Proposed Part VIII Development
Fonthill Road
County Dublin

Traffic Report

Prepared
for
South Dublin County Council

March 2022

TPS M Moran & Associates
Rathasker Road, Naas, Co. Kildare.
Traffic and Transportation Planning Consultants

1.0 Introduction.

1.1 TPS M Moran & Associates have been retained to undertake a Traffic Report relating to a proposed Part VIII Development consisting of 7 residential units on lands off the Fonthill Road, County Dublin.

1.2 The proposed residential development consists of 7 residential units of which 5 number are four bedroom detached houses, 1 unit is a three-bedroom semi-detached house, with 1 unit is a four-bedroom semi-detached house.

1.3 The existing development site has an area of 0.36 hectares and is located to the west of the Fonthill Road and to the south of the N4 national primary route connecting Dublin with the west of the country. The site currently operates as a temporary accommodation site.

2.0 Background Information.

2.1 The former National Roads Authority now, Transport Infrastructure for Ireland published the 'Traffic and Transport Assessment Guidelines' in September 2014 which provided specific advice on when a Traffic Impact Assessment should be undertaken.

2.2 These guidelines identified thresholds for land use development based on land use trip attraction or land use trip generation which impact adjacent road links or junctions receiving the proposed development.

2.3 These guidelines also provided advice on acceptable traffic modelling programs, traffic data sources, road safety issues to be considered and pre-planning discussions with the relevant Local Authority. These thresholds are set down below.

Thresholds.

This section considers the thresholds at which the production of Traffic and Transport Assessments in relation to planning applications is recommended.

It is important to identify proposals that will affect National Roads, and which may have other transport implications at the earliest stages of development planning and design.

This will help to ensure that additional costs and delays to the developer are avoided and facilitate best practice evaluation by planning authorities, the NRA and other transport agencies.

Table 1.4 of the Traffic Management Guidelines (DoT/DoEHLG/DTO, 2003) gives the thresholds above which a Transport Assessment is automatically required. The thresholds concerned are reproduced below.

- *Traffic to and from the development exceeds 10% of the traffic flow on the adjoining road.*
- *Traffic to and from the development exceeds 5% of the traffic flow on the adjoining road where congestion exists, or the location is sensitive.*
- *Residential development in excess of 200 dwellings.*
- *Retail and leisure development in excess of 1,000m2.*
- *Office, education and hospital development in excess of 2,500m2*
- *Industrial development in excess of 5,000m2*
- *Distribution and warehousing in excess of 10,000m2*

2.4 While the proposed 7 residential unit development is well below these thresholds which will be discussed further within this report, we consider it worthwhile to outline the likely trip generation and traffic impact of this small residential development.

3.0 Scope of the Traffic Report.

3.1 In this report we will identify the existing road and traffic conditions and assess the relative level of impact the proposed development is likely to have on the local road network. We will also identify how the traffic associated with the proposed residential development can be accommodated on the adjacent road network.

3.2 The methodology used within this TIA complies with best practice for Traffic Impact Assessments indicated within key publications, which include:

- 'Traffic and Transport Assessment Guidelines' National Roads Authority (May 2014).
- 'Guidelines for Traffic Impact Assessments' The Institution of Highways and Transportation.
- The Design Manual for Urban Roads and Streets.

3.3 In this report the existing roads and traffic conditions in the vicinity of the proposed residential development site will be identified. The relative level of impact the proposed development is likely to have on the local road network will be assessed.

3.4 In this report comments will also be made on the proposed vehicular site access arrangements to serve the proposed residential development. In addition, this report, which addresses the likely traffic impact of the proposed development, will generally be structured as follows:

- Existing Site Former Land Uses.
- Assessment of the existing roads and traffic conditions on the road network in the vicinity of the proposed development site.
- Assessment of the trip rates associated with the proposed residential development.
- Assignment of the trip distribution patterns associated with the proposed development onto the adjacent road network.
- Design Manual for Urban Roads and Streets and Proposed Site Access.
- Proposed site access arrangements.
- Car Parking Provision.
- Swept Path Assessments.

