CS CONSULTING

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DUBLIN LONDON LIMERICK

Traffic and Transport Assessment

Nursing Home Development

St. Mary's Priory, Old Greenhills Road, Tallaght, Dublin 24

Client: St. Mary's Medical (Tallaght) Ltd

Job No. D092

February 2022

TRAFFIC AND TRANSPORT ASSESSMENT

NURSING HOME DEVELOPMENT

ST. MARY'S PRIORY, OLD GREENHILLS ROAD, TALLAGHT, DUBLIN 24

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1.0 INTRODUCTION

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by St. Mary's Medical (Tallaght) Ltd to prepare a Traffic and Transport Assessment to accompany a planning application for a proposed nursing home development within the grounds of St. Mary's Priory, Tallaght, Dublin 24.

In preparing this report, CS Consulting has made reference to the following:

- South Dublin County Council Development Plan 2016–2022
- Tallaght Town Centre Local Area Plan 2020
- TII Traffic and Transport Assessment Guidelines 2014
- TII Project Appraisal Guidelines 2011
- Design Manual for Urban Roads and Streets 2019
- National Cycle Manual 2011
- Greater Dublin Area Cycle Network Plan
- Trip Rate Information Computer System (TRICS) database
- CSO 2016 Census data

1.1 Objective

The objective of this report is to examine the traffic implications associated with the proposed development, in terms of integration with existing traffic in the area. The report determines the impact of the proposed development on the existing road network, in particular through the operational assessment of the junction of Old Greenhills Road with Tallaght Main Street (L3021). The report also examines the proposed development's vehicular access arrangements, car and bicycle parking provision, site layout, public transport accessibility, and facilities for pedestrians and cyclists.

1.2 Study Methodology

The assessment methodology adopted for this report is summarised as follows:

- Traffic flow data – Classified vehicular traffic count data were obtained from a 24-hour survey undertaken on Tuesday the 11th of September 2018 at 2no. existing junctions in proximity to the subject development site. These traffic flow data were scaled up to 2022 baseline levels using TII growth factors.
- Trip generation – A development trip generation assessment has been carried out using TRICS data, to determine the potential vehicular trips to and from the proposed development site during peak hours.
- Trip distribution – Based upon existing traffic characteristics and the surrounding road network, an appropriate distribution has been assigned to site development vehicular trips across the road network, as described in sub-section 4.2.
- Existing junction assessment – A spreadsheet model was created which contains the baseline year do-nothing traffic count data described above. The traffic count data were used to develop a PICADY model of the existing junction of Old Greenhills Road with Tallaght Main Street.
- Future junction operation assessments – Future year traffic forecasts were derived from TII growth factors and development trip generation figures. These traffic flows were applied to the PICADY junction model. The performance of the modelled junction was assessed for the baseline year (2022), the proposed year of opening (2024), 5 years after opening (2029), and 15 years after opening (2039; the Design Year Assessment).
- Parking – Car and bicycle parking provisions within the proposed development have been assessed with reference to the parking standards set out in the Local Authority development plan.

1.3 Structure of Report

As outlined above, this report seeks to establish the traffic impact generated by the proposed development on the surrounding road network and subsequently ascertain the future operational performance of the elements of this network with the potential to be affected.

The structure of this report corresponds to the various stages outlined above, and the key tasks summarised below:

- Section 2 describes the proposed development location, the existing land use, and the development proposals.
- Section 3 provides an overview of the existing traffic conditions and the local road network and identifies any existing or predicted issues related to traffic flow or road infrastructure of particular relevance to this transport appraisal.
- Sections 4 and 5 detail the analysis as described in the study methodology above. The analysis examines trip generation, trip distribution, and resulting junction operational performance with the development in place.
- Section 6 assesses the proposed car and bicycle parking provision for the development, with reference to Local Authority standards.
- Section 7 examines the development's vehicular access arrangements, internal layout, servicing arrangements, public transport accessibility, and pedestrian and cyclist facilities.
- Section 8 presents the conclusions of the report.

2.0 SITE LOCATION AND PROPOSED DEVELOPMENT

2.1 Site Location

The proposed development site is located within the grounds of St. Mary's Priory, on the western side of the Old Greenhills Road in Tallaght, Dublin 24. The site is located in the administrative jurisdiction of South Dublin County Council and has a total area of 0.99ha.

Figure 1 – Location of proposed development site
(map data & imagery: EPA, OSM Contributors, Google)

The location of the proposed development site is shown in Figure 1 above; the indicative extents of the development site, as well as relevant elements of the surrounding road network, are shown in more detail in Figure 2.

The site is bounded to the north by the TU Dublin Tallaght campus, to the east by Old Greenhills Road and Greenhills Road, and on other sides by the

remaining grounds of St. Mary's Priory. The site has street frontage of approx. 95m on Old Greenhills Road and approx. 50m on Greenhills Road.

