PUBLIC TRANSPORT CAPACITY ASSESSMENT

HOLYBANKS, SWORDS, CO DUBLIN

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1. Introduction.

Cairn Homes Properties Limited intend to apply to An Bord Pleanala for planning permission for a strategic housing development (SHD) at Holybanks, Swords, Co Dublin. This report, by Derry O'Leary, Transport Consultant, has been commissioned by Cairn to investigate the available spare capacity in the local bus network. The author, a Civil Engineer, qualified as a Traffic Engineer and has over 40 years experience in both the public and private sector. He has spent nearly 30 years in both planning and operations in Dublin Bus. This report should be read in conjunction with the Traffic and Transport Assessment undertaken by Waterman-Moylan's (WM) on the subject site.

Site Location and Description



The subject site has an area of approximately c.14.14 hectares and is located to the north of Glen Ellan Road, adjoining the former Celestica/Motorola site (Balheary Demesne/ Balheary Industrial Park). Situated on the northern fringe of the built-up area of Swords, within the Estuary West Masterplan lands. The site benefits from a strategic, highly accessible location with connections

to quality transport infrastructure including Dublin Airport, an excellent road network (M50/M1), and a high frequency bus network.

The subject land is a greenfield site, comprised primarily of scrubland that was previously in agricultural use. The site has an irregular shape with Jugback Lane running parallel to the western boundary and the Broad Meadow River running east-west along the northern site boundary. The former Celestica site (Balheary Demesne/ Balheary Industrial Park) is located to the east of the subject site. There are no existing structures or buildings within the boundaries of the site. The site is relatively flat and slopes gently towards the Broadmeadow River. The landbank is dissected at the centre by a hedgerow running north south direction. The site is surrounded by a mix of residential use (to the west and south), educational use reservation and vacant commercial industry (to the east) and by the Broadmeadow River estuary and recreational lands to the north. The Applewood development is located directly to the west of the site and across Jugback Lane. The development comprises a mix of housing types and apartments and is serviced by the Applewood neighbourhood/village centre. There are currently no direct entrances to the subject landholding from Glen Ellan Road or Jugback Terrace. However, it is noted that there is an existing access way from the Glen Ellan Road close to the southeast corner of the site, which provides vehicular and pedestrian access to the former Celestica premises. A private residence is located directly adjacent to the northwest corner of the site, along Jugback Terrace.

2. Background to Dublin's Public Transport Network

- 2.1 While the customer-facing bus network serving the Greater Dublin Area (GDA) has been relatively stable in recent years, the organisation of these operations has undergone major structural changes in the last decade or so. The National Transport Authority (NTA), established in 2009, is now the public transport Regulator. The planning of bus and rail services nationwide has moved from the CIE Group of companies to the NTA. Responsibility for the network and individual route designs, fares and timetable details, etc. now lies solely with the Regulator. In this current regime even the smallest modification to any bus route or timetable must be agreed with the NTA in advance of implementation. The Authority also allocates State funding to meet the Public Service Obligation (PSO) benefits provided by the public transport network. The NTA also approves and allocates licences to commercial bus operators, subject to agreed routes, timetables and conditions. This aspect is particularly relevant is assessing the Swords bus network, as will be seen shortly. The NTA are also the lead agency for the Metro proposals to serve Swords in the medium term.
- 2.2 In 2015, the Authority commenced a root and branch review of the efficiency and effectiveness of the Dublin Bus Network, branded as Bus Connects. In parallel, it also began a Bus Market Opening (BMO) process to open the Irish bus market to competition. These are now briefly outlined below.

