify potential refinements and improvements.

Sensitivity tests were also undertaken to understand the potential impact of variation in assumptions and to account for risks.

During the subsequent concept design development, the location of the station at Collins Avenue Junction was moved south by approximately 100m to space in front of the Our Lady of Victories Church to seek to reduce the impacts on the community during construction.

This location was further developed as part of the preliminary design process.

Transport Corridors



Transport Corridors.

- Large spacing between Ballymun Corridor and Finglas
- Much of Glasnevin Ave served by Ballymun Corridor
- Collins Ave also served by Ballymun Corridor

- OLV ideally located to service this transport demand

- Further south, reduced service for these areas.

Figure 3.3 of Collins Ave Traffic and Transport Assessment – Section A9.2 of EIAR – Overlaid with notes

Distribution of Boarding Passengers – Modelling Results

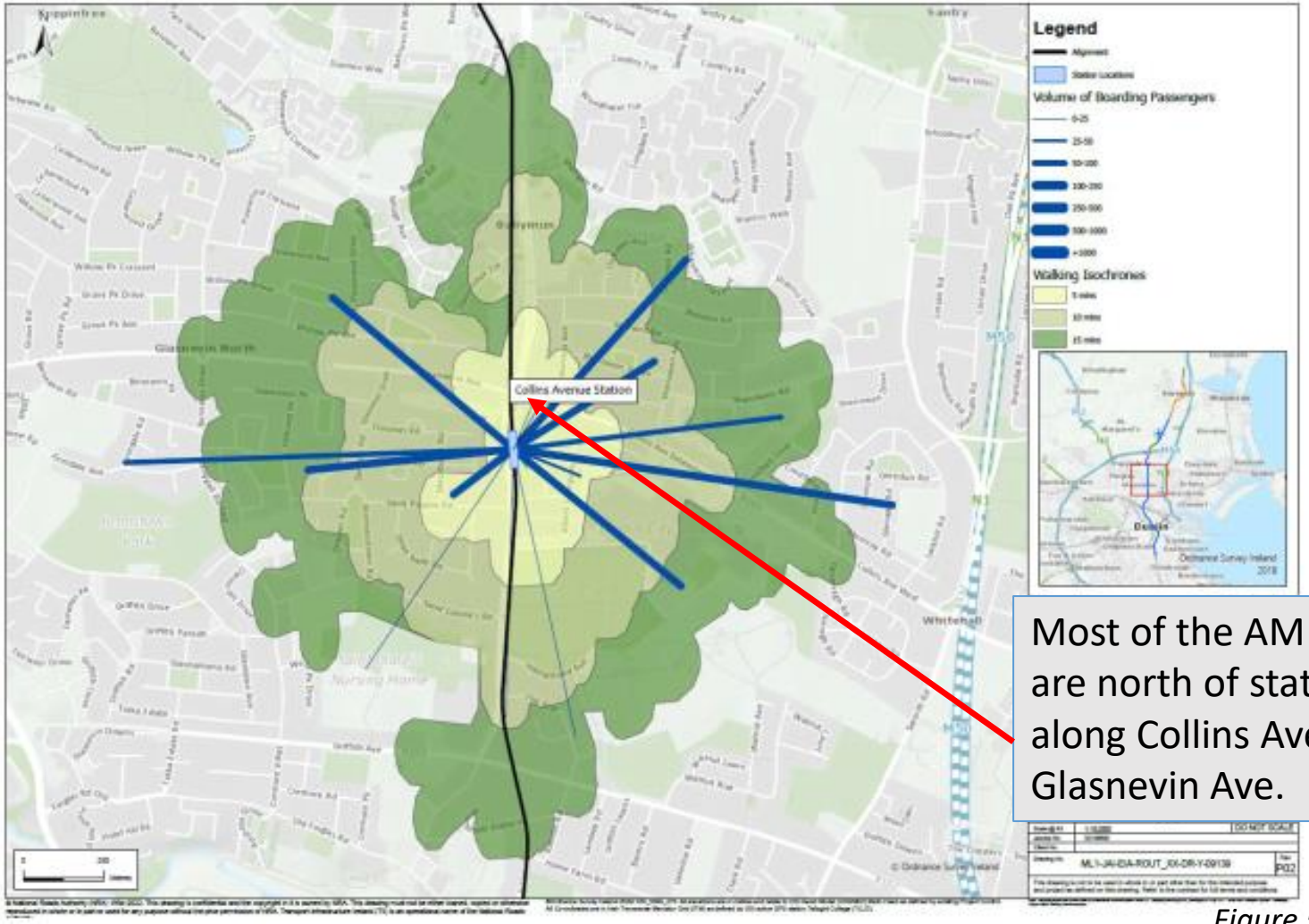
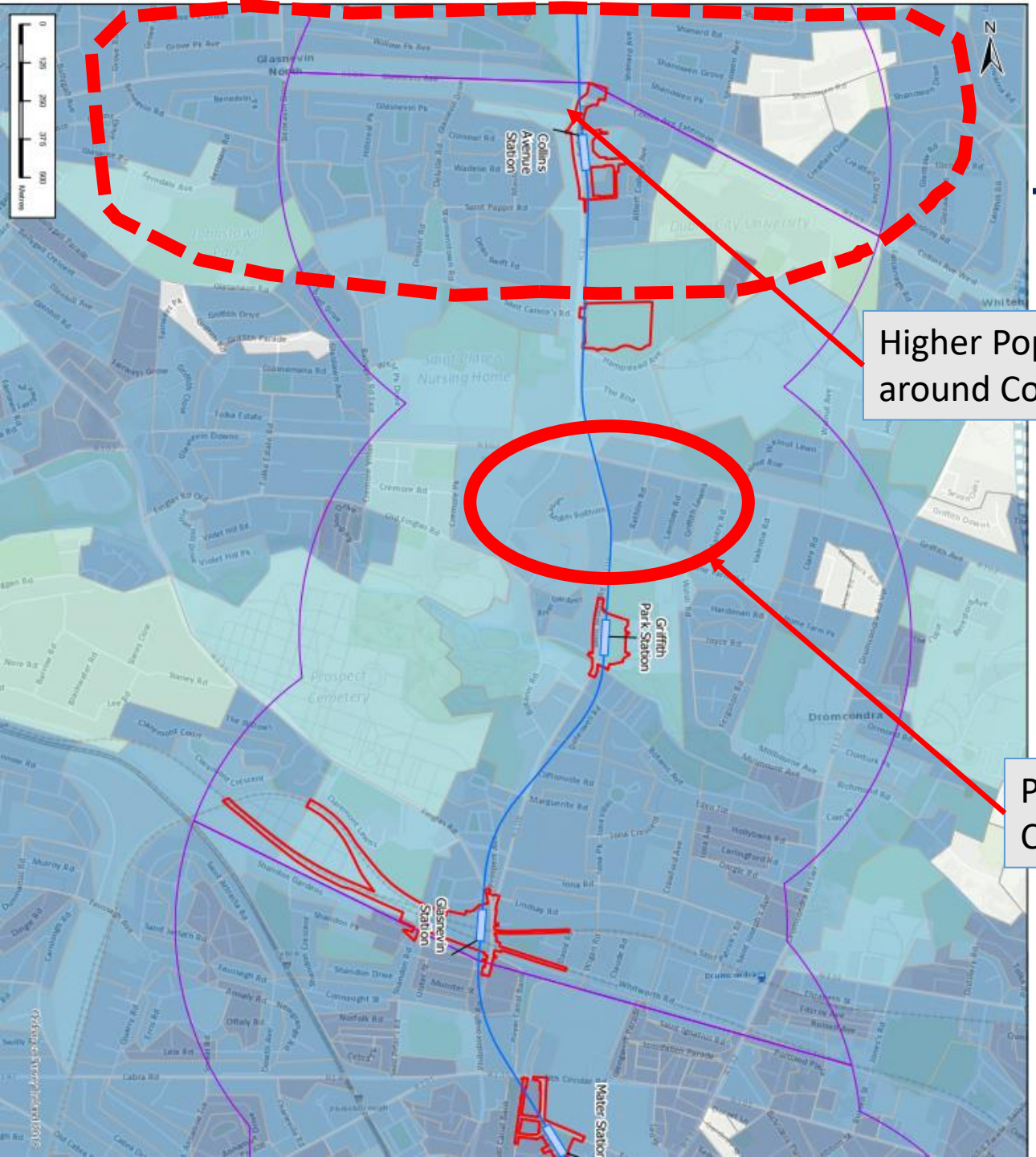