Figure 2 – Site extents and environs
(map data & imagery: NTA, OSM Contributors, Google)

2.2 Existing Land Use

The subject site is greenfield, forming part of the grounds of St. Mary's Priory, and does not currently generate any vehicular traffic.

2.3 Description of Proposed Development

The proposed development consists of:

(a) construction of a 4 storey nursing home building consisting of (i) 106 no. bedrooms (with ensuite); (ii) associated resident's welfare facilities; (iii) administration areas and staff facilities; (iv) with multi-function space; and pharmacy proposed at ground floor level;

(b) construction of 60 no. one bed independent living units in 3 no blocks as follows: (1) Block A, a 4 story building comprising 11 no. one-bed units; (2) Block B, a part 4/part 5 storey building comprising 35 no. one-bed units; and (3) Block C, a 5 storey building comprising 14 no. one-bed units. Each unit will be provided with private open space in the form of a balcony/terrace (6sq.m).

(c) The development will include communal open space and landscaping (including new tree planting and tree retention), 30 no. car parking spaces (including 3 no. limited mobility parking spaces; 3 no. EV parking spaces and 1 no. car sharing spaces); and 37 no. bicycle parking spaces.

(d) The development will be served by a new pedestrian and vehicular access from Old Greenhills Road through existing boundary wall. Material from the removed wall will be repurposed within the landscape areas; and

The development includes landscaping, boundary treatments (including walls and railings to southern and western boundaries), an ESB Substation, SuDS drainage; road infrastructure and all ancillary site works necessary to facilitate the development.

For the purposes of the present assessment, it is assumed that the proposed development shall be completed and occupied by the year 2024.

3.0 RECEIVING ENVIRONMENT

3.1 Existing Traffic Flows

Ongoing travel restrictions and varying working patterns resulting from the current COVID-19 public health emergency precluded conducting a contemporary traffic survey, as data obtained through such a survey would not be representative of typical traffic patterns.

As an alternative, traffic survey data were obtained from a Traffic and Transport Assessment submitted to South Dublin County Council as part of a planning application for a proposed mixed-use development at Main Street, Tallaght (reg. ref. SD20A/0250). This survey comprised full turning movement classified traffic counts carried out by Traffinomics Ltd on behalf of Punch Consulting Engineers, over a 24-hour period on Tuesday the 11th of September 2018. Count information was obtained at the following 2no. sites, which are also the road junctions of most relevance to the subject nursing home development:

J1. R819 Greenhills Road (North/South) / L3021 Main Street (East/West) *(4-arm signal-controlled junction)*

J2. L3021 Main Street (West/East) / Old Greenhills Road (North) *(3-arm priority-controlled junction)*

The peak traffic flows across these two survey sites were found to occur between 08:00 and 09:00 (AM peak hour) and between 15:00 and 16:00 (PM peak hour).

The 2018 traffic movements at each of the surveyed junctions during the peak hours have been isolated from the count data and have been scaled up to baseline levels for the year 2022 using standard TII growth factors (see sub-section 4.5). These total survey year and baseline year peak hour flows at the survey junctions are included in the traffic flow matrices given in Appendix B and are also given in Table 1.

Figure 3 – Locations of traffic survey sites
(map data & imagery: OSM Contributors, Google)

Table 1 – Total Peak Traffic at Selected Survey Junctions

Time Period	Total Surveyed Junction Traffic Movements (in Passenger Car Units)	
	J1	J2
	2018 – Survey Year	
AM Peak (08:00-09:00)	1466	377
PM Peak (15:00-16:00)	1458	414
	2022 – Baseline Year	
AM Peak (08:00-09:00)	1564	402
PM Peak (15:00-16:00)	1555	442

3.2 Existing Road Network Characteristics

3.2.1 Tallaght Main Street (L3021)

- Single carriageway road with a pavement width of between 7.3m and 10.0m in the vicinity of its junction with Old Greenhills Road.
- Local road with an east-west alignment, connecting to Old Blessington Road and Old Bawn Road in the west, and terminating at the N81 in the east.
- Subject to a 50km/h speed limit.
- Raised footpaths are present along both sides of Main Street, and an eastbound on-road cycle lane is in place through its junctions with Old Greenhills Road and Greenhills Road (R819). No bus lanes are present.
- On-street parallel parking bays are in place along the southern side of Main Street in the vicinity of its junction with Old Greenhills Road.

3.2.2 Old Greenhills Road

- Single carriageway road with a pavement width of approx. 5m.
- Local access cul de sac extending approx. 160m northward from Main Street, giving access to the grounds of St. Mary's Priory and to 5no. additional properties.
- Subject to a 30km/h speed limit.
- Raised footpaths are present along both sides of the street, along the length of Old Greenhills Road. No cycle tracks or bus lanes are present.
- Recessed on-street parallel parking bays are in place along the eastern side of Old Greenhills Road.

