

22111-03-004

PROPOSED RESIDENTIAL DEVELOPMENT  
MAYESTON S179A,  
POPPINTREE, DUBLIN 11

## MOBILITY MANAGEMENT PLAN

for

**Fingal County Council**

October 2023

**ROADPLAN**

**CONSULTING**

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# 1 Introduction

## 1.1 INTRODUCTION

Roadplan Consulting were commissioned by O'Briain Beary Architects (OBBA) on behalf of the Fingal County Council to prepare a Mobility Management Plan for a proposed residential development at Mayeston, Poppintree, Dublin 11.

In preparing this Plan Roadplan Consulting have taken account of the guidance provided in document 'Mobility Management Plans - DTO Advice Note' 2002 and has made reference to:

- The 'Fingal Development Plan 2023 - 2029',
- 'Sustainable Urban Housing: Design Standards for New Apartments (2022)' by the Department of Housing, Local Government and Heritage (DHLGH).

## 1.2 THE DEVELOPMENT

The proposed development relates to a site of c.1.35ha located within existing residential development referred to as Mayeston, Poppintree, Dublin 11. The proposed development is located north of the R104 St Margaret's Road and is bound by the M50 motorway to the north, Mayeston Green and Silloge Green to the east, Mayeston Downs to the south, and to the west by public open space. The proposed development is accessed off the R104 and Mayeston Rise. See *Figure 1.1 Site Map* below.



**Figure 1.1** Site Map

The proposed development consists of a creche and apartment blocks, as shown in *Table 1.1 "Development Schedule"*.

Item	Units	Total
Creche	m <sup>2</sup>	<b>387m<sup>2</sup></b>
Apartment blocks:		
– 1 Bed units	39	<b>119</b>
– 2 Bed units	68	
– 3 Bed units	12	

**Table 1.1 - Development Schedule**

Proposed development will also include for car parking, cycle parking, pedestrian and cycle links, storage, services and plant areas. Landscaping will include for high quality private open space, communal amenity areas and public open space provision.

A layout of the proposed development and its access point are shown on the Architect's drawing which is contained in *Appendix A – Drawings*.

## 2 Travel Characteristics

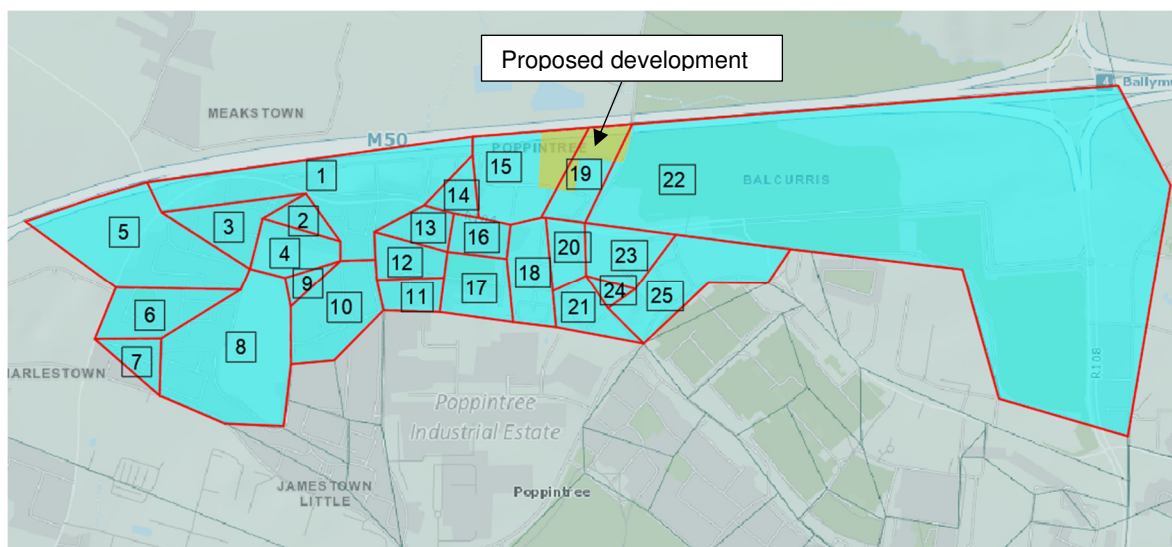
### 2.1 CSO

The Central Statistics Office website <http://census.cso.ie/sapmap/> have been used to gather data for existing travel patterns. Data gathered is from the 2022 census.

To determine the travel pattern of the proposed development an assessment has been based on the characteristics of similar existing areas near the site.

Areas that are considered to be similar to the proposed development are as shown on the *Figure 2.1* below. Labelled areas are similar in to the proposed development, so it is appropriate to assume that the mixed development will have similar travel patterns. The proposed development site is located within the small areas numbered 15 and 19 on *Figure 2.1* below.

*Table 2.1* shows existing travel mode splits for the combined areas.



**Figure 2.1** - Small size CSO areas

Travel Mode	No. of Person	Percentage
On Foot	402	5.9%
Bicycle	269	3.9%
Bus, minibus or coach	1484	21.7%
Train, DART or LUAS	46	0.7%
Motorcycle or scooter	20	0.3%
Car Driver	1729	25.3%
Car passenger	1318	19.3%
Van	121	1.8%
Other (incl. lorry)	13	0.2%
Work mainly at or from home	276	4.0%
Not stated	1149	16.8%
Total	6827	100.0%

**Table 2.1** - Travel mode splits for population aged 5 years and over by means of travel to work, school or college

The proposed development is expected to have the same modal split as listed in Table 2.1.

## 2.2 ESTIMATED NUMBER OF TRIPS

The TRICS database has been used to predict daily trip generation to and from the proposed development. Full details of the TRICS information used for the assessments are provided in Appendix B - TRICS information.

Item	No. of units	Daily trip rate	No of trips
Apartment blocks	119	6.2 / unit	738
Creche	387 m <sup>2</sup>	60.882 / 100 m <sup>2</sup>	236
		<b>Total</b>	<b>974</b>

**Table 2.2** - Estimated daily number of trips for residents

The predicted number of daily trips is 974.

## 2.3 TARGETS

The travelling habits of users cannot be easily influenced by the plan. Residents of the residential section of the development often require the use of their car, however they will be encouraged to use sustainable and active travel modes where feasible.