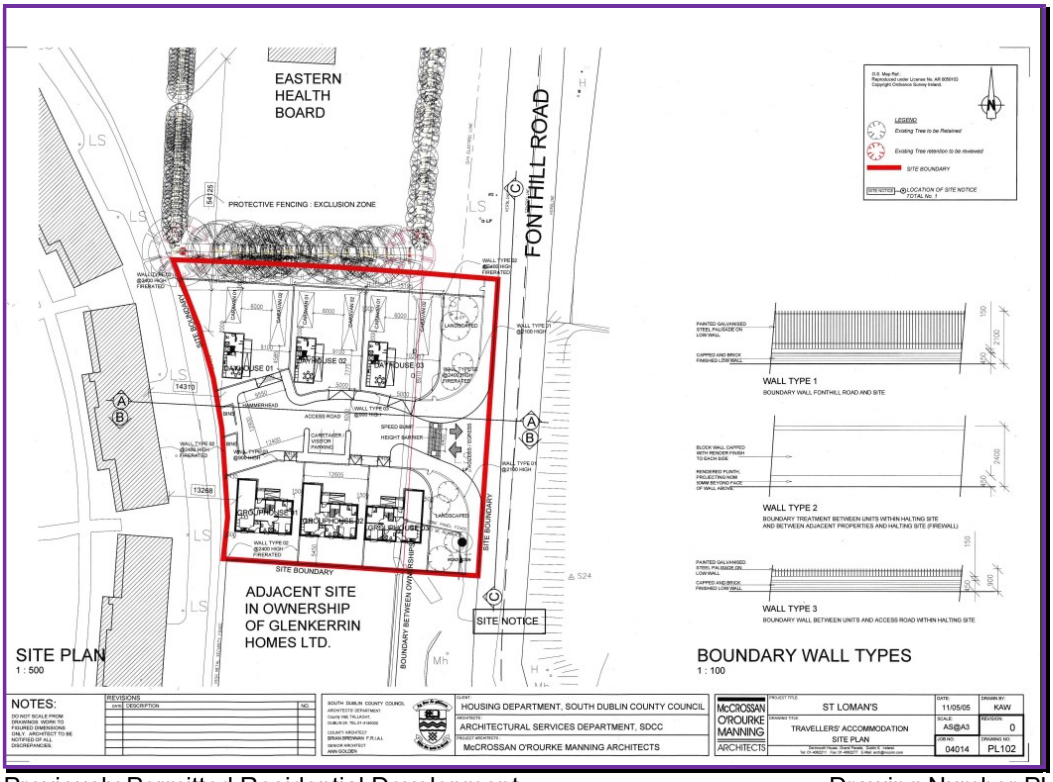
3.5 Background information used within this report has been derived from technical information and layout plans prepared by McCrossan O'Rouke Manning Project Architects, for this development proposal.

4.0 Previously Permitted Residential Development.

4.1 In May 2005 a planning application was lodged by Glenkerrin Homes Ltd with South Dublin County Council seeking approval of 6 residential units on this site. This planning application was approved in under Planning Reference: SD05/0090 but to date, this development has not been implemented.

4.2 Specific to the traffic matters relating to this planning application the permitted site access took the form of a simple priority T junction off the Fonthill Road, which was located midway along the eastern boundary of the site.

4.3 The general layout and location of these previously permitted 6 residential units are shown outlined in red within McCrossan O'Rourke Manning Drawing Number PL102 below.



Previously Permitted Residential Development. Drawing Number PL102.

5.0 Existing Road, Traffic Conditions and Public Transport.

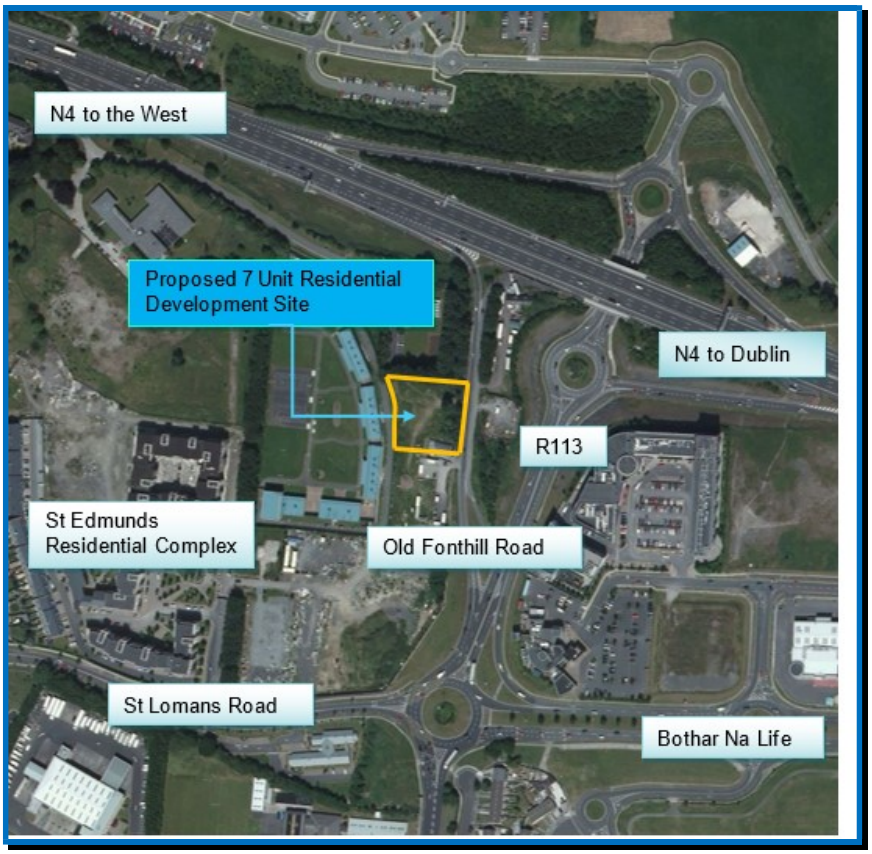
Existing Road Conditions.