Figure 5.2: Origins of Boarding Passengers During AM peak hour within Walking Catchment Areas

Most of the AM boarders are north of station and along Collins Ave – Glasnevin Ave.

Figure 5.2 of Collins Ave Traffic and Transport Assessment – Section A9.2 of EIAR – Overlaid with notes

Population Density



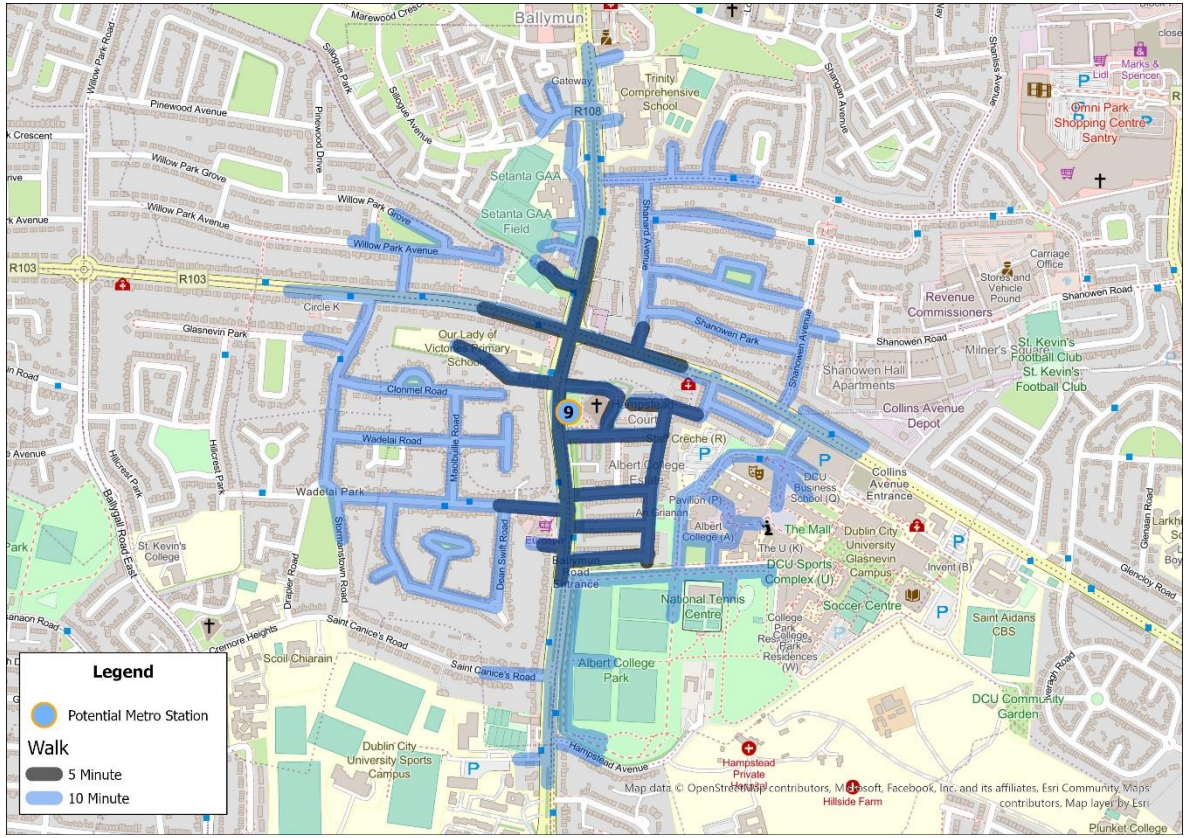
Higher Population Catchment around Collins Ave junction