Considering the development location, the following initial target modal splits has been established.

Travel Mode	On foot	Bicycle	Public transport	Car, van, scooter
Existing*	5.9%	3.9%	22.4%	46.7%
<b>TARGET</b>	<b>15%</b>		<b>35%</b>	<b>45%</b>

\*Excluded 'Not stated', 'Other' and 'Work from home' categories

**Table 2.3** - Mobility targets

These targets should be considered as preliminary targets. It is a recommendation to carry out a detailed travel survey within 12 months of the development being occupied.

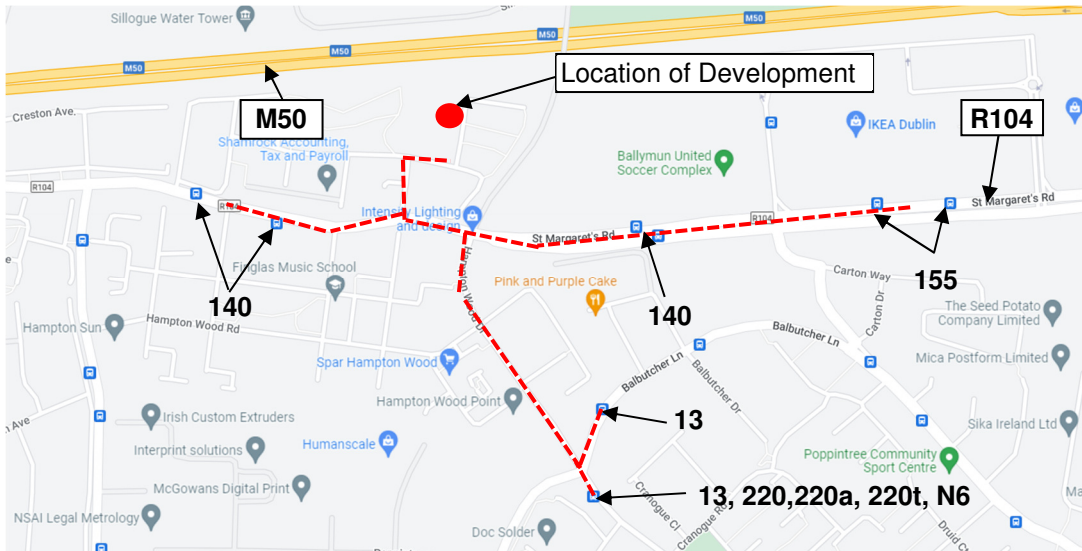
The targets require ongoing work and commitment without which they will not be achieved. It is recognized that some people will be easier to convert to alternative modes of travel than others and the more that is done to facilitate the use of those alternative modes of travel, the more they will be used.

### 3 Travel Facilities

The road network surrounding the development site provides good connectivity to the Greater Dublin Area. Being located approximately 8km from the city centre, the site offers good conditions for the provision of sustainable travel measures.

#### 3.1 BUS

The proposed development is well served by existing bus services.



**Figure 3.1** Bus Stops and route numbers in the vicinity of the development

There are three number Bus stops located along the R104 St Margaret’s Road, only 300m – 850m from the development, or 4 to 10min walking distance. There are also two bus stops on Balbutcher Drive and Belclare Park, located approx. 650m south of the development, which offer good connection to many destinations (as listed in *Table 3.1* below). The location of these bus stops and the bus route numbers serving these stops are shown on *Figure 3.1*. The red lines on that figure indicate the walking routes between the sites and the bus stops.

More details on bus routes and destinations can be found in the following *Table 3.1* and *Figure 3.2*.

Bus route no	Destinations
140	Ballymun (IKEA) - Palmerston Park (Rathmines)
13	Harristown - Grange Castle
220, 220a	DCU - Lady’s Well Road via Blanchardstown Shopping Centre
N6	Finglas Village - Naomh Barróg GAA Kilbarrack (towards Howth)
155	Ballymun (IKEA) - Bray via City centre

**Table 3.1** Bus route number and destinations

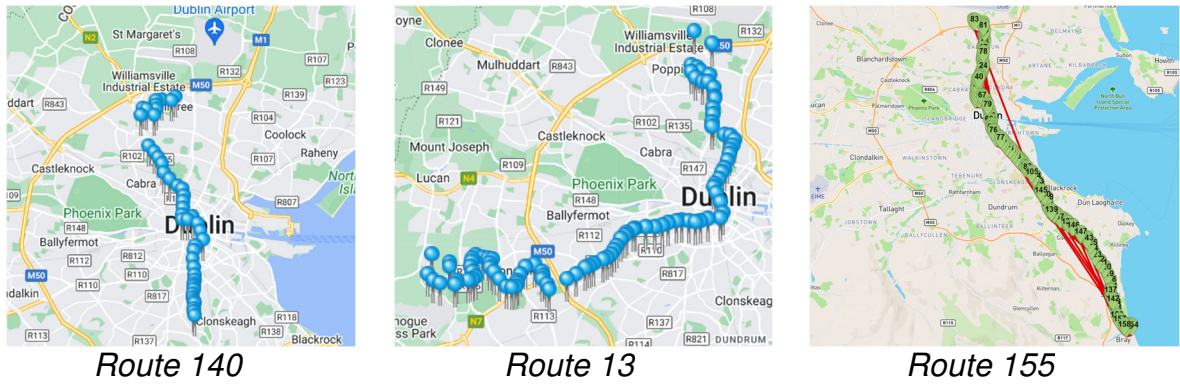


Figure 3.2 Some of the Bus Routes serving the development

The service frequency is approx. every 10 min during the AM and PM peak hour on most of these routes, and 10 to 20 min during the off-peak period.

Full details on Dublin Bus services can be found on [www.dublinbus.ie](http://www.dublinbus.ie). For real-time information, or to plan a journey, the website [www.transportforireland.ie](http://www.transportforireland.ie) can be used.

The National Transport Authority in conjunction with Dublin Bus launched the BusConnects network for Dublin in June 2021. Spine E2 route will serve the proposed development. Route is shown on Figure 2.3 below (source [busconnects.ie](http://busconnects.ie) website).