3.3 Traffic Collision Data

Data on road traffic collisions in the years 2005 to 2016 have been collated by the Road Safety Authority. The locations of recorded collisions in the wider area surrounding the development site during this period are shown in Figure 4.

Figure 4 – Recorded road traffic collisions on surrounding road network
(map data & imagery: RSA, OSM Contributors, Google)

3.4 Proposed Local Infrastructure Improvements

The NTA BusConnects Core Bus Corridor Project includes the implementation of Core Bus Corridor no. 9 (Greenhills to City Centre) along Old Greenhills Road, adjacent to the subject development site (see Figure 5). This entails the removal of on-street parking bays along Old Greenhills Road to permit two-way bus traffic and the creation of a new bus-only junction with Greenhills Road (R819). No land acquisition is proposed within

the subject site. Three rounds of Public Consultation have been conducted in respect of the Core Bus Corridor Project, and the NTA indicates that it will soon be presenting planning applications to An Bord Pleanála.

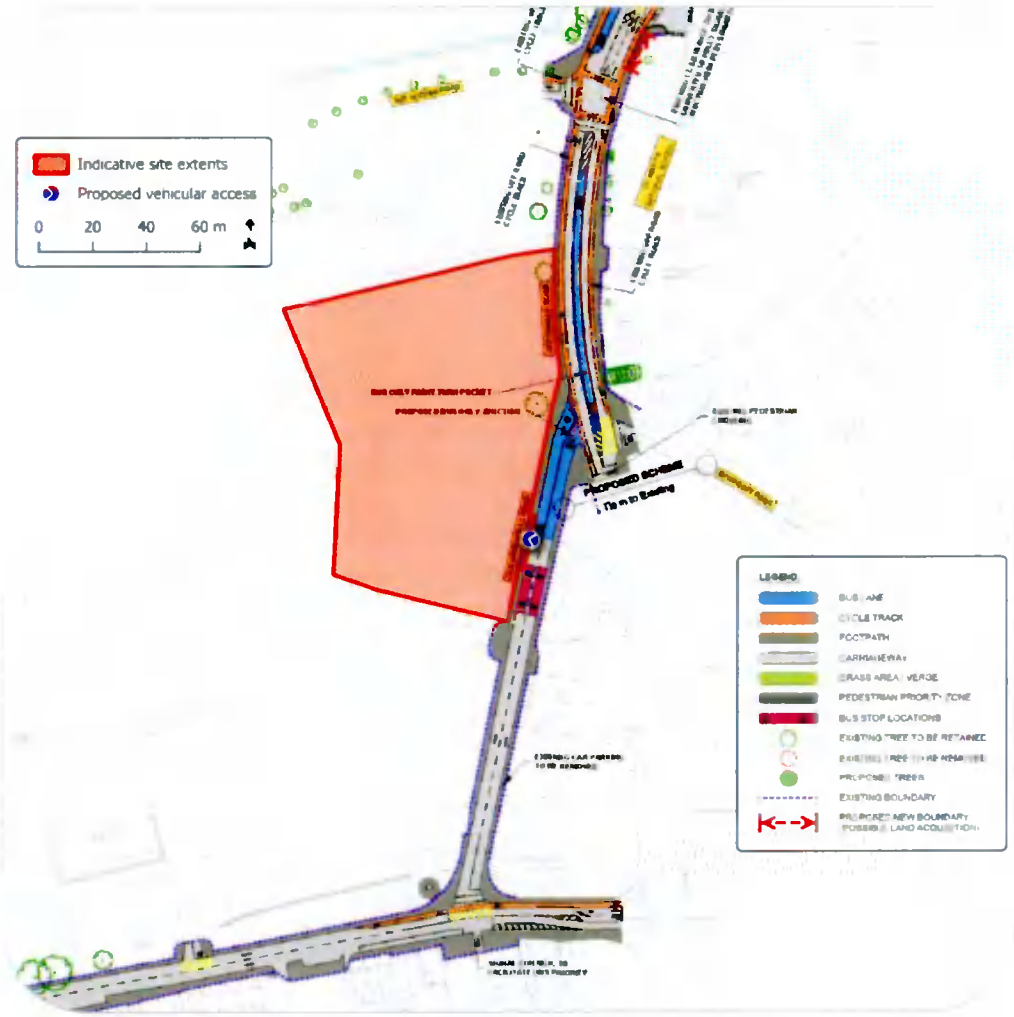

Figure 5 – Composite extract of Core Bus Corridor 9 mapping
(background imagery source: NTA)

Under the BusConnects Dublin Area Revised Bus Network proposals, it is also proposed to implement new spine routes A3, D2 and D4 along Tallaght Main Street and Greenhills Road. These routes will operate at intervals of 12-15 minutes during peak times.