5.1 The proposed development site which relates to this planning application is located some 3.3kms to the east of Lucan Village and some 3.0kms to the west of Palmerstown Village and is currently accessible from the Fonthill Road by means of a simple priority T junction.

5.2 This section of the Fonthill Road operates as a 50kph two-way distributor route mainly providing access to the N4 to the north from the Fonthill Road and a small number of residential dwellings accessing the R113 and the broader road network to the south.

5.3 To the south of the site these roads provide access to numerous commercial and retail developments including the Liffey Valley Shopping Centre, located approximately 1.3km to the east of the application site.

5.4 The location of the proposed 7 residential unit development site is shown outlined in yellow within Map 1.0 below:



Development Site Location. Map 1.0

Existing Pedestrian, Cyclist and Public Transport Provision.

5.5 The proposed development site is located within an area that is well served by pedestrian, cyclist and public transport facilities.

5.6 Footpaths of 2.0 metres in width are provided on both sides of the R113 to the south of the application site. The footpaths along this road connect with footpaths and pedestrian crossings on all road links and junctions located to the south and east of this development. These existing pedestrian links enable pedestrians to safely walk from the existing land use developments to surrounding commercial and retail developments, including the Liffey Valley Shopping Centre which is approximately a 12-minute walk to the east of the site. Dedicated cycle paths are provided upstream and downstream of St Loman's Road, which incorporates appropriate surfacing, signage, markings and crossings.

5.7 Further cycle proposals are to be developed to connect with the National Transport Agency, Greater Dublin Area Cycle Network Plan which is a proposal comprising the Urban Network, Inter-Urban Network and Green Route Network for each of the seven Local Authority areas made up of the Greater Dublin Area which includes Dublin City Council, South Dublin County Council, Dun Laoghaire Rathdown County Council, Fingal County Council, Meath County Council, Kildare County Council and Wicklow County Council.

5.8 The application site is located to the north of St Loman's Road, which accommodates a bus layby adjacent to the eastbound carriageway of this road. The site also benefits from being located adjacent to the Lucan QBC located along the N4 to the northeast of the application site which runs from Lucan to the city centre, providing a connection with the Luas, Intercity and suburban rail services at Heuston Station.

5.9 This QBC accommodates numerous Dublin Bus services including the following set out within Table 1.0 below:

Bus	Route
40	Finglas To Liffey Valley
40b	Parnel Street to Liffey Valley
76a	Blanchardstown to Liffey Valley
239	Blanchardstown Town Centre to Liffey Valley
25	Merrion Square to Lucan
25a	Lucan to Merrion Square
25b	Adamstown to Merrion Square
25x	Lucan to UCD Bellfield
66	Maynooth to Merrion Square
66a	Leixlip to Merrion Square
66b	Leixlip (Castletown) to Merrion Square
66x	Maynooth to Bellfield
67x	Celbridge to Bellfield

Existing Bus Routes Table 1.0

5.10 The Lucan to City Centre QBC is identified by the National Transport Authority within their Bus Connects Report of 2018 as a core bus route with the objective …. *"to fundamentally transform Dublin's bus system, so that journeys by bus will be fast, reliable, punctual, convenient and affordable in addition to radically enhancing our cycling infrastructure."*

5.11 The Lucan to City Centre QBC is within the National Transport Agency Liffey Valley to Dublin City Centre Bus Connect Route 6 which, specific, to the location of the development site proposes improved public transport links to the existing bus corridor on the N4 bus stop location adjacent to Liffey Valley Shopping Centre.

5.12 The latest proposals include a significant improvement to the bus stop provision in the vicinity of the Liffey Valley Shopping Centre. The bus stops themselves are moved some 150m further west, segregated from the adjacent N4 carriageway and increased in length.