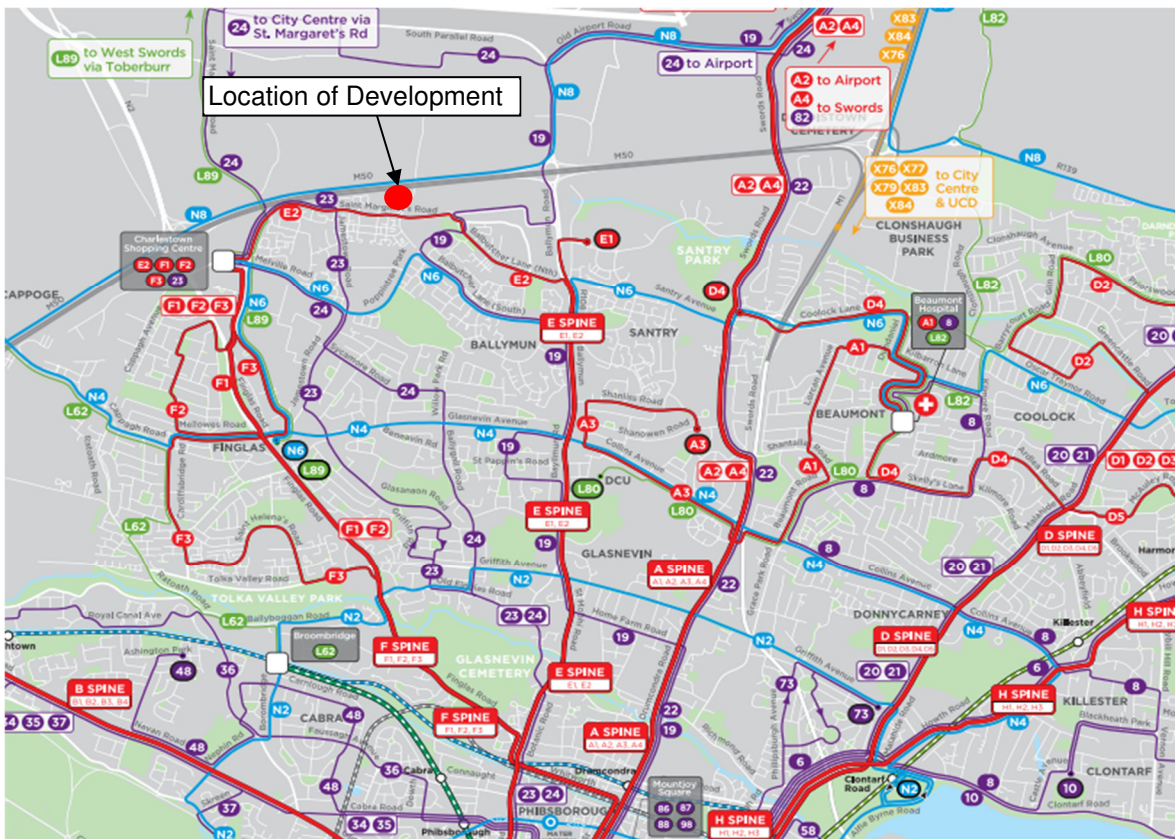


Figure 3.3 Bus Connect E-spine route serving the development



Upgrading of the bus network, as part of the overall BusConnects project, has been rolled out in phases. So far, five phases have commenced. E-Spine is yet to start, but is expected to do so in the near future.

### 3.2 RAIL

The proposed development is not served by existing rail services.

Figure 3.4 below shows the MetroLink - proposed high-frequency rail line running from Swords to Charlemont, linking Dublin, Irish Rail, DART, Dublin Bus and Luas services. The closest stop to reach MetroLink from the proposed development is Northwood stop, located 1.6km east on R108, which is equivalent to 20min walking distance.

The current status of the proposed MetroLink is described in the publication ‘*Dublin MetroLink Project Market Update October 2023*’, a TII document. It states that the project is in the market consultation phase at present and that it is anticipated that publication of a contract notice for the construction of MetroLink is expected in early 2024.