The *Greater Dublin Area Cycle Network Plan* provides for the implementation of secondary arterial cycle routes along Tallaght Main Street (route 9A) and along Greenhills Road (route 8B), in close proximity to the subject development. No further information is available at present regarding the delivery timeframe or detailed design for these proposed cycle network improvements.

No other relevant transport-related infrastructural objectives in the vicinity of the development site are given in the *South Dublin County Council Development Plan 2016–2022*. The *Tallaght Town Centre Local Area Plan 2020* does include a reference to implementing traffic signals at the existing junction of Old Greenhills Road with Main Street but this would conflict with the BusConnects Core Bus Corridor proposals and is not warranted by the junction's existing or predicted usage patterns.

3.5 Nearby Committed Developments

Figure 6 – Relevant nearby committed developments
(map data & imagery: SDCC, ABP, OSM Contributors, Google)

Active planning permissions have been identified at 3no. sites that are considered sufficiently close to the subject development site to have a potential influence on the traffic flows at the 2no. junctions considered in this report, if developed as permitted:

(A) SDCC ref. SD18A/0435

New Sport Science, Health and Recreation Building within the TU Dublin Tallaght campus (total floor area of 3,175m^2) with grass playing pitch and associated facilities.

(B) ABP ref. TA06S.306705

Strategic Housing Development on former Gallaher's cigarette factory site, comprising 502no. apartments and a crèche, with 202no. car parking spaces and vehicular access to/from Airton Road and Greenhills Road.

(C) ABP ref. TA06S.305763

'Airton Plaza' Strategic Housing Development comprising 328no. apartments, 889m^2 commercial floor space and a crèche, with 184no. car parking spaces and vehicular access to/from Airton Road.

For the purposes of the present assessment, it has been assumed that the above-listed developments shall all proceed and shall be operational by the year 2024. The projected traffic to be generated by these developments has been included in the future year junction assessments, as described in sub-section 4.4 of this report.

4.0 TRAFFIC GENERATION AND TRIP DISTRIBUTION

4.1 Subject Development Trip Generation

Trip generation factors from the TRICS database have been used to predict the trip generation to and from the proposed development, for both the AM and PM peak hour periods.

The subject development comprises the following principal elements:

- a nursing home accommodating 106no. residents; and
- 60no. 1-bedroom independent living apartments.

The development also includes a pharmacy, which is considered ancillary to the principal elements and which therefore has negligible vehicular trip generation potential in itself.

The following TRICS sub-categories have therefore been employed, being the most appropriate for the principal elements of this development:

- 05 Health / F - Care Home (Elderly Residential)
- 03 Residential / P – Assisted Living

These sub-categories are described in the TRICS land use category definitions as follows:

Care Home (Elderly Residential)

"A care home in a residential setting where a number of older people live, usually in single rooms, with access to on-site care services. These sites are not registered to meet a specific care need, so not to be confused with the "Care Home (specific condition)" land use sub-category. Trip rates are calculated by Residents or Parking Spaces."

Assisted Living

"Housing developments for older people that offer more support than sheltered housing, but still allow residents to live independently. Residents usually live in a self-contained flat with their own front door, but meals may be provided. Personal care and support services are generally available on-site 24 hours per day. Trip rates are calculated by Site Area, Dwellings, Housing Density or Bedrooms."

The TRICS trip rates for the proposed development have been selected from the above categories, restricted insofar as possible to similar suburban locations, and further refined with reference to 2016 CSO census data on the basis of:

- the population within 1 mile of the development site (35,000 approx.);
- the population within 5 miles of the development site (450,000 approx.);
- the aggregate mean car ownership rate within 5 miles of the development site (1.1 cars per household).

The selected peak hour trip rates are given in Table 2, and the resultant trip generation figures are given in Table 3. Full details of the TRICS information used in the assessments are provided in Appendix A.

Table 2 – TRICS Peak Hour Trip Generation Rates

Element	Trip Type	AM Peak	PM Peak
Care Home *(trips per hour per resident)*	Arrivals	0.115	0.057
	Departures	0.074	0.107
Assisted Living *(trips per hour per apartment)*	Arrivals	0.077	0.144
	Departures	0.038	0.125

Table 3 – Development Peak Hour Trip Generation

Element	Trip Type	AM Peak	PM Peak
Nursing Home	Arrivals	12	6
	Departures	8	11
	Total Trips	20	17
Independent Living Apartments	Arrivals	5	9
	Departures	2	8
	Total Trips	7	17
Development TOTALS	Arrivals	17	15
	Departures	10	19
	Total Trips	27	34

4.2 Subject Development Trip Distribution

Vehicular access to the proposed development from the existing surrounding road network shall be via a single entrance/exit on Old Greenhills Road, at the eastern boundary of the development site (see Figure 2, page 5).