5.13 To better serve the increased bus stop capacity a new footbridge is proposed adjacent to the new bus stop locations, some 200m further west from the existing footbridge. The position of this new bridge aligns with the proposed public transport interchange within the Liffey Valley Shopping Centre. The relocation of the bus stops allows for an increased weaving length for all eastbound traffic approaching the M50 interchange and for all westbound traffic exiting the M50 interchange. The existing foot/cycle bridge will be retained with improved connections to the new two-way cycle track along Old Lucan Road.

5.14 In addition, as part of the Bus Connect Route 7 Liffey Valley to City Centre it is proposed to commence this bus corridor at a new bus interchange facility on the northern boundary of the Liffey Valley Shopping Centre.

5.15 The Liffey Valley Core Bus Corridor (CBC) commences at a new terminus adjacent to the Liffey Valley Shopping Centre and is routed along the distributor roads to the west and south of the Liffey Valley Shopping Centre.

5.16 Priority for buses is provided along the entire route, consisting primarily of dedicated bus lanes in both directions with alternative measures proposed at particularly constrained locations.

6.0 Proposed Residential Development Trip and Traffic Generation.

6.1 In order to assess the likely traffic associated with these 7 residential units we have reviewed this small residential development within the TRICS 2021(b) trip rate database (Trip Rate Information Computer System).

6.2 TRICS 2021(b) is a database that uses survey information to estimate traffic generation for planning purposes. The database consists of over 7,500 traffic surveys, which therefore yields empirical rather than theoretical trip rate generation figures.

6.3 The TRICS 2021(b) database output file for the proposed 7 residential units derived from similar residential sites in Ireland is attached within Appendix 1.0 to this report. A summary of the TRICS 2021(b) output file for this proposed residential development is shown in Table 2.0 below.

TOTAL VEHICLES | Estimate TRIP rates

Survey Start/End: 07:00-19:00
Trip rate parameter range available: 8 - 48 (units:)

State TRP Figure & Extrapolate Results | ON

Estimated TRIP rate value per 7 DWELLS
Estimated TRIP rates shown in shaded column (for 7 DWELLS)

TRIP RATE VALUE PER 1 DWELLS	ARRIVALS Total Rate: 2.546 Peak: 17:00-18:00			Total 17.814	DEPARTURES Total rate: 2.478 Peak: 17:00-18:00			Total 17.343	TOTALS Total rate: 5.024 Peak: 17:00-18:00			Total 35.157
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip rate
00:00-01:00												
01:00-02:00												
02:00-03:00												
03:00-04:00												
04:00-05:00												
05:00-06:00												
06:00-07:00												
07:00-08:00	4	34	0.075	0.522	4	34	0.157	1.097	4	34	0.232	1.619
08:00-09:00	4	34	0.112	0.784	4	34	0.246	1.724	4	34	0.358	2.508
09:00-10:00	4	34	0.157	1.097	4	34	0.231	1.619	4	34	0.388	2.716
10:00-11:00	4	34	0.209	1.463	4	34	0.157	1.097	4	34	0.366	2.560
11:00-12:00	4	34	0.194	1.358	4	34	0.224	1.567	4	34	0.418	2.925
12:00-13:00	4	34	0.254	1.776	4	34	0.149	1.045	4	34	0.403	2.821
13:00-14:00	4	34	0.142	0.993	4	34	0.224	1.567	4	34	0.366	2.560
14:00-15:00	4	34	0.239	1.672	4	34	0.194	1.358	4	34	0.433	3.030
15:00-16:00	4	34	0.284	1.985	4	34	0.254	1.776	4	34	0.538	3.761
16:00-17:00	4	34	0.246	1.724	4	34	0.164	1.149	4	34	0.410	2.873
17:00-18:00	4	34	0.388	2.716	4	34	0.269	1.881	4	34	0.657	4.597
18:00-19:00	4	34	0.246	1.724	4	34	0.209	1.463	4	34	0.455	3.187

7 Residential Units Daily Trip Generation. Table 2.0

6.4 The projected daily traffic levels that would be expected to be generated by the 7 residential units on the site shown within Table 2.0 above, indicate that the proposed development generates negligible daily trips.

6.5 The extent of peak hour trips during the AM and PM peak traffic periods on the surrounding road network are further summarised within Table 3.0 below:

Time Period	Inbound	Outbound	Total
AM Peak Hour	1	2	3
PM Peak Hour	3	2	5

7 Residential Unit AM and PM Peak Hour Trip generation. Table 3.0.

6.6 It can be seen from Table 3.0 that during the AM and PM peak traffic periods the proposed 7 residential also generate very limited trips and as such cannot be regarded as having an impact on the operational capacity of the adjacent road links or junctions.

6.7 It should also be noted that the existing site operating as a temporary accommodation land use gives rise to existing daily and peak hour trips, which if applied to the proposed development would reduce the extent of these projected daily and peak hour trips.

