

## METROLINK Integrated Transport. Integrated Life.

**Cycle Parking Review** 27/03/24









## METROLINK



**Cycle Demand Review** 

# **Important Notes GDA Transport Strategy**



#### Measure CYC5 - Cycle Parking

It is the intention of the NTA to deliver, through the statutory planning process and liaison with relevant stakeholders, high quality cycle parking at origins and destinations, serving the full spectrum of cyclists including users of non-standard cycles.

#### Measure CYC6 - Cycle Parking Strategies

Local authorities will prepare public cycle parking strategies in order to ensure that there is sufficient shortstay safe and secure cycle parking available on-street and/ or off-street, including spaces for cargo bikes and other non-standard bike designs, in city, town and village centres.

#### Measure INT5 - Major Interchanges and Mobility Hubs

It is the intention of the NTA, in conjunction with TII, Irish Rail, local authorities, and landowners to deliver high quality major interchange facilities or Mobility Hubs at appropriate locations served by high capacity public transport services.

These will be designed to be as seamless as possible and will incorporate a wide range of facilities as appropriate such as cycle parking, seating, shelter, kiosks selling refreshments plus the provision of travel information in printed and digital formats.

Metrolink – Conditions from FCC and DCC – Agreement with DCC/ FCC

### Metrolink - Previous Policy Review



Policy	Description
National Cycle Policy Framework	Overarching objective of 10% of all trips in Ireland will be made by bike by 2020
National Cycle Manual	Minimum of 2.5% of number of daily boarders at the station, subject to a minimum of 10 bicycle places. Off streetcar parks (incl. multi story): 10% of total car-spaces, subject to a minimum provision of 50 spaces
Dublin City Development Plan 2016-2022	Dublin City Council aims to increase mode share associated with cycling to reach a minimum of 25%. Cycle parking standards: 7 per number of trains at the two hour AM peak period (minimum of 100 spaces).
Dublin City Development Plan 2022-2028	Does not contain cycle parking standards in relation to public transport facilities – 'for any land use not outlined in [the plan], the default parking rate will be calculated based on those of a comparable use and/or determined as part of a Transport and Traffic Assessment and/or Mobility Management Strategy'
Dublin City Centre Cycle Parking Strategy Report	2013 Canal Cordon Count- 10% of total inbound vehicle traffic in the AM peak and 4.7% of total person trips. Assumption of target mode share of 15% by 2020 and 25% by 2030 for cycling
Fingal Development Plan 2017-2023	Secure cycle parking facilities shall be provided in new Public Transport interchanges. No mention regarding cycle parking numbers in Transport Hubs
Draft Fingal Development Plan 2023- 2029	Objective DMSO114- Ensure that all new and renovated public transport stations/stops provide appropriate levels of cycle parking provision based on the existing and proposed passenger levels, surrounding environments and future transportation infrastructure
Danish Bicycle Parking Manual	Start number of 10% of passenger numbers in the morning rush hour (6-9) at train terminals. At train stations, the number of spaces should correspond to between 10% and 30% of passenger numbers (number of train passengers per day)

### Metrolink – Previous Policy Review



A demand led approach has been recommended for use during this project, this has provided the recommended numbers for cycle parking provision at each of the Metrolink stations.

To calculate the number of potential cycle parking spaces to be provided at the proposed Project stations, two approaches were considered.

- **Fixed**: This approach applies a flat percentage rate to all stations e.g the National Cycle Manual suggests that a rate 2.5% is applied to the number of daily boarders subject to a minimum of 10 bicycle spaces, or the Dublin City Council approach of 7 spaces per the number of trains at the two-hour AM peak period, which must be a minimum of 100 spaces.
- Variable: This approach applies a bespoke percentage range to each station based on the demographic spread relevant to each location e.g., the Danish Cycling Federation suggests that bicycle parking is provided for "10-30% of train passenger numbers per day", or "10% of passenger numbers in the morning rush hour (06:00-09:00) at bus stops and terminals".

### **The Demand Approach**





Outer Dublin - Long-stay
Outer City- Bike Sharing/Long-stay
City Centre- Bike Sharing