3. Bus Market Opening (BMO)

- 3.1 In order to open the bus market to competition to more than the incumbent State-owned operators (Dublin Bus and Bus Eireann) the NTA first tendered a package of orbital bus routes operated by Dublin Bus in 2016. The group of 24 routes, and total fleet of 125 buses, represented roughly 10% of the bus market in the Greater Dublin Area. Following the competitive tendering process, the Go-Ahead Group (a largely UK-based bus and rail operator with significant overseas businesses) was selected to operate these routes. The seamless transfer of routes, in stages, from Dublin Bus to Go-Ahead Ireland (GAI) took place over a 12-month period in 2018/2019. The switch was barely noticed by the general public and passengers alike, as the new operations were introduced under the NTA's Transport for Ireland (TFI) brand. Indeed, the Swords public were more than familiar with private bus operators well in advance of the BMO process. The Swords bus network is quite unique in the Dublin market, and the urban bus market State-wide, in that it has its own, longestablished, urban commercial bus operation of scale in Swords Express. This brand has garnered a degree of support and loyalty that reflects the competitive nature of the operation, despite having higher fares than other Dublin-wide buses. Speedy access to the city centre via Dublin Port Tunnel is its key success factor.
- 3.2 All PSO operators, whether commercially or State-owned, operate bus services under contract to the NTA and must meet a set of key performance indicators (KPIs) covering reliability, timekeeping and vehicle maintenance. The same standards are expected of all contracted operators and failure to meet the targets will result in fines or contract cessation. Both the performance standards expected of contractors and the level of fines exacted for not meeting those standards are in the public domain.
- 3.3 The NTA owns a growing share of the bus fleet deployed to operate its routes in the GDA. It appears that, over time, the entire public transport fleet will be owned by the NTA as the fleet is renewed and the Authority obtains the capital funding to buy and replace buses for use in the PSO networks across Ireland. The next tranche of buses ordered by the NTA for the Dublin urban market are fully-electric traction. The delivery of the first of these EV buses is expected in 2024.

4. Bus Connects Project Overview

4.1 This comprehensive, root and branch, re-design of the urban bus network in the GDA, including the suburban Swords services, was commenced by the NTA in 2015. The bus services will be dominated by high frequency "Spine routes" that follow the main radial corridors in the city centre, and beyond.

In tandem with these service re-designs, the bus route alignments will be upgraded to radically enhance bus priority measures. This investment is required to protect the enhanced operation from the adverse impacts on reliability caused by traffic congestion. Average bus speeds are expected to rise on the back of this new investment. These Core Bus Corridors (CBCs) along which the high-frequent Spine routes will run, and the revised routes themselves, have been through a series of extensive consultation phases with the general public and key stakeholders. Local Authorities have been directly involved in both the bus route and CBC design process. The final route network, modified following the review of thousands of submissions by members of the public and key stakeholders, has now been agreed. The CBC designs will shortly be entered by the NTA into the formal planning process.



1.	Clongriffin to City Centre
2.	Swords to City Centre
3.	Ballymun/Finglas to City Centre
4.	Blanchardstown to City Centre
5.	Lucan to City to Centre
6.	Liffey Valley to City Centre
7.	Tallaght/Clondalkin to City Centre
8.	Kimmage to City Centre
9.	Templeogue/Rathfarnham to City Centre
10.	Bray to City Centre
11.	Belfield/Blackrock to City Centre
12.	Ringsend to City Centre

<u>Figure 1</u>. The GDA Core Bus Corridor (CBC) Network from the NTA . Swords to City Centre is Corridor 2.

4.2 Phased implementation of the new Spine routes has started. To date, only two of the phases required to modify the bus network in the Greater Dublin Area have been introduced. The C-Spine and H-Spine changes have been introduced in parts of the west and north western suburbs of Dublin. Further phases have been designed and planned but will take a number of years to implement. The whole network of services is expected to be implemented by 2024. No changes to the Swords Network have yet taken place, and the specific bus route changes planned for this area are outlined later. The wide network of Swords Express routes that serve the Swords to Dublin corridor were outside the terms of reference of the Bus Connects study. They are covered by their own license arrangements with the NTA. The Bus Connects details for this area are outlined in section 7.