7.0 Compliance with Design Manual for Urban Roads and Streets and Proposed Site Access.

7.1 It is proposed to access the residential development site from The Fonthill Road by means of a simple priority T junction which would connect to a 5.50metre internal site access estate road. Junction radii of 4.50 metres would be provided within the bellmouth of the site access where it connects with the Fonthill Road. These access arrangements are shown within McCrossan O'Rourke Manning Project Architects Design Brief Site Layout Plans.

7.2 The proposed site access and internal access routes within the proposed development can be designed to accord with the standards set out within the Design Manual for Urban Roads and Streets (DMURS).

7.3 DMURS places the emphasis not on road link or junction capacity but on the sharing of the available road space. DMURS was launched by the Department of Transport and the Department of Environment in March 2013 with a focus on pedestrians, cyclists, and public transport.

7.4 The now DMURS 2019 manual sets out design guidance and standards for constructing new and reconfiguring existing urban roads, streets and access points in Ireland, incorporating good planning and design practice. DMURS sets out 4 principles that should be incorporated with the development of an urban form. These are:

Design Principle 1:
To support the creation of integrated street networks that promote higher levels of permeability and legibility for all users, and in particular more sustainable forms of transport.

Design Principle 2:
The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment.

Design Principle 3:
The quality of the street is measured by the quality of the pedestrian environment.

Design Principle 4:
Greater communication and cooperation between design professionals through the promotion of a plan-led, multidisciplinary approach to design

7.5 The proposed site layout places a priority on sustainable forms of travel which includes provision for a dedicated pedestrian route connecting the various residential units with the public routes. These routes can also be used by cyclists. Thus, maximizing the connectivity between the application site and the public realm.

7.6 This priority can be achieved by the use of various materials and finishes, promotion of shared areas and pedestrian priority within the various internal links within the application site.

7.7 The proposed site layout ensures a balance between the various users accessing the site from the public realm and provides a transition from this realm to promote a real sense of place within the site as set out within the objectives of DMURS.

8.0 Car Parking Provision.

8.1 The extent of car parking provision within a proposed residential development site is discussed in Table 11.24 of the South Dublin Development Plan 2016 to 2022. Table 11.24 indicates that the number of spaces provided for any particular residential development should not exceed the maximum provision. Furthermore, the maximum provision should not be viewed as a target and a lower rate of parking may be acceptable subject to:

- The proximity of the site to public transport and the quality of the transport service it provides.
- The proximity of the development to services that fulfil occasional and day to day needs.
- The existence of a robust and achievable Workforce Management or Mobility Management Plan for the development.
- The ability of people to fulfil multiple needs in a single journey.

8.2 The proposed residential development units are made up of 7 residential units, of which 5 are four-bedroom houses and 2 are three-bedroom houses. The extent of maximum car parking based on the proposed development being within Zone 1 of the Development Plan is shown outlined in Table 11.24 of the current South Dublin Development Plan 2016 to 2022 which suggests 1.5 spaces for 3-bedroom houses and 3+ bedroom houses.

8.3 Based on these maximum parking standards some 14 car parking spaces would be required to serve the development. It is proposed to provide 14 parking spaces within the development site at the surface level which is fully compliant with the development plan car parking standards.

9.0 Conclusions.

9.1 In this report we have identified the existing roads, pedestrian cycling and public transport provision in the vicinity of the proposed Part VIII residential housing units proposed off the Fonthill Road, County Dublin.

9.2 We have also identified the daily and peak hour level of trip generation associated with the proposed small housing development and identified that these limited trips can readily be accommodated within the adjacent road network.

9.3 From the above, we conclude that the existing road and junction links to access the proposed development site can operate satisfactorily in accommodating the levels and types of traffic likely to be generated by the proposed 7 residential units.

Calculation Reference: AUDIT-764101-220411-0405

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES
TOTAL VEHICLES

Selected regions and areas:

13	**MUNSTER**		
	TI	TIPPERARY	2 days
15	**GREATER DUBLIN**		
	DL	DUBLIN	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 8 to 48 (units:)
Range Selected by User: 8 to 70 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 20/11/17

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	4

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
15,001 to 20,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
250,001 to 500,000	1 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	4 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 **DL-03-B-02** **TERRACED HOUSES** **DUBLIN**
MARIGOLD ROAD
DUBLIN
DARNDALE
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total No of Dwellings: 35
Survey date: MONDAY *19/10/15* *Survey Type: MANUAL*

2 **DL-03-B-03** **SEMI-DETACHED & TERRACED** **DUBLIN**
HOME PARK ROAD
DUBLIN
DRUMCONDRA
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 48
Survey date: TUESDAY *22/11/16* *Survey Type: MANUAL*