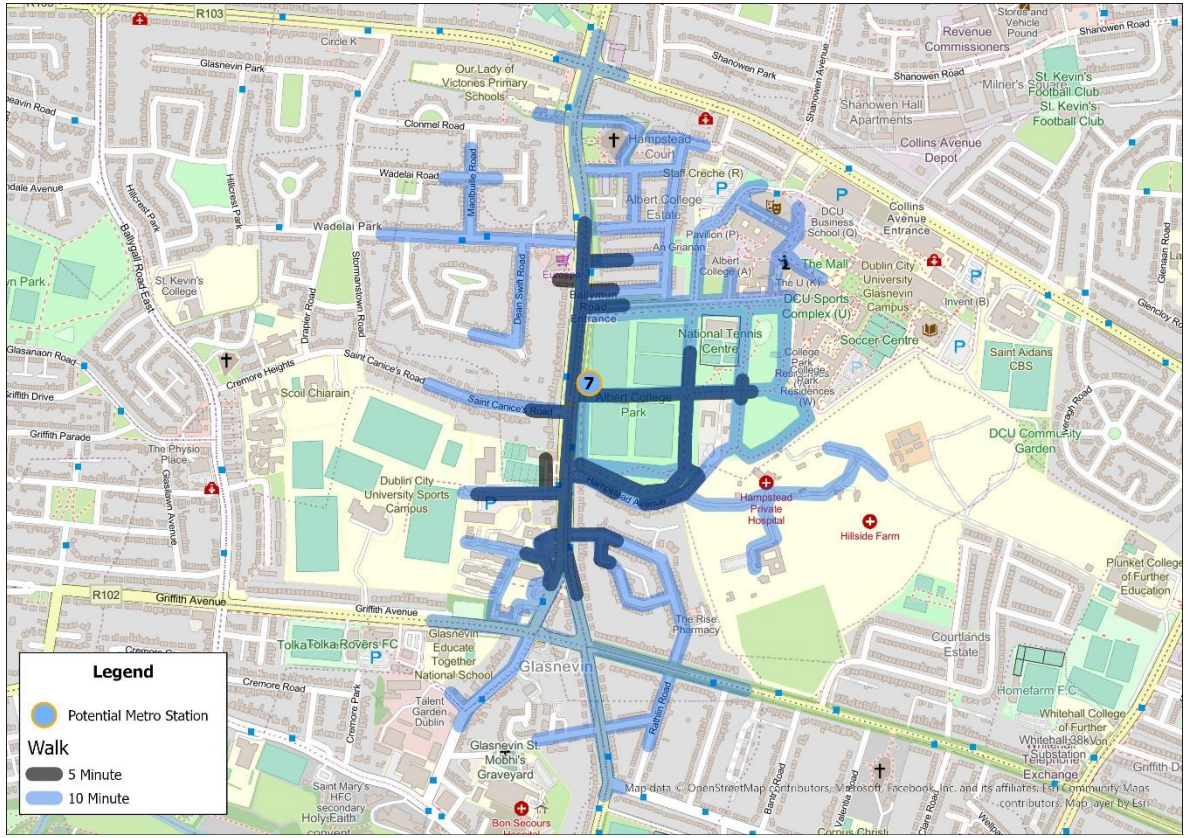
Part of Griffith Park Catchment

Figure 11.2 of EIAR – With Overlays

Walking Isochrones

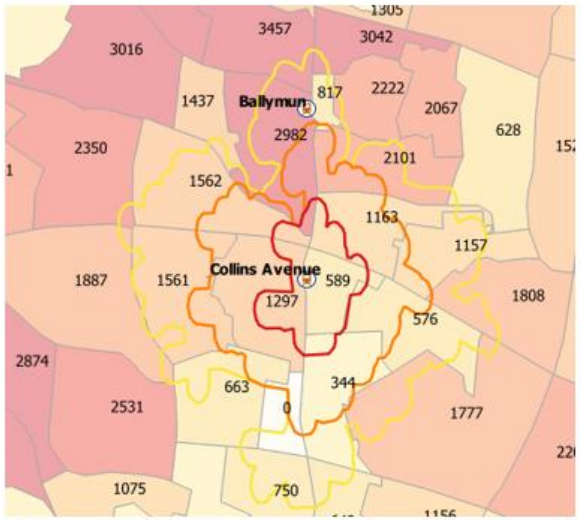
- OLV – Better Coverage of Denser Residential
- OLV – Easier Access for Residential along Collins Ave and Glasnevin Ave
- Albert College Park – Overlaps with Griffith Park Station