5 Existing Public Transport Network Serving the Holybanks, Swords Site

5.1 The Holybanks site is extremely well-located on the main bus routes serving the Swords to Dublin bus market. The public service obligation (PSO) routes operated under contract to the NTA that directly serve Glen Ellen Road, past the subject site, are all operated by Dublin Bus. Together with the Swords Express services that pass the site, they offer a variety of alignments to Dublin City centre as well as catering for more local trips to Swords village and Dublin Airport. Table 1 shows the extent of the bus routes passing the southern fringe of the subject site:

Route	Operator	Origin	Destination	Via	Frequency (Peak) Mins
41C	Dublin Bus	Swords Manor (SM)	Dublin City Centre	River Valley	20
41X	Dublin Bus	Knocksedan/S M	UCD Belfield	Port Tunnel	4 peak trips
43	Dublin Bus	Swords Business Park	Dublin City Centre	Fairview	2 peak trips
500/X	Swords Express	Abbeyvale/SM	Dublin City Centre	Port Tunnel	15
503	Swords Express	Abbeyvale/SM	Merrion Square	Port Tunnel	2 peak trips
506X	Swords Express	Miller's Glen	Dublin City Centre	Port Tunnel	1 peak trip
507	Swords Express	Abbeyvale/SM	Dublin City Centre	Port Tunnel	1 peak trip

<u>Table 1</u>. Routes on Glen Ellen Road, past Holybanks site.

The key Dublin Bus route serving the Glen Ellen Road catchment is the 41C with a relatively good, frequent, all day service. The peak-only four 41X journeys and two specific (extended) route 43 trips supplement the parent 41C route. The big disadvantage for city-bound commuters using route 41C is that it takes a less than direct route, via River Valley, before operating past Dublin Airport on its traditional Swords Road alignment to the city centre.

The NTA licensed Swords Express routes, from inception, have largely targeted commuters wishing to get to the city centre as quickly as possible. These commercially operated limited stop express routes follow a variety of alignments from Swords that all utilise the Dublin Port Tunnel to provide a very competitive 35 minute headline journey time. The core route 500 services (and most of its variants) operate from Swords Manor and along the Glen Ellen Road axis and its relatively high-density housing estates. Routes 503, 506X and 507, all surveyed below, take slightly different routing around Swords itself but all enter the Port Tunnel. They, and other peak routes, are combined into the one Swords Express timetable to offer a very attractive, combined 6 minute peak frequency in the peak hours from the stops serving the Holybanks site. The current Swords Express timetable dates from September 2021. The service has been tailored to meet the reduced Covid-19 demand patterns. Fares on Swords Express are higher than the normal Dublin bus fares, but the Leap card can be used to get discounts on their services. The service is fully integrated into the Dublin bus network.

5.2 The Glen Ellen Road alignment is such a strong current (and future) bus axis that one of the three proposed Bus Rapid Transit (BRT) alignments previously designed by the NTA a decade or so ago started in this area. The ambitious BRT plans have been shelved in the expectation that the Metro, long planned for Swords, will be constructed. However, the identification of Glen Ellen Road for the BRT bus priority measures, ahead of other areas, speaks volumes for its underlying importance in the bus market.

5.3 The site at the junction of Glen Ellen Road with Jugback Lane is situated on this established bus alignment in Swords. Few suburban areas in Dublin have such an array of routes. The Swords Express type services are unique to this area of Dublin. There are two city-bound stops available to future Holybanks residents. Stop 4923, just before the site, is only 140m from the proposed main site entrance while stop 4924 is 320m further down Glen Ellen Road. There are corresponding westbound stops, from the city, that also serve the site. Access to these bus stops from the proposed Holybanks development, by any standards, is excellent.