3 **TI-03-B-01** **MIXED HOUSES** **TIPPERARY**
LIMERICK ROAD
NENAGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 43
Survey date: FRIDAY *27/05/16* *Survey Type: MANUAL*

4 **TI-03-B-02** **BUNGALOWS** **TIPPERARY**
STRADAVOHER
THURLES

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 8
Survey date: MONDAY *20/11/17* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

TOTAL VEHICLES

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 7 DWELLS shown in shaded columns
BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00												
07:00 - 08:00	4	34	0.075	0.522	4	34	0.157	1.097	4	34	0.232	1.619
08:00 - 09:00	4	34	0.112	0.784	4	34	0.246	1.724	4	34	0.358	2.508
09:00 - 10:00	4	34	0.157	1.097	4	34	0.231	1.619	4	34	0.388	2.716
10:00 - 11:00	4	34	0.209	1.463	4	34	0.157	1.097	4	34	0.366	2.560
11:00 - 12:00	4	34	0.194	1.358	4	34	0.224	1.567	4	34	0.418	2.925
12:00 - 13:00	4	34	0.254	1.776	4	34	0.149	1.045	4	34	0.403	2.821
13:00 - 14:00	4	34	0.142	0.993	4	34	0.224	1.567	4	34	0.366	2.560
14:00 - 15:00	4	34	0.239	1.672	4	34	0.194	1.358	4	34	0.433	3.030
15:00 - 16:00	4	34	0.284	1.985	4	34	0.254	1.776	4	34	0.538	3.761
16:00 - 17:00	4	34	0.246	1.724	4	34	0.164	1.149	4	34	0.410	2.873
17:00 - 18:00	**4**	**34**	**0.388**	**2.716**	**4**	**34**	**0.269**	**1.881**	**4**	**34**	**0.657**	**4.597**
18:00 - 19:00	4	34	0.246	1.724	4	34	0.209	1.463	4	34	0.455	3.187
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			2.546	17.814			2.478	17.343			5.024	35.157