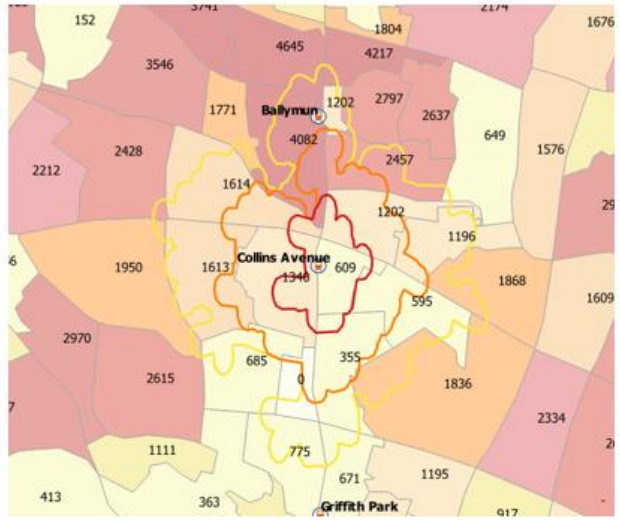


Collins Avenue

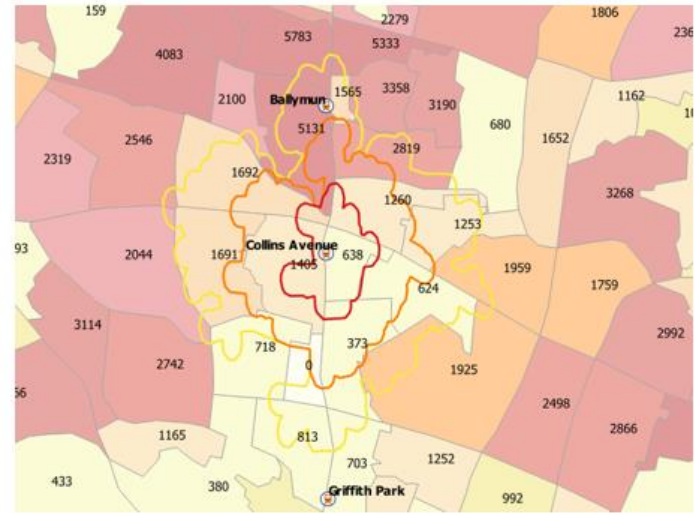
2035 Population



2050 Population



2065 Population



Legend

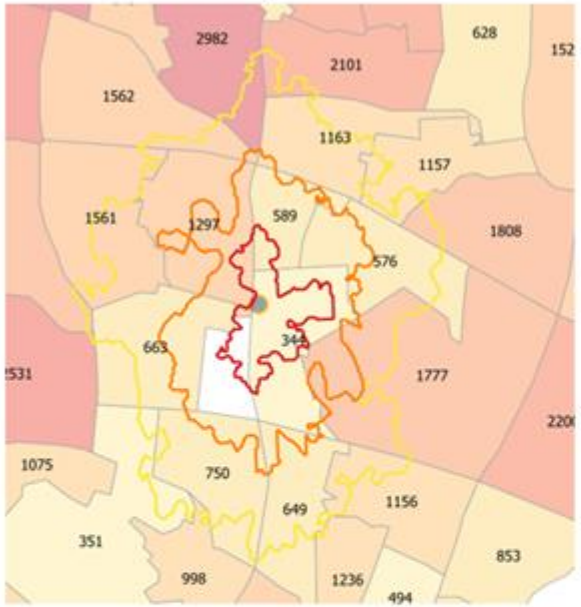
Walk Time:
- 5 minute
- 10 minute
- 15 minute

Population:

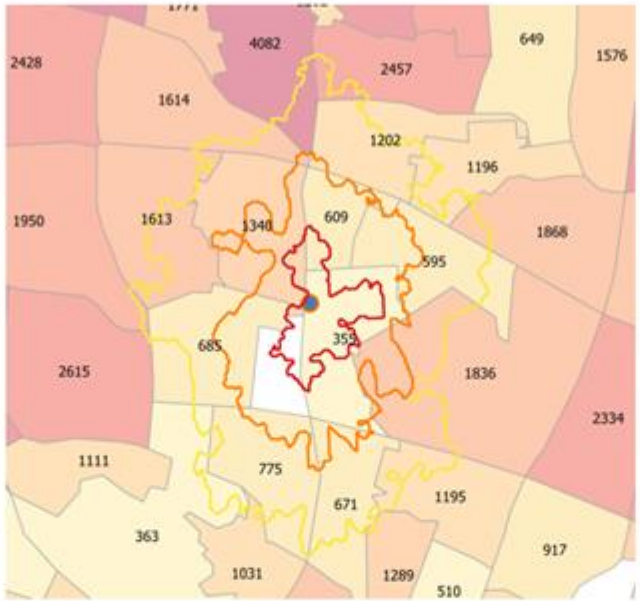
Low — High

Population		2035	2050	2065
Walking Catchment	5 min	1,886	1,949	2,043
	10 min	4,954	5,119	5,367
	15 min	14,149	16,265	18,451

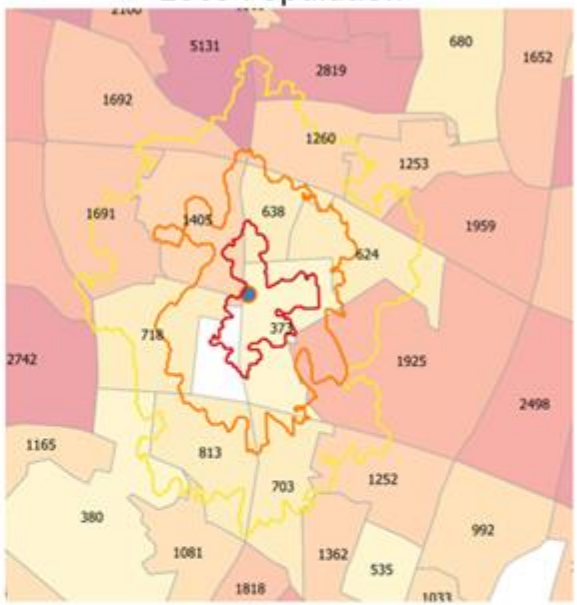
2035 Population



2050 Population



2065 Population



- Residential population approx. half of Collins Ave
- Does serve Glasnevin Ave and Collins Ave well.

Legend

Walk Time:
- 5 minute
- 10 minute
- 15 minute

Population:

Low — High

Population		2035	2050	2065
Walking Catchment	5 min	308	318	333
	10 min	2,126	2,197	2,303
	15 min	7,594	8,004	8,525