5.4 Consideration could be given to the construction of a new, sheltered bus stop, complete with RTPI unit, immediately east of the proposed T-junction access point with Glen Ellen

Road. While relatively close to the previous stop, number 4923, it would almost eliminate the 320m walk to stop 4924 further east. There is some value in residents having what is seen as their own bus stop. This would also be of assistance to any future development to the east of the subject site. The existing stops on Glen Ellen Road are all in relatively close proximity to the housing, both existing and planned, and the termini of many of the bus routes themselves are nearby, with seating almost guaranteed to potential commuters. The survey data, reviewed in section 6 below, bear this out.

6. Public Transport Capacity Assessment

- 6.1 The purpose of this analysis is to determine whether or not the demand for public transport, in this case exclusively bus services, generated by developing the Holybanks site puts the existing bus services under undue pressure. Surveys have been undertaken at a nearby bus stop to demonstrate that the additional demand will not overload the existing levels of public transport services.
- 6.2 The demand profile for public transport services, like road traffic, is quite seasonal in nature.
 - Demand for bus services, in general, is materially lower in the Summer and school holiday periods.
 - Demand tends to be somewhat higher in the late Autumn and in the run up to the busy Christmas holiday. Surveying in the none-holiday weeks in the opening four months of the year, and early Autumn, represent a reliable indication of base-level predevelopment expressed demand for transport.
 - Demand also varies by day of the week, with traffic demand generally lower on Mondays and Fridays, with some exceptions. Public transport usage on Saturdays and Sundays (in particular) are materially lower than mid-week demand.
 - Demand for bus travel varies throughout the standard weekday but morning peakhour levels are shorter but higher than the corresponding evening peak flows.
- 6.3 In determining whether spare capacity is available to meet increasing demand from any development site it is best to undertake surveys and test the mid-week morning peaks prior to the Summer period when schools are open. The, perhaps, temporary negative implications

for public transport demand due to the reduced commuter travel caused by Covid-19 related restrictions is addressed later in section 6.7.

6.4 The surveys of public transport usage were undertaken by Waterman-Moylan's (WM) on Tuesday, 1st March, 2022 to establish the current level of bus patronage at the Holybanks site and assist this analysis. The surveys have been done at a suitably representative time of the year, as identified in 6.2 above. The relevant summary data have been reproduced here. The eastbound (citybound) buses were surveyed at stop 4924, the bus stop past the proposed site entrance. Bus capacity for the purposes of this analysis is taken, conservatively, as the seated_capacity only, which understates the true capacity of buses. Seated capacity for the Dublin Bus fleet is taken as 67 seats. Similarly, the Swords Express single-decker coach fleet, based on published data, has a seated maximum set at 53, but varies slightly by fleet type.

Timeband	Bus Numbers	Passengers	Passengers/Bus
07.31 - 07.45	5	64	13
07.46 - 08.00	3	36	12
08.01 - 08.15	5	119	24
08.16 - 08.30	1	48	48
08.31 - 08.45	1	32	32
08.46 - 09.00	2	66	33
Total	17	365	22

<u>Table 2</u>. Eastbound Buses (Stop 4924) in the AM Peak (towards Dublin)

Table 2 above shows the demand profile for buses on Glen Ellen Road, by time band, in the AM peak. The survey data indicate that the peak hour on Glen Ellen Road, almost directly outside the subject site, is, marginally, between 07.30 and 08.30. The busiest period, in terms of passengers loadings, is a relatively modest 119 passengers and occurs between 08.01 and 08.15. The low volume of passengers at this point is due to a combination of factors. Aside from the network wide Covid-19 volume reductions, the primary factor is the location of the stop relatively early into

the routes surveyed. The busiest bus, before 08.30, was carrying significant numbers of schoolchildren. The data are now re-presented, by route, in Table 3.