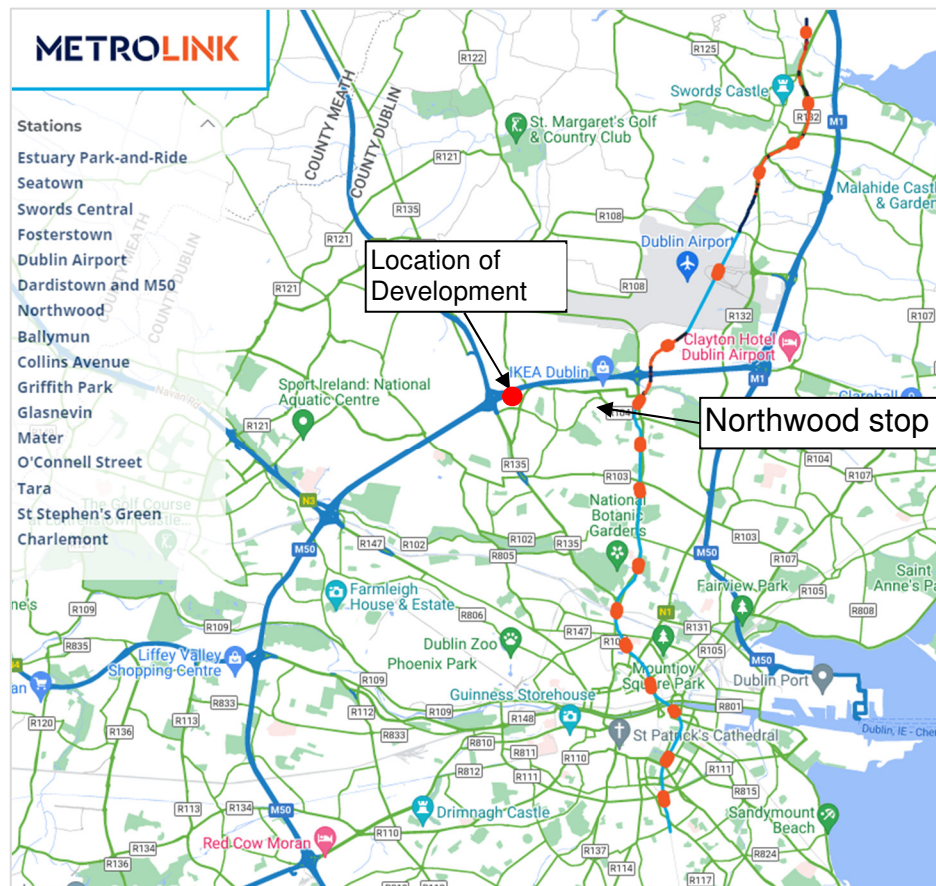
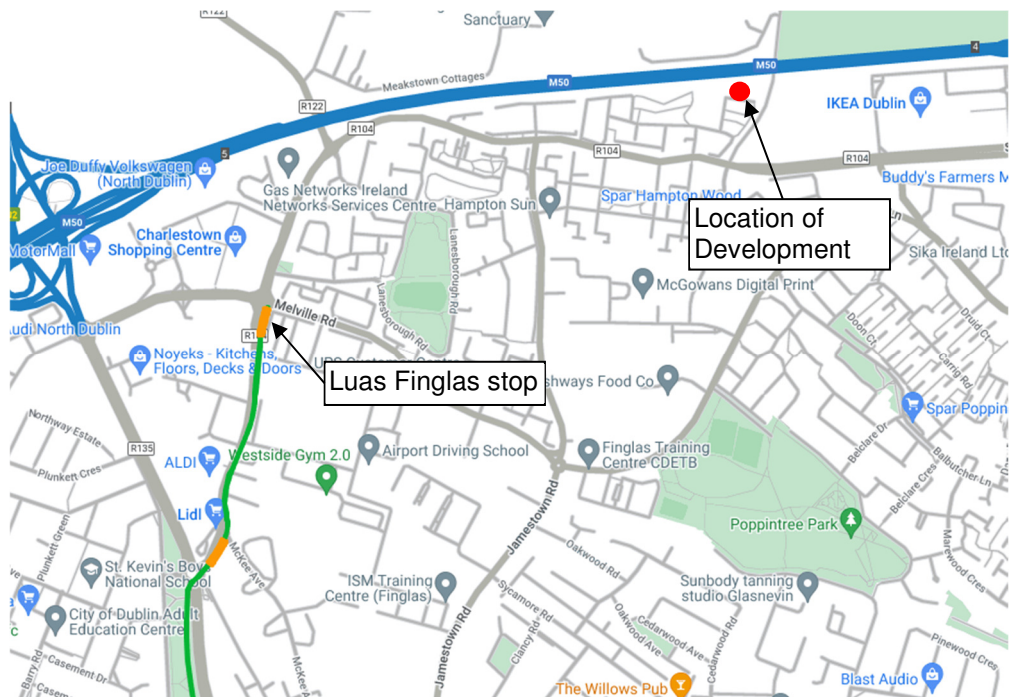


Figure 3.4 Extent of the proposed Metro Link

Figure 3.5 below shows the proposed Luas Finglas line, extension to existing Luas Green Line. The last Luas Finglas stop is the closest to from the proposed development, located 1.6km east on R108, which is equivalent to 20min walking distance.

The current status of the proposed *Luas Green Line Extension to Finglas* is described on the website [luasfinglas.ie](http://luasfinglas.ie), where it is stated that two non-statutory public consultations on the Emerging Preferred Route occurred in 2020, that the Preferred Route was identified in 2021 and that the design of the Preferred Route is in progress.



**Figure 3.5** Extent of the proposed Luas Finglas

### 3.3 CYCLING

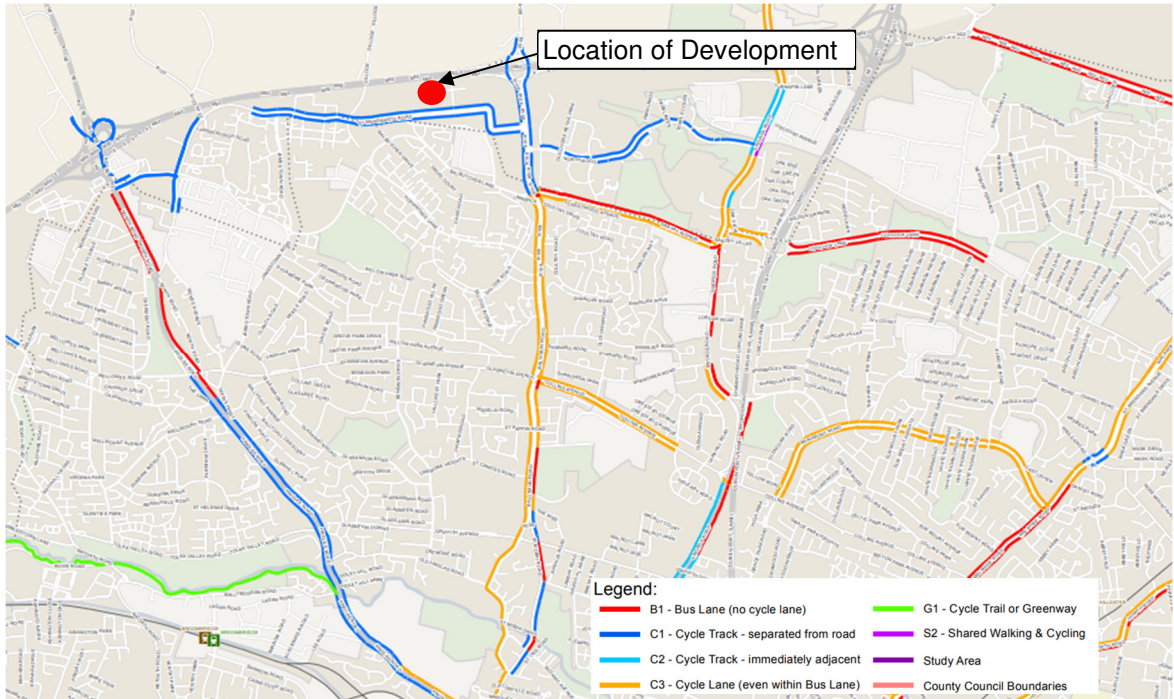
Figure 3.6 shows the existing cycle network in Greater Dublin area. The location of the development site provides good accessibility via cycle mode.

Figure 3.7 shows the planned cycle infrastructure for the immediate area. It can be noted that the existing cycling facilities along St Margaret's Road are considered to be feeder route to the proposed N05 Secondary route, connecting Finglas West and Santry.