Distribution of Alighting Passengers – Modelling Results

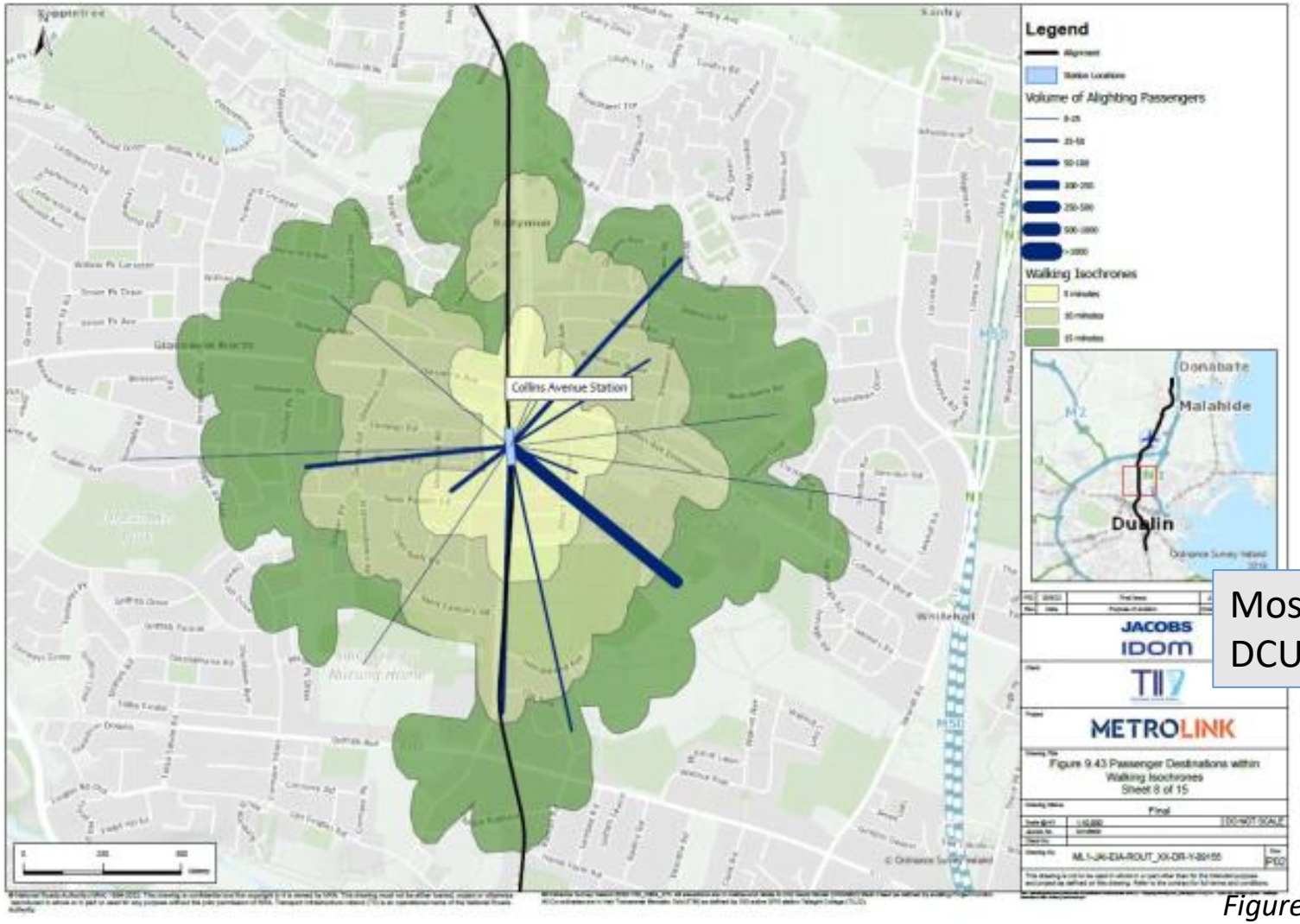


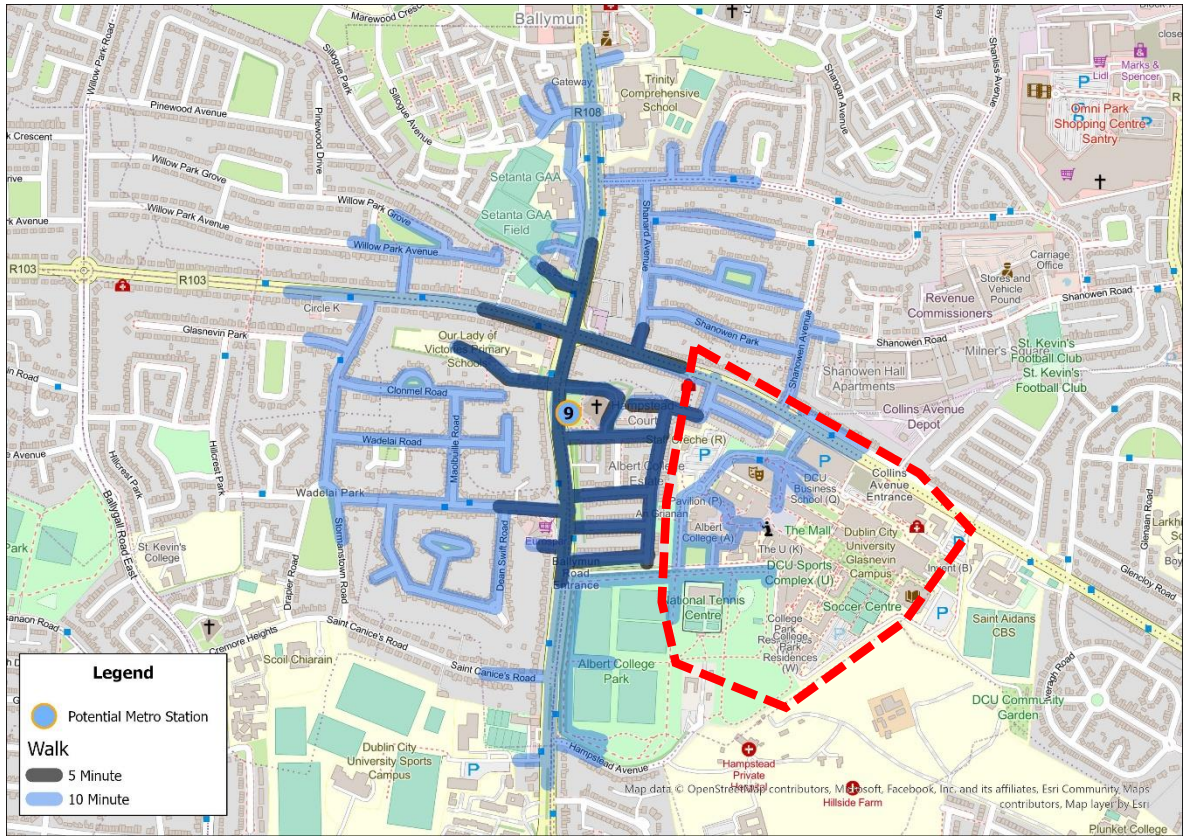
Figure 5.3: Final Destinations for Alighting Passengers During AM peak hour within Walking Catchment Areas