Route Number	Bus Numbers	Passengers	Average Passengers/Bus
500/X	6	138	21
41C	4	154	39
41X	2	11	5
503	2	10	5
506X	1	24	24
507	1	24	24
43	1	4	4
Total	17	365	22

<u>Table 3</u>. Passenger Numbers by Route (STOP 4924)

As can be seen from Table 3 above the majority of buses servicing this area are operated by Swords Express. Of the seventeen surveyed, 59% belong to the commercial operator. In terms of patronage, the Swords Express routes combine to carry 54% of surveyed commuters. This area of Dublin has a high level of commercial coach operations bringing local commuters to work in the morning peak. No other area of Dublin has anything remotely like this level of (licensed) commercial operations. The dominant route, in terms of buses for the Glen Ellen Area is the 500, combined with the 500X variant. This route primarily starts in Swords Manor and serves the Glen Ellen residents on its way to the Swords By-pass. From Airside it heads via the Drinan M1 Interchange to the M1 and Port Tunnel to Dublin City centre. The very competitive journey time, mooted to be 35 minutes to the city centre, is its unique selling point. Fares are correspondingly higher than the Dublin Bus routes, but Leap card discounts are available. Many Swords commuters trade off fares for commute speed, coach seating, etc.

Despite the obvious attractiveness of the express services, route 41C is the busiest route serving the Glen Ellen area, alone counting for 42% of passengers. The average load of this route, at 39 passengers per bus, is materially higher than the other routes. The lower network fares for the

likes of schoolchildren are likely a key factor here. In addition, some of the low loadings are undoubtedly due to the fact that a few routes have, literally, commenced operations a number of stops earlier. Despite this, the average seated load of 22 per bus over the entire period indicates material levels of spare capacity in the bus mode, regardless of the bus/coach type.

6.5 There are no rail alternatives in the short-term. There are other bus services that can be accessed from the Holybanks site, in particular along the Rathbeale Road. But the walk distances required to board some of these alternatives is relatively unattractive and the service frequencies are not such as to make it worth most commuter's while. A wide variety of bus routes are also available on the Swords by-pass, opening up options north and south of Swords, as outlined in the WM TTA. But, while they may well suit individual residents of Holybanks they are not addressed in this analysis. The uncertain timescales surrounding the planning and construction of the Metro are behind its exclusion from this analysis. When The Metro is operational one can expect a revised bus network in this area focussed primarily on linking into this attractive mode.

Impact of Generated Trips on Future Bus Capacity

6.6 The above surveys and analysis clearly show that there is a significant level of spare capacity in the current bus service in the peak hour at the point in the network immediately adjacent to the Holybanks site. We now examine the likely generated number of bus trips that future residents of the 621 residential units will undertake. The planned phasing programme is ignored for the purpose of this analysis. All three phases are treated as one. On the basis of the 2016 Census data reviewed by WM in section 5.7 of their Traffic and Transport Assessment (TTA) a total residential population of up to 1926 persons is anticipated. The WM examination of likely future generated trips (based on TRICS data) in Table 19, section 8.3.3, of the TTA envisages an additional 91 public transport trips out of the development in the AM peak hour. In order to assess the potential impact of these additional bus passengers on the existing bus network the extra trips have been spread across the surveyed bus routes seen in 6.3, Table 3.

In allocating these generated trips the following assumptions were made:

- All 91 public transport trips were allocated as if all three development phases were constructed
- All 91 trips were assumed to travel eastbound, towards Swords and Dublin, the worst case scenario.
- All 91 are assumed to travel in the peak hour.
- The trips were allocated to the <u>existing</u> network, both Dublin Bus and Swords Express, even though both are expected to grow in the coming years. Section 7 below shows that the new Bus Connects routes offer higher frequencies than current Dublin Bus routes, while the Swords Express current (September 2021) timetable is approximately 20% below its recent (pre Covid-19) average.
- Generated trips are allocated on pro-rata basis by volume to all buses surveyed between the empirical peak hour of 07.50 to 08.50

6.7 The surveyed bus patronage in Table 3 has been amended to reflect the generated trips, envisaged by the WM analysis, and allocated to the routes on the basis of the above assumptions. It covers the busiest 11 buses (of 17 surveyed) over the narrower time period.