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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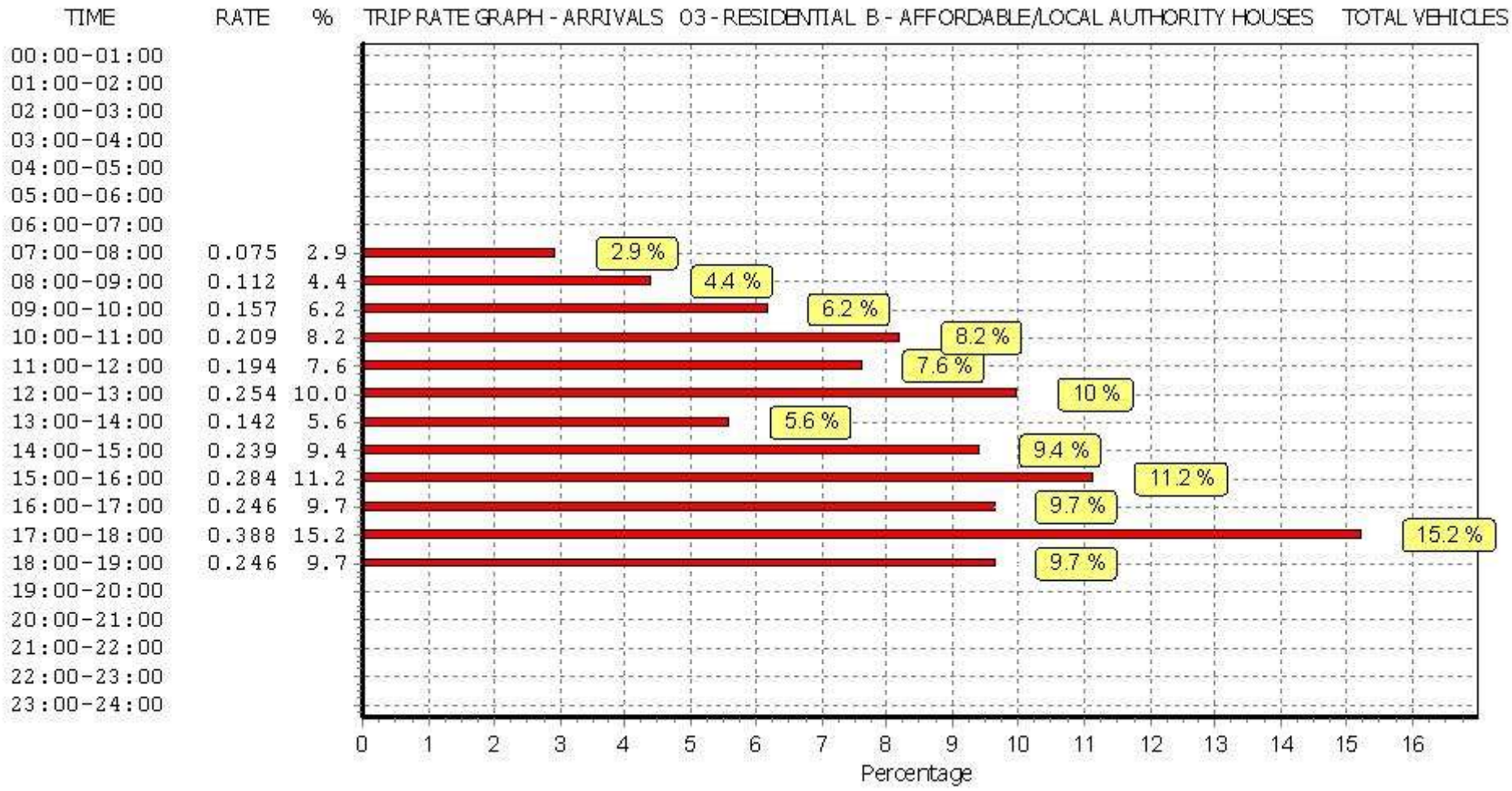
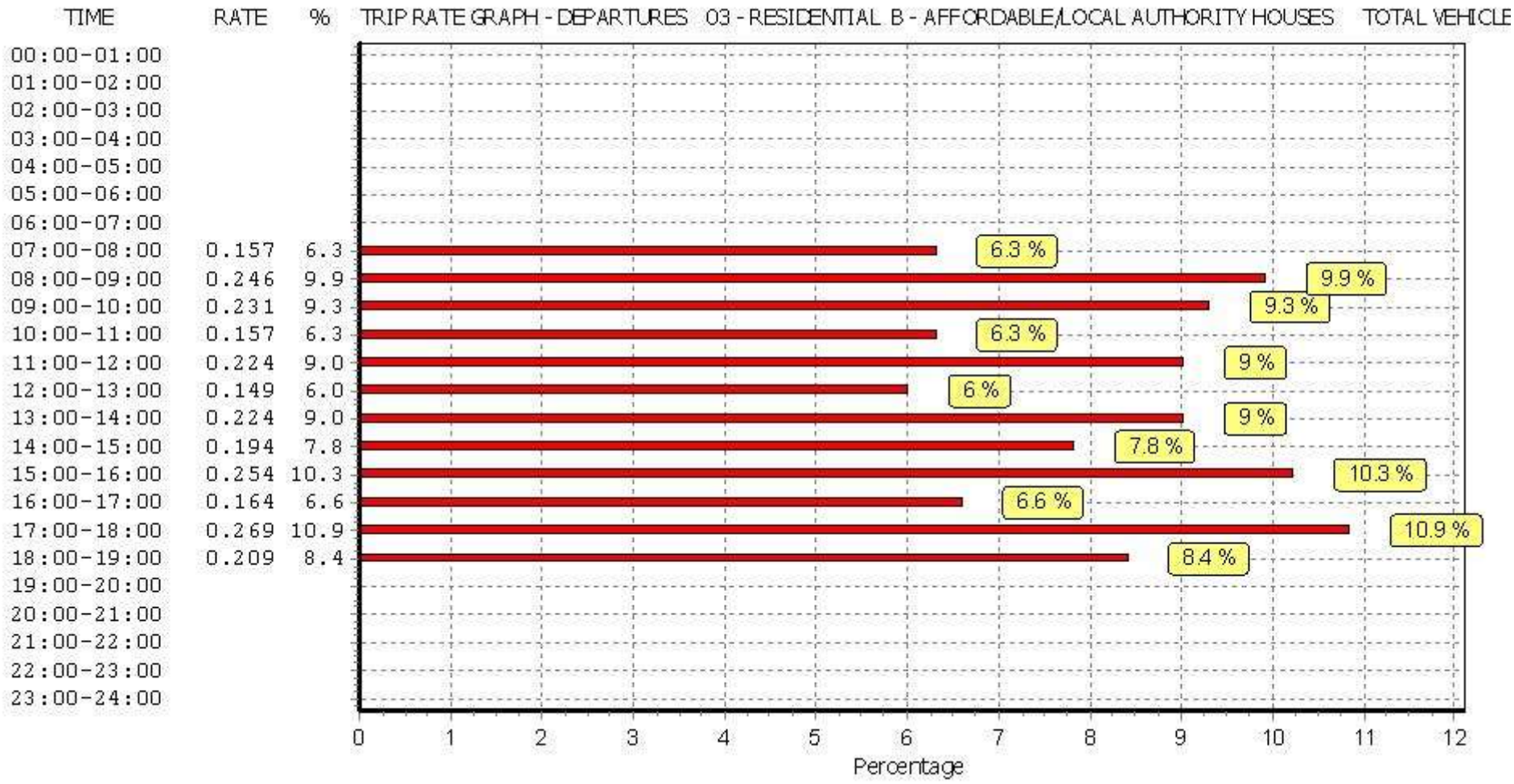
Parameter summary