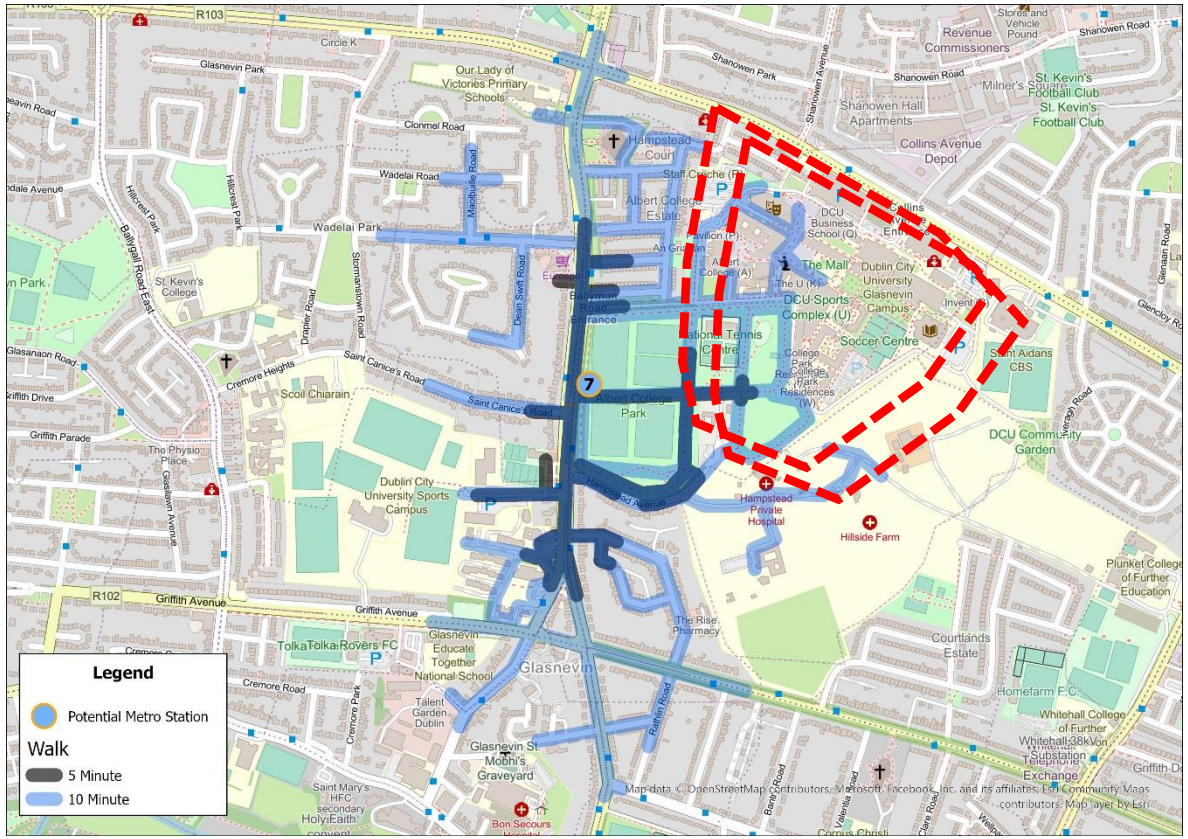
Most of the AM alighting is to DCU

Figure 5.3 of Collins Ave Traffic and Transport Assessment – Section A9.2 of EIAR – Overlaid with notes

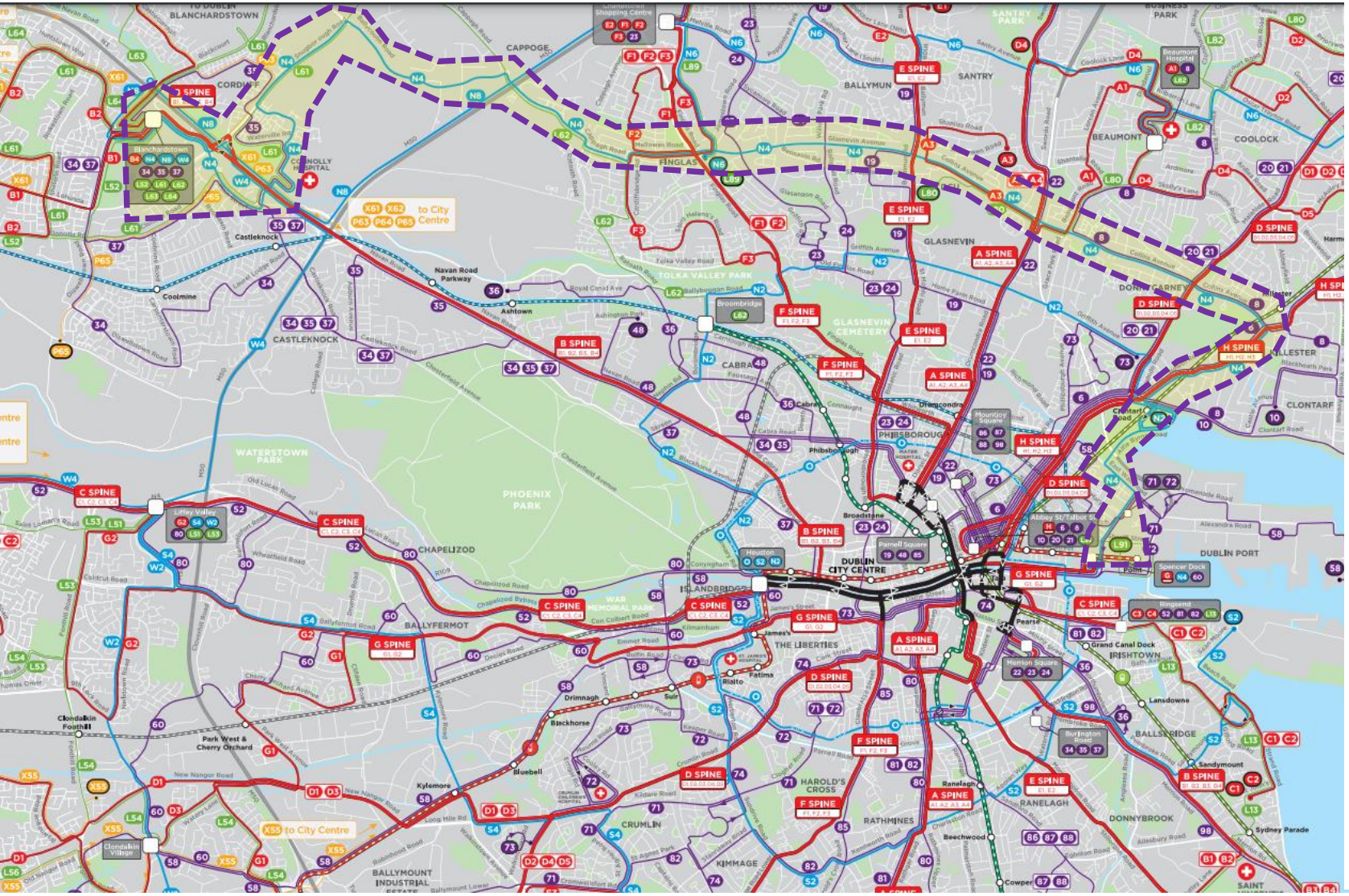
Coverage of DCU

- Similar Level of Coverage
- OLV – Better for Access to Collins Ave Entrance buildings
- Albert College Park – Better for access to Residences