All vehicular traffic to and from the subject development shall arrive and depart from/to the south along Old Greenhills Road, passing through the junction of Old Greenhills Road with Tallaght Main Street (L3021). At this junction, it is assumed that development traffic shall be distributed east and west according to the directional splits recorded at this location at the time of the traffic survey referred to. These splits, for both the AM and PM peak periods, are given in Table 4.

Table 4 – Surveyed Traffic Splits at Junction Site J2

L3021 Main Street (West/East) / Old Greenhills Road (North)

Arrivals TO Old Greenhills Road

From	L3021 West	L3021 East	TOTAL
AM Peak	71%	29%	100%
PM Peak	46%	54%	100%

Departures FROM Old Greenhills Road

To	L3021 West	L3021 East	TOTAL
AM Peak	33%	67%	100%
PM Peak	38%	62%	100%

A proportion of development traffic shall therefore also pass through the existing junction of Greenhills Road (R819) and Tallaght Main Street (L3021). At this junction, it is likewise assumed that development traffic shall follow the surveyed directional splits; these are given in Table 5.

Table 5 – Surveyed Traffic Splits at Junction Site J1

R819 Greenhills Road (North/South) / L3021 Main Street (East/West)

Arrivals TO L3021 Main Street (West)

From	R819 North	L3021 East	R819 South	TOTAL
AM Peak	32%	61%	7%	100%
PM Peak	43%	43%	14%	100%

Departures FROM L3021 Main Street (West)

To	R819 North	L3021 East	R819 South	TOTAL
AM Peak	38%	60%	2%	100%
PM Peak	39%	50%	11%	100%

4.3 Proportional Changes in Traffic Flows

Table 6 gives the absolute and proportional changes in peak hour traffic flows that shall result from vehicular trips generated by the subject development, at each of the 2no. existing junctions considered.

Table 6 – Changes in Traffic Flows at Junction Survey Sites

Junction Survey Site	Existing Traffic Flows at Junction [1]		Change in Flows Through Junction [2]		Proportional Change	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
J1	1564	1555	12	19	0.8%	1.2%
J2	402	442	27	34	6.7%	7.7%

The TII *Traffic and Transport Assessment Guidelines* (PE-PDV-02045) advise that Transport Assessments should generally be applied where traffic to and from a development is predicted to exceed 10% of the existing background traffic on the adjoining road (or 5% at sensitive locations). Within the scope of this report, therefore, only the junction of Old Greenhills Road with Tallaght Main Street (junction site J2) is considered to warrant detailed operational assessment.

The junction of Greenhills Road and Tallaght Main Street (junction site J1) is considered at negligible risk of detrimental effects resulting from the proposed development, given the minimal proportional increases in traffic flows that it shall give rise to at this location.

4.4 Committed Development Trip Generation and Distribution

The vehicular trips predicted to be generated by the 3no. committed developments identified in sub-section 3.5 have been included in the background traffic flows for all future assessment years. The peak hour trip generation figures for these committed developments are given in Table 7:

[1] Total 2022 baseline year vehicle movements (PCU/hour), with no additional development traffic.
[2] Trips generated by subject development.

these have been sourced from the relevant technical reports submitted under their respective planning applications:

(A) Traffic and Transport Assessment prepared by AECOM and submitted under planning application ref. SD18A/0435.

(B) Traffic and Transport Assessment prepared by Barrett Mahony and submitted under SHD planning application ref. TA06S.306705.

(C) Traffic Impact Assessment prepared by Martin Rogers Consulting Ltd and submitted under SHD planning application ref. TA06S.305763.

It should be noted that the above-listed technical reports each identify a slightly different AM peak hour or PM peak hour to those identified by the traffic survey used for the present assessment. Given the comparatively low vehicular trip generation in each case, however, the use of the trip generation figures provided in these reports is nevertheless considered adequate for the purposes of the present assessment.

Table 7 – Committed Development Trip Generation

Committed Development [3]	Peak Period	Arrivals	Departures	Total Trips
(A)	AM	63	12	75
	PM	16	42	58
(B)	AM	22	90	112
	PM	85	33	118
(C)	AM	36	86	122
	PM	75	43	118

The distributions of these committed development trips across the local road network have also been adopted from the relevant technical reports,

[3] See Figure 6, page 12.

resulting in the following total traffic flows at the 2no. road junctions (sites J1 and J2) that are considered in the present assessment:

Table 8 – Committed Development Trips via Relevant Junctions

Committed Development	Peak Period	Trips via Junction Site J1	Trips via Junction Site J2
(A)	AM	10	0
	PM	6	0
(B)	AM	21	3
	PM	20	1
(C)	AM	29	4
	PM	21	2
TOTALS	AM	60	7
	PM	47	3

4.5 Future Year Background Traffic Growth

The operational impact of traffic on the road network within the proposed development's area of influence has been assessed for the following years:

- 2022 Baseline year
- 2024 Proposed opening year
- 2029 5 years after opening
- 2039 Design year (15 years after opening)

Unit 5.3 of the TII *Project Appraisal Guidelines* (PE-PAG-02017 *Travel Demand Projections*) has been used to apply growth factors to the existing surveyed background traffic flows for the future year junction assessments. The TII annual growth rates applied are given in Table 9, and the resultant cumulative growth in background traffic for each assessment year is given in Table 10.