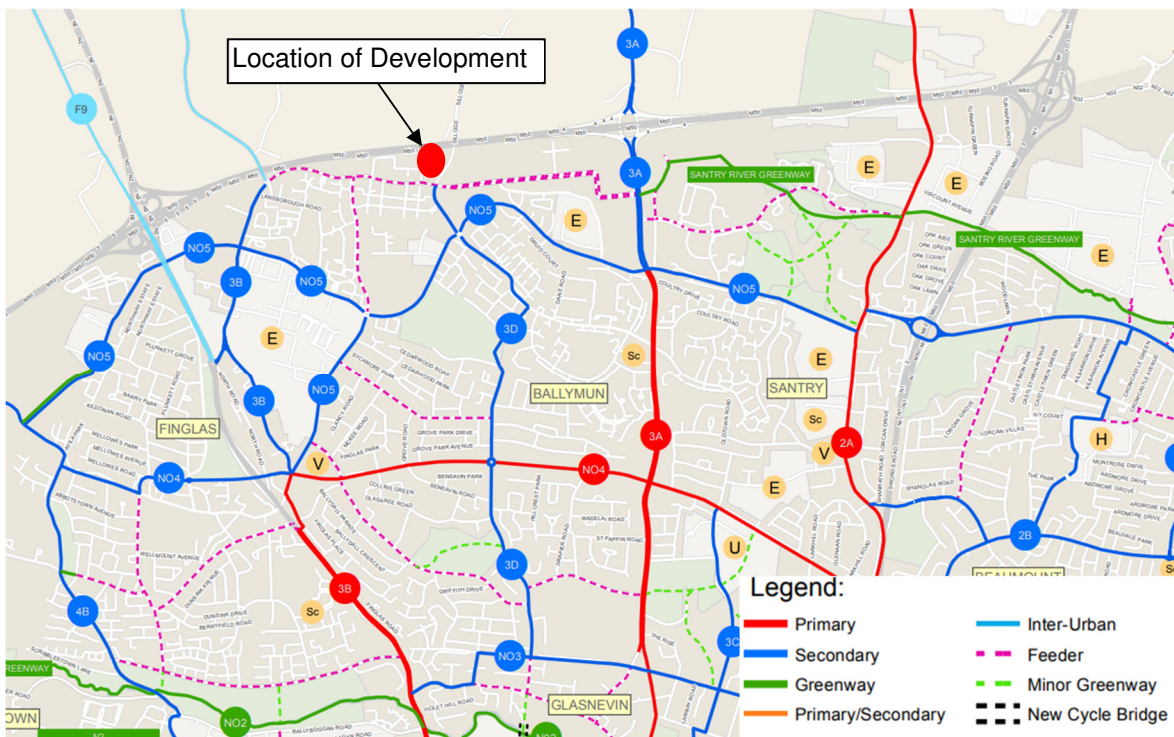
Parking for 444 bicycles is being provided on site, with a spread of internal and external parking locations throughout the development. This includes for 358 long stay / internal bike provision and 86 visitor bicycle parking places.

Long-stay bike parking is located in secure rooms, either in stacked allocated bike lockers or in a double-stacked arrangement. Storage rooms have been sized to accommodate this equipment. Bike stores are generally internal and adjacent the

main entrance, apart from one external bike store adjacent Block B and the bike locker store adjacent Block E. Spaces for cargo bikes, e-charging points, maintenance facilities and bike wash facilities are provided.



**Figure 3.6** Extent of existing cycle lane provision (GDA Cycle Network Plan)



**Figure 3.7** Planned cycle facilities (GDA Cycle Network Plan)

The Department of Housing, Local Government and Heritage (DHLGH) issued in 2022 the ‘Sustainable Urban Housing: Design Standards for New Apartments’. The standard is aiming to promote cycling for urban living and to make it ‘...fully integrated into the design and operation of all new apartment development schemes’.

As shown on Architect’s drawings, provision of bike parking is in accordance with the *Sustainable Urban Housing: Design Standards for New Apartments 2022* standard requirements.

### 3.4 WALKING

The proposed development is located within a 3km radius from Santry, Finglas, Charlestown and DCU which makes the site easily accessible by walking. The public footpaths surrounding the proposed development provide an important pedestrian route between the development and public transport service.

The majority of the road junctions in the area are signalised and provide good pedestrian crossing facilities in the form of drop kerbs, tactile paving and pedestrian refuge islands at the larger junctions.

The proposed development will have pedestrian access from Mayeston Downs and Mayeston Green via Mayeston Rise onto St Margaret’s Road, as shown on Architect’s drawing included in Appendix A.

Links to various points of interest in the area are shown in *Table 3.2*. Good pedestrian connectivity will be a factor in encouraging residents and employees to travel by foot more as it will be convenient to do so.

Destination	Walking distance from Development
Centra	5 min
Ballymun United Soccer Complex	8 min
IKEA	10 min
Lanesborough Park	13 min
Poppintree Community Sport Centre	15 min
Charlestown Shopping Centre	20 min
St. Joseph's Senior National School	20 min

**Table 3.2** – Walking distances from development to various points of interest

### 3.5 CARS

Vehicular access to the development is via Mayeston Rise and the R104 St Margaret’s Road. The M50 motorway nearby is accessed either from the Ballymun or the Finglas junctions, each approx.1km from the development.

The speed limit on the R104 at the entrance to the site is 50km/h. Many of the side roads have a 30km/h limit, but no 30km/h sign is visible on the entrance road (Mayeston Rise) to this development.

The proposed development will have 73 car parking spaces available to serve the residents and creche occupants.

The proposed **68** spaces are provided to serve the new buildings (as requested by Development Plan). Additional **5** spaces represent relocation of existing spaces at Mayeston Green that are removed to allow access to the rear of the site. The result is a total of 73 car parking spaces.

These spaces are located as follows:

- West carparking court – 47 spaces, including 2 disabled and 5 EV spaces;
- East carparking court – 15 spaces, including 1 disabled and 10 EV spaces; also provided 8 motorcycle parking spaces.
- On street parking along the Mayeston Green - 9 spaces;
- On street accessible parking along the Mayeston Downs - 2 spaces.

Fronting the creche, there will be a 25m long set down area / visitor parking to serve parents dropping off and picking.