N4 – Orbital Bus Route



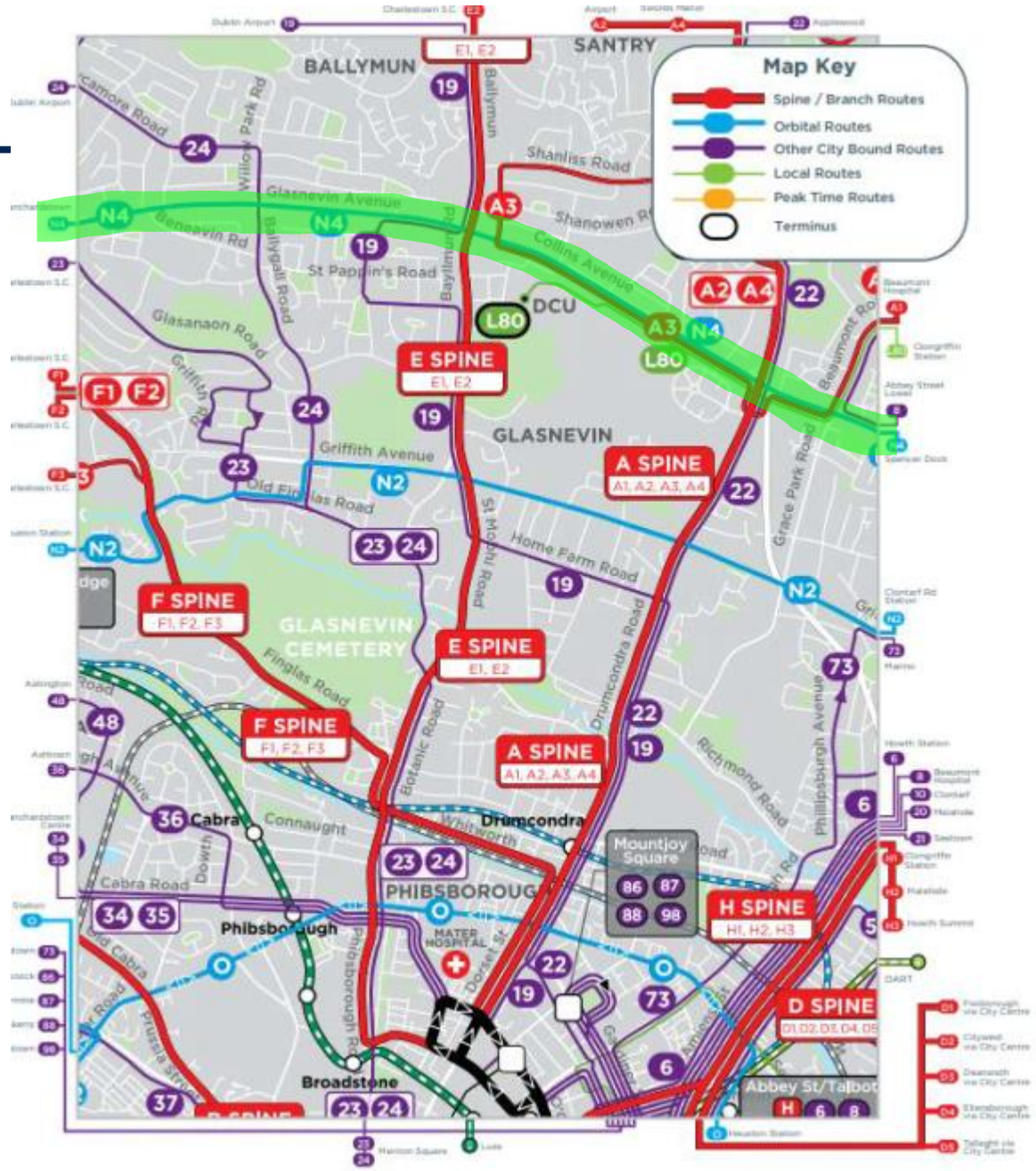
Orbitals -> Crucial Role in BusConnects
Efficient Suburban Travel: allow passengers to travel **between suburbs without having to first go into the city centre**
Improved Connectivity - enhances connectivity by linking different parts of the city
Integrated Transport: Full system provides the integrated transport network

Public Transport Connects to/from Metrolink with locations :

- James Connolly Hospital
- Blanchardstown
- Finglas
- Killester

- Greatly improved Journey Times with good interchange (~2 mins walk)
- Improved accessibility to/from Hospital, Shopping, Airport, Employment