Table 9 – TII Central Growth Rates (Light Vehicles)

Geographic Area	Background Traffic Growth per Year		
	2016-2030	2030-2040	2040-2050
Dublin Metropolitan Area	+ 1.62%	+ 0.51%	+ 0.44%

Table 10 – Predicted Background Traffic Growth [4]

2022 Baseline year	2024 Year of opening	2029 Opening year +5	2039 Opening year +15
+ 6.6%	+ 10.1%	+ 19.3%	+ 27.0%

[4] Cumulative percentage increases over 2018 surveyed traffic levels.

5.0 OPERATIONAL ASSESSMENT

5.1 Introduction

To determine the likely traffic impact of the proposed development, operational assessments have been undertaken of the existing 3-arm priority-controlled junction of Old Greenhills Road with Tallaght Main Street (junction site J2), through which all vehicular traffic generated by the subject development will pass. This junction has been modelled using the industry-standard TRL computer program PICADY, for both the weekday AM peak hour (08:00-09:00) and the weekday PM peak hour (15:00-16:00).

Figure 7 – Modelled road junction
(map data & imagery: OSM Contributors, Google)

Junction performance is assessed based upon the four metrics defined in sub-section 5.3. Full PICADY modelling outputs are provided in Appendix C.

5.2 Assessment Scenarios

The performance of this junction has been assessed under the following scenarios, using the existing and predicted traffic flows given in Appendix B:

- 2022 – existing baseline traffic conditions;
- 2024 (planned year of opening) – with & without subject development;
- 2029 – with & without subject development; and
- 2039 (design year) – with & without subject development.

5.3 Definitions

Degree of Saturation (DoS):

The ratio of current traffic flow to ultimate capacity (also known as RFC) on a junction approach. A 90% DoS represents effective capacity, beyond which a junction will begin to operate inefficiently. Ultimate capacity is reached at 100% DoS, beyond which severe queueing and delays may occur.

Mean Maximum Queue

The highest estimated mean number of Passenger Car Units (PCUs) queued in any lane of a junction approach, averaged over the entire analysis period.

Mean Delay per Vehicle:

The average delay incurred by a vehicle on a junction approach as a result of having to give way at a priority-controlled junction.

Network Residual Capacity:

The lowest percentage by which the arriving traffic flow on any junction approach could increase before the junction as a whole would reach its effective capacity (i.e. 90% DoS on one or more approaches).

5.4 Junction Assessment Results

The following table gives the PICADY modelling results, for each of the assessment scenarios, at the existing 3-arm priority-controlled junction of Old Greenhills Road with Tallaght Main Street (junction site J2).

- Arm A: Main Street [L3021] (to west)
- Arm B: Old Greenhills Road (to north)
- Arm C: Main Street [L3021] (to east)

Table 11 – Junction Site J2 Assessment Results

Junction Approach Arm	Degree of Saturation (%)		Mean Maximum Queue (PCU)		Mean Delay per PCU (seconds)		Network Residual Capacity (%)	
	AM	PM	AM	PM	AM	PM	AM	PM
2022 – baseline year assessment								
B	3	6	0	0	7	7	492	425
C	2	3	0	0	5	5		
2024 – opening year assessment – WITHOUT subject development								
B	4	6	0	0	7	7	459	409
C	2	3	0	0	5	5		
2024 – opening year assessment – WITH subject development in place								
B	6	10	0	0	7	8	405	329
C	3	4	0	0	5	5		
2029 assessment – WITHOUT subject development								
B	4	6	0	0	7	8	419	368
C	2	3	0	0	5	5		
2029 assessment – WITH subject development in place								
B	6	10	0	0	7	8	372	300
C	3	5	0	0	5	5		
2039 – design year assessment – WITHOUT subject development								
B	4	7	0	0	7	8	392	344
C	2	4	0	0	5	5		
2039 – design year assessment – WITH subject development in place								
B	6	11	0	0	8	8	350	282
C	3	5	0	0	5	5		

The assessment results show that this junction currently operates well within its effective capacity on all approaches during both the AM and PM peak

periods, with negligible vehicle queues and minimal delays. All junction approaches are shown to continue operating well within their effective capacities past the year 2039, with no significant increases in vehicle queues or delays over those currently existing.