Route Number	Bus Numbers	Future Passengers	Average Passengers/Bus	% Spare Capacity
500/X	4	104	26	51
41C	3	171	57	15
41X	1	9	9	87
503	1	7	7	87
506X	1	32	32	40
507	1	32	32	40
Total	11	355	32	-

Table 4. Passenger Numbers, including Generated Trips, by Route (STOP 4924)

The number of bus trips in the peak hour only fell from seventeen to eleven. The impact of the generated trips was to increase patronage on these eleven buses by 34% (from 264 in the survey to 355 passengers), an increase of 91 trips. The resultant spare <u>seated</u> capacity in the various routes obviously falls when more passengers are allocated. Recall that the coaches in the Swords Express fleet have a smaller seated capacity (assumed at 53 here). However, from the final column in Table 4 it can be seen that all services have significant spare capacity, with only route 41C operating anywhere close to capacity with still 15% free seats. Most of its passengers on board at this point are from Swords Manor and other stops en route to this area. The Bus Connects re-design for the area (see section 7 below) addresses this fact.

The true extent of the longterm impact of the recent pandemic on bus patronage will only become clear in a few years. The Covid-19 impact is very real, with volumes below "normal" levels. While most in the industry expect some recovery, despite high levels of WFH, the predicted levels of spare capacity strongly suggest that there is more than adequate capacity to handle the generated Holybanks' commuters. This is before the additional Bus Connects capacity increases outlined in the next section and the likely ramp up in Swords Express services should bus passenger volumes recover.

7. Bus Connects Proposals in Swords

7.1 While the Bus Connects project largely covers the built up area of Dublin it does extend as far north as Swords and beyond to take in the operational areas of the routes under consideration here. The revised network of services arising from this major bus network review in Swords is shown in Figure 2 below. Note that the Swords Express services, not part of the PSO network, were excluded from the review process. They, for now at least, remain as is. Any changes sought by the Operator, as elsewhere, would require license approval from the NTA.

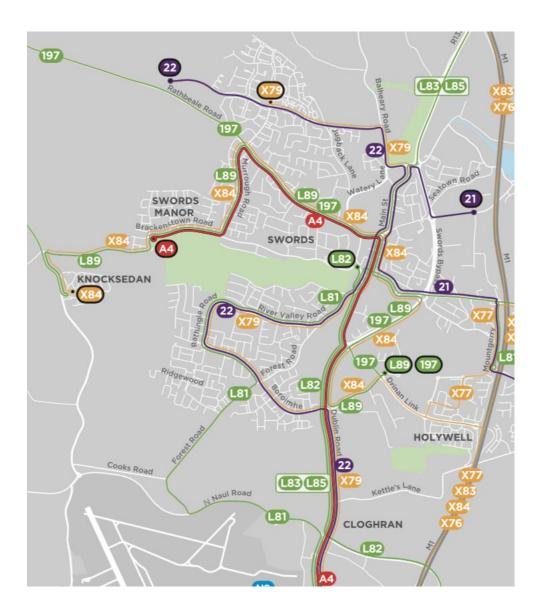


Figure 2. Swords Area Bus Connects Network (excludes Swords Express network).

The output from figure 2 is best illustrated in Table 5 below where the existing routes along Glen Ellen Road are compared with the revised network.

Existing Route	Bus Connects Replacement	Frequency (mins)
41C	22	15
41x	X79	3 in AM peak
43	None	-

<u>Table 5.</u> Comparison of Current and Proposed Bus Connects Network on Glen Ellen Road.

The revised PSO bus network in Swords, expected to be introduced by 2024, identifies bus services for both key east west alignments in the north suburban Swords, Glen Ellen Road and Rathbeale Road. The main route proposed for these northwestern suburbs of Swords is route A4. This is one of four high frequency routes that combine further south, near the Airport, to form the backbone of the **A-Spine** that will operate along the Core Bus Corridor, alignment 2, shown in figure 1 earlier. Of particular interest here is that the A4 operates along Rathbeale Road, one block further south than Glen Ellen Road.