As per 'Fingal Development Plan 2023 – 2029', proposed development is considered to be in parking Zone 1 (proposed development is within 800m of Bus Connects spine route, or 1600m of an existing or planned Luas/Dart/Metro Rail station). More details on parking can be found in Section 3 of the 'Parking Assessment & Management Strategy' report (ref.no. 22111-03-003) included with this submission.

Provision of car parking spaces is in accordance with 'Fingal Development Plan 2023-2029'.

The Department of Housing, Local Government and Heritage (DHLGH) issued in 2022 the 'Sustainable Urban Housing: Design Standards for New Apartments'. The standard states that '*The quantum of car parking or the requirement for any such provision for apartment developments will vary, having regard to the types of location in cities and towns that may be suitable for apartment development, broadly based on proximity and accessibility criteria*'.

Design Standards for New Apartments' further recognise different parking needs for *Central and/or Accessible Urban Location, Intermediate Urban Locations* or *Peripheral and/or Less Accessible Urban Locations*. The proposed Mayeston Estate site can be defined as *Central and/or Accessible Urban Location*, therefore, as per standard, parking provision should be minimised.

Restricted parking availability for the proposed development will be the significant factor in encouraging more sustainable travel modes.

## 4 Proposed Measures

### 4.1 INTRODUCTION

The primary goal of this plan will be to facilitate and encourage a positive modal shift at the development towards sustainable modes of transport.

As proposed development consists of creche and residential area, proposed measures may vary.

Residential MMP is mainly looking at journeys made from a home to multiple and various destinations. This includes commuter-based trips, which have the greatest influence on traffic congestion during weekday AM and PM peak periods, as well as leisure trips.

The overall purpose of this plan for the proposed residential development is to minimise the proportion of single occupancy vehicle trips by promoting and increasing awareness on sustainable travel modes of travel as a part of a wider health and well-being agenda.

### 4.2 MOBILITY OBJECTIVES

The objectives for the proposed development can be summarised as follows:

- Reduction in car dependency as a mean of travel,
- Increased walking and cycling to work,
- Increased use of public transport where feasible,
- Increased commuting (car occupancy),
- Increased awareness and encouragement of the use of sustainable travel modes,
- Increased awareness of healthy lifestyles and exercise,
- Provision of travel information.

### 4.3 PROPOSED MEASURES

This section of the report outlines the measures and incentives that will be promoted on site to encourage all users to actively choose sustainable travel wherever practical.

#### 4.3.1 Development Design

The development is being designed with sustainable transport in mind. The proposed development will have multiple access points for pedestrians and cyclist. Beside the development access points from Mayeston Downs and Mayeston Green serving all users, pedestrians and cyclists will have additional access point from the neighbouring park located west of the development. This will ensure that the proposed development will integrate into the existing pedestrian and cycle facilities,

making use of the existing infrastructure which provides links to the remainder of the town.

One of the proposed measures for the development would be reducing the speed limit to 30km/h, if in line with Council's policy. It is proposed to provide a 'Slow Zone' sign within the proposed development.

A layout of the sign is shown on Photo 4.1.



**Photo 4.1**

#### 4.3.2 Mobility Manager

A Mobility Manager will be assigned by the Applicant prior to occupation of the Site. The creche should have also assigned Mobility Manager, member of the staff.

The Mobility Manager will be responsible for the implementation, administration and monitoring of the MMP. The Mobility Manager will be the first point of contact for residents/staff members for all matters regarding travel to and from site.

The responsibilities of the Mobility Manager will be:

- To develop and oversee the implementation of the initiatives outlined in the plan,
- Monitor the progress of the plan,
- To encourage and market the plan,
- Promote the social, economic and environmental benefits of sustainable travel, including journey sharing, car sharing, and local cycle walking schemes and events,
- Provide sustainable travel information including available bus and rail services and locations, as well as walking and cycling maps.

#### 4.3.3 Marketing and communications - Welcome Travel Pack

Measures that will be implemented to encourage residents of the proposed development to travel sustainably can be included in a Welcome Travel Pack. The Travel Pack will be provided to all new residents on occupation of the new development and all creche staff members with the purpose of providing them with a suitable level of information about their travel choices to and from the site.

The following Information can be included in Welcome Travel Pack:

- Health benefits of walking and cycling,
- Access maps showing the pedestrian and cycle routes in proximity to the site, including cycle parking locations, time to walk/cycle from key areas/nodes and nearby facilities,
- Access maps showing the local provision of public transport services, including the location of bus stops near the proposed development,
- Timetables for public transport and ticketing systems,
- Car sharing information,

- Local taxi information,
- Advice on ways to reduce the need to travel,
- Details of the benefits of journey sharing such as; reduced congestion, better air quality, reduction in traffic noise and cost savings.

#### 4.3.4 Marketing and communications - Travel Information Points

Set up an on-site notice boards - *Travel Information Points* - where all activities previously listed shall be displayed. Notice boards to be displayed in a prominent position within communal areas of the development and would be updated by the Mobility Manager at regular intervals.

Information to be displayed will include any promotional initiatives and activities, such as:

- Local travel information leaflets (in addition to the travel pack),
- Posters on active travel initiatives available in the area (e.g., cycle training, healthy walks, and any other national/local events),
- Posters on travel events like ‘National Bike Week’, ‘A Pedometer Challenge’, ‘Walk to School Week’, ‘Weekend Walk’ etc.
- Advertise the Government’s Cycle to Work Initiative ([www.bikescheme.ie](http://www.bikescheme.ie), [www.biketowork.ie](http://www.biketowork.ie)) which allows employees to purchase bicycles, bicycle equipment and safety equipment tax free and ensure that information is distributed amongst staff.

#### 4.3.5 Journey Sharing Scheme

Journey sharing schemes should be encouraged where possible. This includes not only private car use but also walking, cycling and public transport journeys which will be promoted to residents through the *Welcome Travel Pack*.

Promotion of car sharing in particular would be significant for residents that travel longer distances to work. Car sharing increases vehicle occupancy and reduces vehicle numbers. It offers people a more sustainable way of travelling by car while reducing transport cost and lead to less pollution.

Mobility Manager could organise events to introduce potential car-poolers from the residential development and help setting up a *Car Sharing Club* for interested residents.

#### 4.3.6 Public Transport

The publicity, marketing, and promotion of the public transport services will inform of the benefits of travelling by bus / train. The Mobility Manager shall ensure that residents are aware of local bus routes / timetables / maps.