In each of the future years assessed, the addition of the vehicular traffic generated by the proposed development is shown to have a negligible impact on junction performance, having no discernible effect on mean approach queue length and adding no more than 1 second to the mean vehicle delay on any approach.

Note:

Assessment results are not shown for the junction's western approach (Arm A), as traffic on this approach has priority over other traffic streams and consequently shall not experience any queueing or delay.

6.0 PARKING

The subject development comprises the following principal elements:

- a nursing home accommodating 106no. residents; and
- 60no. 1-bedroom independent living apartments.

The development also includes a pharmacy with a gross floor area (GFA) of 68m². As previously noted, however, this is considered ancillary to the principal elements and therefore has negligible vehicular trip generation potential in itself. This pharmacy element is consequently not considered to have any associated car parking demand. Bicycle parking is however provided to serve the pharmacy.

The development's proposed parking provision shall comprise 30no. car parking spaces (including 3no. disabled-accessible spaces) and 52no. bicycle parking spaces.

6.1 Car Parking Provision

Table 12 – Car Parking Provision

Development Element	Car Parking Maximum [5]	Quantum	Maximum Provision	Proposed Provision
Nursing Home	1 space per 8 residents	106 residents	13 spaces	30 spaces
Independent Living Apts [6]	0.75 spaces per apartment	60 apartments	45 spaces	
TOTALS			68 spaces	30 spaces

The proposed development's car parking provision has been assessed with respect to the *South Dublin County Council Development Plan 2016–2022*.

[5] Zone 2
[6] Assessed as 1-bedroom apartments

which defines maximum car parking provision rates for new developments by land use category. Table 12 above shows the car parking standards applicable to the proposed development.

The proposed development shall have a total car parking provision of 30no. spaces and thereby does not exceed the maximum quantum permitted by the Local Authority development plan.

6.2 Car Parking Demand and Occupancy

Table 13 – Full-Day Car Trip Generation Rates

Time Period	Care Home Trip Rates (per resident)		Assisted Living Trip Rates (per apartment)	
	Arrivals	Departures	Arrivals	Departures
07:00 - 08:00	0.033	0.000	0.106	0.060
08:00 - 09:00	0.107	0.066	0.048	0.020
09:00 - 10:00	0.033	0.008	0.183	0.069
10:00 - 11:00	0.016	0.016	0.173	0.119
11:00 - 12:00	0.016	0.025	0.077	0.119
12:00 - 13:00	0.025	0.016	0.077	0.129
13:00 - 14:00	0.016	0.033	0.115	0.159
14:00 - 15:00	0.057	0.041	0.096	0.169
15:00 - 16:00	0.033	0.090	0.135	0.119
16:00 - 17:00	0.041	0.049	0.087	0.110
17:00 - 18:00	0.025	0.049	0.029	0.030
18:00 - 19:00	0.008	0.008	0.038	0.060
19:00 - 20:00	0.082	0.041	-	-
20:00 - 21:00	0.016	0.066	-	-

Table 13 gives average TRICS weekday trip generation rates for nursing homes ('Care Home' sub-category) and independent living apartments ('Assisted Living' sub-category) in locations similar to the development site over a 14-hour period from 07:00 to 21:00 (the maximum time range interrogable in TRICS for these land uses), for cars only. In the case of the independent living units, departure rates have been adjusted upward such

that the number of car departures over a full day corresponds to the number of arrivals.

From these trip rates, hourly car arrival and departure trips have been calculated for the development as a whole. As previously noted (sub-section 4.1), the development's pharmacy is considered to have negligible vehicular trip generation potential in itself and is therefore not included in this calculation.

Table 14 – Full-Day Car Trips

Time Period	Nursing Home		Independent Living Units		Net Inbound Car Trips
	Arrivals	Departures	Arrivals	Departures	
07:00 - 08:00	3	0	6	4	5
08:00 - 09:00	11	7	3	1	6
09:00 - 10:00	3	1	11	4	9
10:00 - 11:00	2	2	10	7	3
11:00 - 12:00	2	3	5	7	-3
12:00 - 13:00	3	2	5	8	-2
13:00 - 14:00	2	3	7	10	-4
14:00 - 15:00	6	4	6	10	-2
15:00 - 16:00	3	10	8	7	-6
16:00 - 17:00	4	5	5	7	-3
17:00 - 18:00	3	5	2	2	-2
18:00 - 19:00	1	1	2	4	-2
19:00 - 20:00	9	4	0	0	5
20:00 - 21:00	2	7	0	0	-5

Table 15 illustrates the resultant pattern of parking demand and occupancy during the period of 07:00 to 21:00 on a weekday (corresponding TRICS trip rates for weekends are not available). A maximum overnight parking occupancy of 6no. spaces has been assumed; starting from this baseline, the net number of inbound car trips, as given in Table 14, has been applied successively to each hourly time period to obtain the expected number of occupied car parking spaces at the end of that period.