#### Outer Dublin/Outer-City Stations (concerned with boarding figures):

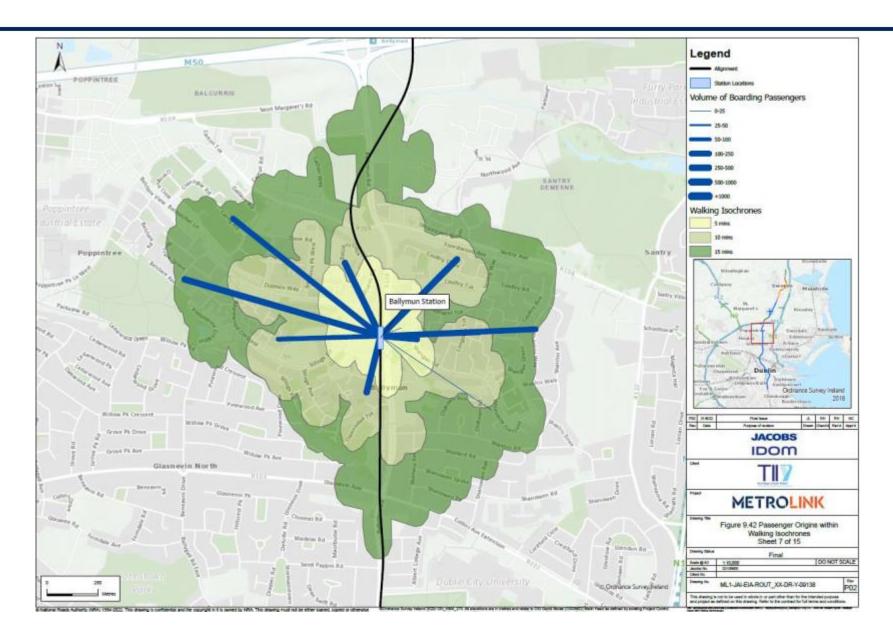
- During the AM peak period, cycling provisions will be calculated for 10% of First Boarders that have origins within the 5-10-minute walking isochrone, and 50% of First Boarders in the 10+ minute walking isochrone.
- During each of the Lunchtime (LT), School Run (SR) and PM peaks, cycling provisions will be calculated for 10% of First Boarders beyond the 5-minute walking isochrone.

#### **City Centre Stations** (concerned with alighting figures):

- During the AM peak period, cycling provisions will be calculated for 10% of Final Destinations that have destinations within the 5-10-minute walking isochrone, and 50% of Final Destinations in the 10+ minute walking isochrone.
- Provisions will be calculated for the AM peak period only.

### **Origins-Ballymun**





### **Demand Led Approach – Results with National Cycle Manual**



Station	National Cycle Manual Requirement (2.5% of 12hr boarders)			Demand-Led Approach	
	Location	Opening Year-2035	Opening Year +5 years	Potential Cycle Demand-Opening Year	Potential Cycle Demand – Opening Year +5
Estuary	Outer Dublin	-	-	-	-
Seatown	Outer Dublin	109	113	765	819
Swords Central	Outer Dublin	138	148	1233	1320
Fosterstown	Outer Dublin	169	181	788	843
Northwood	Outer City	71	76	686	734
Ballymun	Outer City	210	225	973	1042
Collins Avenue	Outer City	190	203	1157	1238
Griffith Park	Outer City	56	60	411	440
Glasnevin	Outer City	170	182	496	531
Mater	City Centre	119	127	164	175
O'Connell St	City Centre	239	256	236	253
Tara St	City Centre	403	431	973	1041
St Stephen's Green	City Centre	283	303	871	932
Charlemont	City Centre	372	398	808	865

### **Station and Provision**



Station	No. of spaces	Location of bike parking
Estuary	254	Next to station
Seatown	480	Landscaped plaza, in front of the entrance to the station with a building for bicycle storage offset with a provision for 240 bicycles. A further 240 bicycles spaces will be provided located along east side of the station building.
Swords Central	942	Bicycle storage building is proposed, offset and slightly in front of the plaza on one of the access routes to the station, which is designed to accommodate 471 bicycles. A further 471 spaces will be provided around the station
Fosterstown	422	Bicycle storage building provided in front of the station building. The building will provide covered storage for 211 bicycles with a further 211 spaces provided at locations around the station but set back from pedestrian desire lines.
Northwood	204	Half located in purpose-built building; half accommodated by stands around the station
Ballymun	292	Half in stands and half in a cycle and café building
Collins Avenue	370	Half will be provided within a covered structure, and the remainder in stands;
<b>Griffith Park</b>	176	Half will be located in a bicycle parking facility and the remainder in on-street bicycle stands;
Glasnevin	120	Cycle park area provided on the existing Brian Boru car park
Mater	70	Located on a shared surface plaza to Eccles St
O'Connell St	N/A	No cycle spaces provided
Tara St	256	Half will be provided under cover and half located in bicycle racks
St Stephen's Green	82	All proposed within the vicinity of the station
Charlemont	162	Located on surface section on the public plaza at Dartmouth Road

### **Dynamic Analysis**



- Dynamic Analysis has been undertaken at each station to account for inward and outward cycle trips at each station.
- This change of parking demand captures those who arrive at stations for long term parking and leave their bicycle for a full day, but also people taking bikes from the station.
- Each station has been analysed for the whole 12-hour period with inflows and outflows of bicycles to map the expected demand at any hour period.

Station	Max Demand	Proposed Spaces
Estuary	0	254
Seatown	363	480
Swords Central	749	942
Fosterstown	553	422
Dublin Airport	0	72
Dardistown	0	0
Northwood	393	204
Ballymun	570	292
Collins Ave	276	370
Griffith Park	119	176
Glasnevin	210	120
Mater	59	70
O'Connell	121	0
Tara	705	256
St Stephen's Green	745	82
Charlemont	446	162

### **Summary**



- The demand led approach is ideal in this situation due to varying levels of users at each station.
- For all stations along the R132, cumulative cycle parking demand is met with reasonable balance i.e some stations are slightly above the forecasts, and some slightly below.
- Plan and Strategy Lead approach -> Cycle Parking in Towns and Cities
- Multi- Agency Approach
- Local Authorities developing Cycle Parking Strategies



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