#### 4.3.7 Managing Car Use

Measures that will be implemented to manage single-occupancy car use include:



- Promote journey sharing websites, and
- Provide information in ‘hard’ format regarding the financial and environmental costs associated with driving.

A limited amount of car parking for residents is proposed as the development will be accessible by sustainable travel modes which reduces the need to travel.

#### 4.3.8 Residents Association

Mobility Manager assigned by the Applicant should engage with new residents of the development to help them form a Residents Association.

The aim of the Association will be to promote the best interests of the residents of the area as well as to protect and improve conditions and amenities in the area. As the development approaches full occupation, more individuals residing in the development should join the group.

It is recommended for Residents Association to set up an online platform for easy communication – dedicated website, Facebook page, WhatsApp group or similar.

One of the very important aspects of the Association would be to promote this Mobility Management Plan and to partake in all the actions and initiatives.

#### 4.3.9 Use of Technology

Technology present a number of additional opportunities in relation to encouraging positive modal shift. Staff members and residents should be informed of a variety of potentially useful tools including the following:

- The NTA Journey Planner - Available on the NTA website and as a downloadable app, the journey planner provides a comprehensive list of travel options available from any origin/destination point in the country.
- Public Transport Providers - Each of the major public transport providers, including Dublin Bus, Bus Éireann and Irish Rail, now have their own dedicated app that can be downloaded.
- RealTime Ireland - This app provides real time arrival and departure listings for a range of public transport options from major rail stations to individual bus stops
- Taxi Apps - There are various apps available at present which simplify the process of booking taxis considerably to provide a much more accessible service.

Mobility Manager should promote use of these apps and inform on any new app that can be useful to residents and staff members.

## 5 Monitoring and Review

The monitoring strategy is important for assessing how effectively this Mobility Management Plan has been in achieving its aim, objectives and targets. It can help identify measures that are not meeting objectives and reallocate resources accordingly. This Plan is a continuous and evolving document requiring monitoring, review and revision to ensure that it remains relevant.

A travel survey should be undertaken within 12 months following occupation of the proposed development. This will give initial travel patterns and shape proposed targets. These surveys can be done face-to-face or online, and should be arranged by the Mobility Manager.

The results of the survey will identify travel patterns in terms of travel modes used. All residents should be informed of the results of the survey.

It is recommended that further monitoring of targets should take place every 3 to 5 years following full occupation in order to assess the change in modal split.

Reviews of the plan should include a full survey, providing valuable information for target setting and marketing target groups. The plan should evolve and develop, considering changing resident numbers and their preferences and needs. It is emphasised that failing to meet initial targets should not be seen as a failing, but rather an opportunity to engage and develop a more sustainable, successful and specific solution for all interested parties.

## 6 Conclusion

The location of the proposed residential development makes it convenient to adopt sustainable travel modes.

- It has good pedestrian and cycling connectivity with points of interest in the area/town (schools, shops);
- Footpaths are wide enough to accommodate higher number of pedestrians;
- Roads in the vicinity have cycle tracks / trails and good cycle connectivity to various points in town;
- The site is well-served by existing public transport links with several bus-stops located within walking distance.
- 73 car parking spaces are to be provided, which is deemed to be sufficient to serve the demand.
- There will be 240 cycle parking spaces in secure bicycle sheds and internally in buildings, with additional 118 spaces externally; a total of 358 spaces.

It is expected that the proposed development will:

- Generate 974 daily trips;
- Follow the preliminary targets as outlined in *Table 2.3* above, based on the 'existing' travel modal splits and the opportunities of the site.

Proposed measures as described in Chapter 4 intend to promote walking, cycling and public transport use, decrease car dependency and increase awareness of healthy lifestyles and exercise.

The success of the measures depends on the co-operation of all interested parties.

## **Appendices**

**Appendix A – Drawings**

**Appendix B – TRICS Information**

## TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION

Category : D - NURSERY

## VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
03	SOUTH WEST	
	BA BATH & NORTH EAST SOMERSET	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
09	NORTH	
	DH DURHAM	1 days
10	WALES	
	WR WREXHAM	1 days
11	SCOTLAND	
	EA EAST AYRSHIRE	1 days
14	LEINSTER	
	WT WESTMEATH	1 days

## Filtering Stage 2 selection:

Parameter: Gross floor area  
 Range: 230 to 850 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/00 to 27/11/08

Selected survey days:

Tuesday	5 days
Wednesday	1 days
Thursday	3 days
Friday	2 days

Selected survey types:

Manual count	11 days
Directional ATC Count	0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	6
Neighbourhood Centre (PPS6 Local Centre)	2
Free Standing (PPS6 Out of Town)	2

Selected Location Sub Categories:

Commercial Zone	2
Development Zone	1
Residential Zone	2
Village	1
Out of Town	2
No Sub Category	3

LIST OF SITES relevant to selection parameters

1	BA-04-D-01 WESTON ROAD	NURSERY, BATH	BATH & NORTH EAST SOMERSET
	BATH		
	Total Gross floor area:	825 sqm	
	Survey date:	THURSDAY 05/10/06	Survey Type: MANUAL
2	CA-04-D-01 CHAPEL STREET	NURSERY, CAMBRIDGE	CAMBRIDGESHIRE
	CAMBRIDGE		
	Total Gross floor area:	420 sqm	
	Survey date:	FRIDAY 05/11/04	Survey Type: MANUAL
3	DH-04-D-01 PEA ROAD	NURSERY, STANLEY	DURHAM
	STANLEY		
	Total Gross floor area:	750 sqm	
	Survey date:	TUESDAY 10/06/03	Survey Type: MANUAL
4	EA-04-D-01 ALTONHILL AVENUE	NURSERY, KILMARNOCK	EAST AYRSHIRE
	KILMARNOCK		
	Total Gross floor area:	592 sqm	
	Survey date:	THURSDAY 19/05/05	Survey Type: MANUAL
5	HC-04-D-01 STAG OAK LANE CHINEHAM BUSINESS PARK BASINGSTOKE	NURSERY, BASINGSTOKE	HAMPSHIRE
	Total Gross floor area:	725 sqm	
	Survey date:	THURSDAY 22/11/07	Survey Type: MANUAL
6	NF-04-D-01 MERIDIAN WAY	NURSERY, NORWICH	NORFOLK
	NORWICH		
	Total Gross floor area:	700 sqm	
	Survey date:	FRIDAY 25/05/07	Survey Type: MANUAL
7	NY-04-D-01 LONDON ROAD BARKSTON ASH NEAR TADCASTER	NURSERY, NEAR TADCASTER	NORTH YORKSHIRE
	Total Gross floor area:	245 sqm	
	Survey date:	TUESDAY 10/05/05	Survey Type: MANUAL
8	SF-04-D-01 IXWORTH ROAD THURSTON NEAR BURY ST EDMUNDS	NURSERY, NR BURY ST EDMUNDS	SUFFOLK
	Total Gross floor area:	600 sqm	
	Survey date:	TUESDAY 09/05/06	Survey Type: MANUAL
9	WM-04-D-01 SCHOOL ROAD YARDLEY WOOD BIRMINGHAM	NURSERY, BIRMINGHAM	WEST MIDLANDS
	Total Gross floor area:	850 sqm	
	Survey date:	WEDNESDAY 19/09/07	Survey Type: MANUAL
10	WR-04-D-01 LLAY ROAD CEFN-Y-BEDD NEAR WREXHAM	NURSERY, NEAR WREXHAM	WREXHAM
	Total Gross floor area:	230 sqm	
	Survey date:	TUESDAY 23/09/03	Survey Type: MANUAL