Of more direct relevance to the subject site, **new route 22** is proposed to replace the 41C along the Glen Ellen Road alignment. Route 22 will operate every 15 minutes throughout the weekday. This is far superior to the existing 41C arrangement that it replaces in a number of respects

- Firstly, the all-day route 22 has a 15 minute frequency that is <u>significantly higher</u>
 throughout the day than route 41C where the average frequency is approximately every
 20 minutes in both the peak and off-peak.
- Secondly, route 22 will start on the western end of Glen Ellen Road. This is much closer than the current route 41C terminus in Swords Manor, by more than a kilometre, and

will ensure even higher levels of spare capacity in advance of the Holybanks site development. The number of bus stops before reaching the development will halve with the new route.

 Finally, the new route layout, not forgetting the unchanged Swords Express network, gives a greater degree of comfort and certainty to bus users frequenting these "local" routes.

The X79 route in figure 2, an express peak-only route, is proposed to further enhance the improved peak bus service along Glen Ellen Road. It is listed in the Bus Connects

Frequency Table as a direct replacement for existing 41X route. The journey time of route X79 will be reduced over time due to the higher bus speeds anticipated on the Core Bus Corridor alignment, when completed. This will generate further bus patronage demand and likely lead to further peak buses on this route. The initial frequency is set at three AM peak buses, with three return trips from Dublin city centre in the evening peak. The over-riding objective of the NTA Transport Strategy for the GDA is to radically increase public transport's modal split, as has been the trend. Bus services will account for the bulk of this increased share. The NTA have given an undertaking to continually monitor demand in the coming years and modify public transport capacity accordingly. Adding extra peak buses to routes like the X79 is an easy way of matching increased demand.

The presence of the new **A4 Spine route** on Rathbeale Road, with its planned 12 minute weekday frequency, might encourage some future Holybanks' residents to walk to stops on that route. The peak **X84** service, itself seen as a further replacement for route 41X, together with local route **L89** and route **197** will supplement the bus service on Rathbeale Road. These routes, when combined, will attract some Holybanks commuters that seek alternative, quicker routing to certain destinations. The approximate 15 minute walk will deter many from this option, but some will avail of it if their "generalised cost" in transport economics is improved under this alternative. Much depends on their ultimate destination and the extent to which the likes of the A4 will foreshorten their overall travel time. The

balance of the Bus Connects local routes in the wider Swords area, such as the L81, L82, L83 and the L85 will benefit few Glen Ellen Road residents.

When the Bus Connects proposals outlined above are taken together with the Swords Express network, and its scope for increased services also, the outlook for the development of buses in the Glen Ellen area of Swords is very positive.

8. Conclusions

This report and analysis confirms how well located the Holybanks site is in relation to both the existing and future bus networks along the Glen Ellen Road in Swords, Co Dublin. The bus market at this location is well developed for a strongly growing area and has a uniquely high level of commercial bus operations run by Swords Express that will respond quickly to any growth in demand to capture market share. Survey data shows excessive levels of existing spare capacity, only partly due to Covid-19 repercussions. Demand will recover over time, depending on WFH patterns.

The NTA's Bus Connects proposals confirm the importance of the Glen Ellen Road as a major growth axis in Swords, one of the fastest growing towns in the Dublin area. The Holylands development will serve to consolidate residential density in the area and thereby strengthen the market for bus services. A key attraction is that the development of the site has no great reliance on the proposed Metro service for Swords. The bus network in this area, post Metro, will likely be largely retained in its current or Bus Connects format but with more emphasis on feeding the Metro stations. The current capacity in the bus network is more than capable of handling the anticipated bus modal share from the Holylands development.