Trip rate parameter range selected:	8 - 48 (units:)
Survey date date range:	01/01/14 - 20/11/17
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



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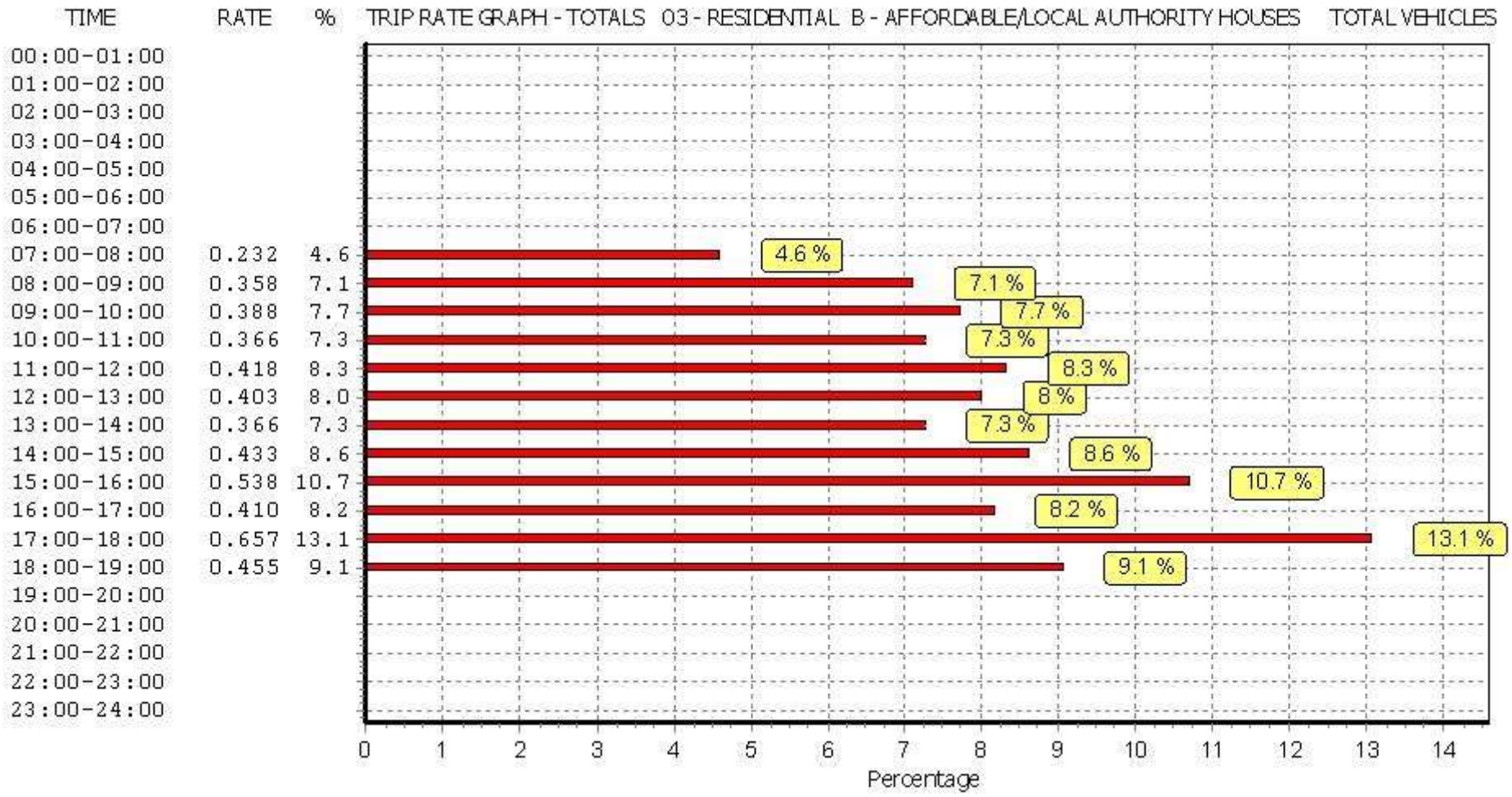

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