LIST OF SITES relevant to selection parameters (Cont.)

11	WT-04-D-01	NURSERY, ATHLONE	WESTMEATH
	DUBLIN ROAD		
	GARRycastle		
	ATHLONE		
	Total Gross floor area:	625 sqm	
	Survey date: TUESDAY	19/06/07	Survey Type: MANUAL

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY  
 VEHICLES  
 Calculation factor: 100 sqm  
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	9	599	2.170	9	599	1.076	9	599	3.246
08:00 - 09:00	11	597	6.629	11	597	5.181	11	597	11.810
09:00 - 10:00	11	597	3.155	11	597	3.810	11	597	6.965
10:00 - 11:00	11	597	1.143	11	597	1.189	11	597	2.332
11:00 - 12:00	11	597	1.798	11	597	1.783	11	597	3.581
12:00 - 13:00	11	597	2.530	11	597	2.316	11	597	4.846
13:00 - 14:00	11	597	1.280	11	597	1.265	11	597	2.545
14:00 - 15:00	11	597	2.194	11	597	1.798	11	597	3.992
15:00 - 16:00	11	597	1.173	11	597	2.133	11	597	3.306
16:00 - 17:00	9	599	2.578	9	599	2.207	9	599	4.785
17:00 - 18:00	9	599	5.211	9	599	5.861	9	599	11.072
18:00 - 19:00	8	645	0.484	8	645	1.918	8	645	2.402
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
<b>Total Rates:</b>			30.345			30.537			60.882

Parameter summary

Trip rate parameter range selected: 230 - 850 (units: sqm)  
 Survey date range: 01/01/00 - 27/11/08  
 Number of weekdays (Monday-Friday): 11  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 4

**TRIP RATE CALCULATION SELECTION PARAMETERS:**

Land Use : 03 - RESIDENTIAL  
Category : D - FLATS FOR RENT

Selected regions and areas:**12 NORTHERN IRELAND**

NI NORTHERN IRELAND 1 days

**Main parameter selection:**

Parameter: Number of households  
Range: 10 to 54 (units: )

Date Range: 01/01/96 to 19/11/03

Selected survey days:

Wednesday 1 days

Selected survey types:

Manual count 0 days  
One way ATC count 1 days

TRIP RATE for Land Use 03 - RESIDENTIAL/D - FLATS FOR RENT

**Calculation factor: 1 HHOLDS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate	No. Days	Ave. HHOLDS	Trip Rate
00:00 - 01:00	1	10	0.00	1	10	0.00	1	10	0.00
01:00 - 02:00	1	10	0.00	1	10	0.00	1	10	0.00
02:00 - 03:00	1	10	0.00	1	10	0.00	1	10	0.00
03:00 - 04:00	1	10	0.00	1	10	0.00	1	10	0.00
04:00 - 05:00	1	10	0.00	1	10	0.00	1	10	0.00
05:00 - 06:00	1	10	0.00	1	10	0.00	1	10	0.00
06:00 - 07:00	1	10	0.00	1	10	0.00	1	10	0.00
07:00 - 08:00	1	10	0.10	1	10	0.20	1	10	0.30
08:00 - 09:00	1	10	0.40	<b>1</b>	<b>10</b>	<b>0.60</b>	<b>1</b>	<b>10</b>	<b>1.00</b>
09:00 - 10:00	1	10	0.10	1	10	0.30	1	10	0.40
10:00 - 11:00	1	10	0.20	1	10	0.20	1	10	0.40
11:00 - 12:00	1	10	0.10	1	10	0.10	1	10	0.20
12:00 - 13:00	1	10	0.30	1	10	0.30	1	10	0.60
13:00 - 14:00	1	10	0.30	1	10	0.10	1	10	0.40
14:00 - 15:00	1	10	0.20	1	10	0.20	1	10	0.40
15:00 - 16:00	1	10	0.00	1	10	0.20	1	10	0.20
16:00 - 17:00	1	10	0.30	1	10	0.10	1	10	0.40
17:00 - 18:00	1	10	0.30	1	10	0.20	1	10	0.50
18:00 - 19:00	<b>1</b>	<b>10</b>	<b>0.60</b>	1	10	0.20	1	10	0.80
19:00 - 20:00	1	10	0.10	1	10	0.20	1	10	0.30
20:00 - 21:00	1	10	0.00	1	10	0.00	1	10	0.00
21:00 - 22:00	1	10	0.00	1	10	0.20	1	10	0.20
22:00 - 23:00	1	10	0.10	1	10	0.00	1	10	0.10
23:00 - 24:00	1	10	0.00	1	10	0.00	1	10	0.00
Daily Trip Rates:			3.10			3.10			6.20

**Parameter summary**

Trip rate parameter range selected: 10 - 54 (units: )  
 Survey date date range: 01/01/96 - 19/11/03  
 Number of weekdays (Monday-Friday): 1  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Optional parameters used in selection: NO  
 Surveys manually removed from selection: 9