Source : BusConnects.ie – with overlay

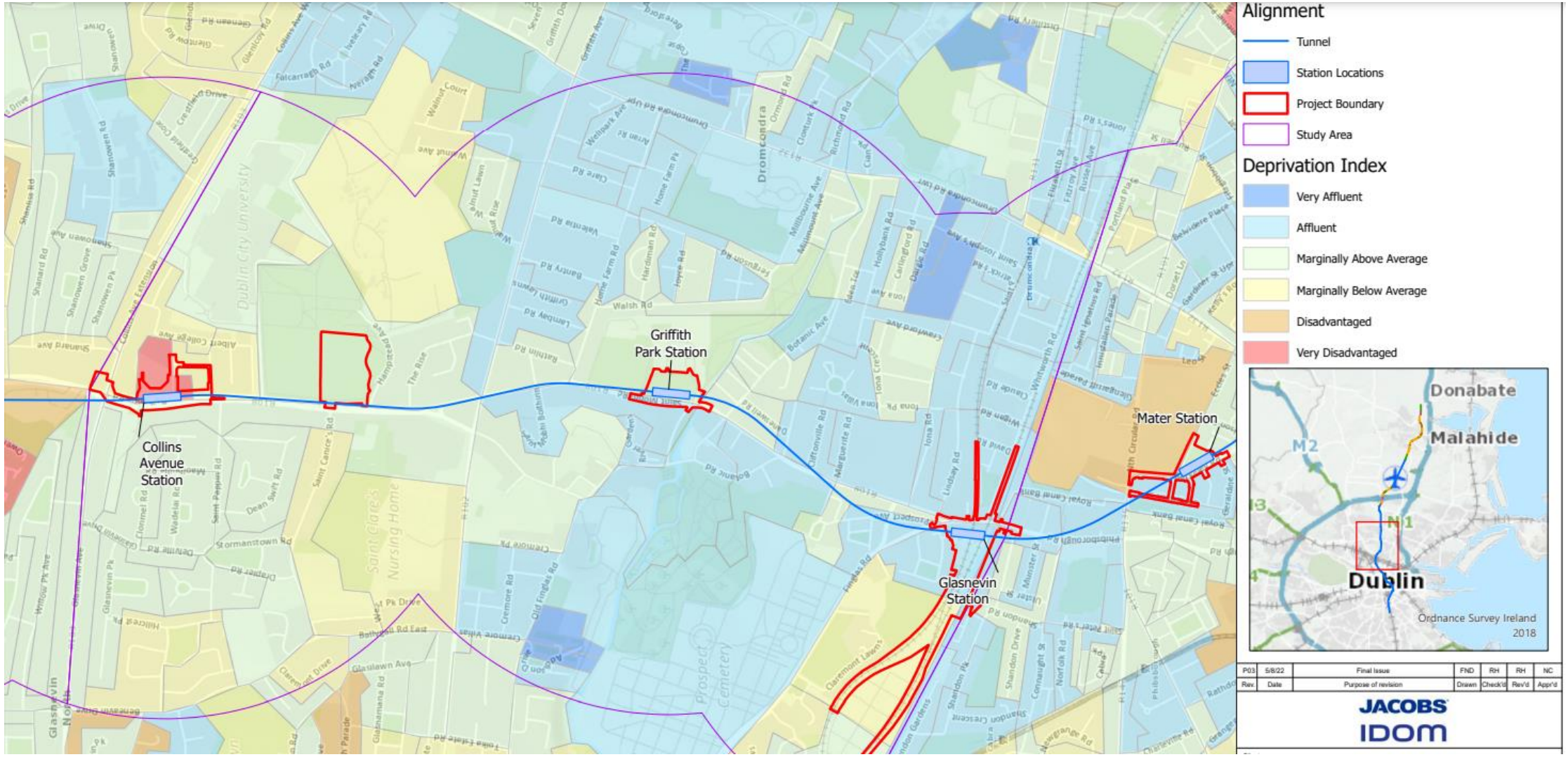


Distance to N4 Orbital Rou

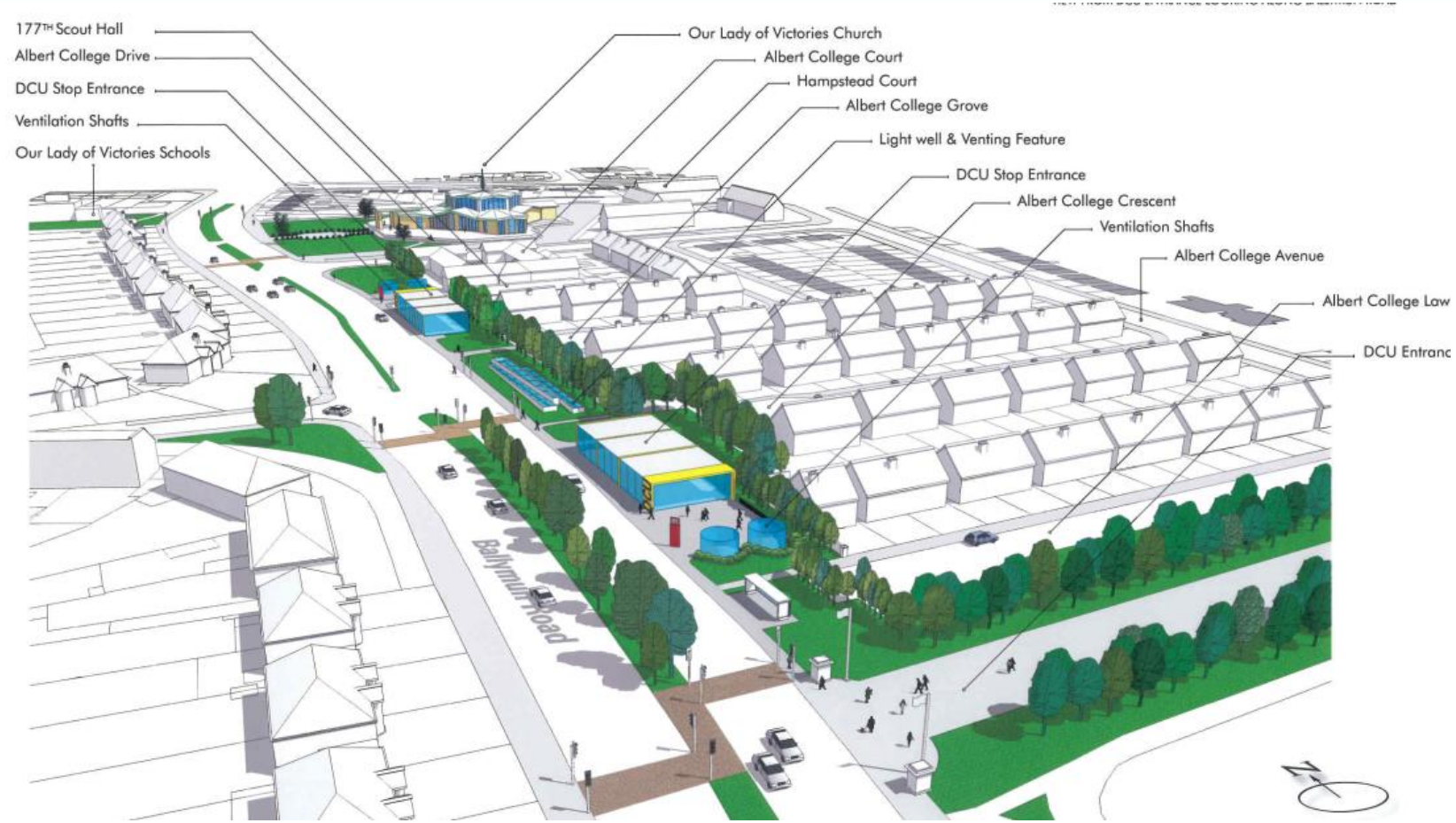
	Potential Metro Station Zone	BusConnects Orbital Route	Distance to nearest EB Stop	Distance to nearest WB Stop
	OLV Site	N4 – Blanchardstown SC to The Point	180m	230m
	Albert College Park	N4 – Blanchardstown SC to The Point	680m	730m

- OLV – Much closer ~ 2 mins walk from N4 Bus Stops
- N2 orbital route connected to Griffith Park station
- OLV provides better Interchange

Provides better accessibility for more deprived areas



Old Metro North



For OMN a station location in Albert College Park was also ruled out in favour of a station on Ballymun Road, Just south of OLV for the following reasons:

- To avoid environmental impacts on the park in regard to Landscape and biodiversity;
- To avoid the requirement for an " escape tunnels" at Ballymun Library.

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