Table 15 – Total Development Car Parking Occupancy

Time Period	Spaces Occupied at Start of Hour	Net Inbound Car Trips	Spaces Occupied at End of Hour
07:00 - 08:00	6[7]	5	11
08:00 - 09:00	11	6	17
09:00 - 10:00	17	9	26
10:00 - 11:00	26	3	29
11:00 - 12:00	29	-3	26
12:00 - 13:00	26	-2	24
13:00 - 14:00	24	-4	20
14:00 - 15:00	20	-2	18
15:00 - 16:00	18	-6	12
16:00 - 17:00	12	-3	9
17:00 - 18:00	9	-2	7
18:00 - 19:00	7	-2	5
19:00 - 20:00	5	5	10
20:00 - 21:00	10	-5	5

This analysis indicates that a maximum of 29no. car parking spaces may be expected to be occupied at any time during a typical weekday. The proposed provision of 30no. car parking spaces to serve the nursing home and independent living units is therefore considered sufficient to cater for the development's car parking demand.

6.3 Disabled-Accessible Car Parking Provision

The *South Dublin County Council Development Plan 2016-2022* requires that disabled-accessible car parking be provided in compliance with Part M of the Building Regulations (i.e. that it constitute at least 5% of the total car parking provision). Table 16 applies this requirement to the proposed development.

[7] Assumed maximum potential overnight car parking occupancy

Table 16 – Accessible Car Parking Provision

Proposed Car Parking Provision	Minimum Required Proportion	Accessible Spaces Required	Accessible Spaces Proposed
30 spaces	5%	2 spaces	3 spaces

The proposed development shall include a total of 3no. disabled-accessible car parking spaces, all of which all shall be located in proximity to building entrances.

6.4 Bicycle Parking Provision

Table 17 – Bicycle Parking Provision

Development Element	Cycle Parking Minimum	Quantum	Minimum Provision	Proposed Provision
Long-Term Cycle Parking Spaces				
Nursing Home	1 space per 5 staff	30 staff	6 spaces	6 spaces
Independent Living Apts[8]	1 space per 5 apartments	60 apartments	12 spaces	22 spaces
Pharmacy[9]	1 space per 5 staff	4 staff	1 space	1 space
Short Stay (Visitor) Cycle Parking Spaces				
Nursing Home	1 space per 10 residents	106 residents	11 spaces	11 spaces
Independent Living Apts	1 space per 10 apartments	60 apartments	6 spaces	10 spaces
Pharmacy	1 space per 50m² GFA	68m² GFA	1 space	2 spaces
Combined Cycle Parking Provision				
TOTALS			37 spaces	52 spaces

[8] Assessed as residential apartments
[9] Assessed as convenience retail

The bicycle parking provision of the proposed development has been assessed with respect to the *South Dublin County Council Development Plan 2016–2022*, which defines the minimum standard bicycle parking provision for new developments by land use type. Table 17 shows the standards applicable to the proposed development.

The proposed development shall include a total of 52no. bicycle parking spaces. These shall include:

- 29no. long-term cycle storage spaces for independent living residents and for staff of the nursing home, day centre, and pharmacy (of which 1no. space to accommodate a cargo bike); and
- 23no. short stay cycle parking spaces for visitors.

The development's proposed bicycle parking provision thereby exceeds the requirements of the Local Authority development plan.

6.5 Electric Vehicle Charging Provision

The *South Dublin County Council Development Plan 2016–2022* requires that:

> *"all developments shall provide facilities for the charging of battery operated cars at a rate of up to 10% of the total car parking spaces. The remainder of the parking spaces should be constructed to be capable of accommodating future charging points, as required."*

All car parking spaces within the development shall therefore be 'future-proofed' through the inclusion of cables or ducting to permit the rapid future installation of EV charging points.

7.0 ACCESS, LAYOUT, PEDESTRIANS & CYCLISTS, SERVICING, PUBLIC TRANSPORT

7.1 Development Access

Vehicular access to the proposed development shall be via a new entrance/exit on Old Greenhills Road at the site's eastern boundary, as shown in Figure 8. This shall have a minor arm carriageway width of 6.0m, allowing two-way vehicle movement into and out of the site.

Figure 8 – Development layout and access
(map data & imagery: Doyle & O'Troithigh, NTA, OSM Contributors, Google)

An unobstructed sight distance of 24m in both directions along Old Greenhills Road is achieved at the development access, as measured from a set-back of 2.4m from the public road edge, in accordance with the requirements of the *Design Manual for Urban Roads and Streets*.

An uncontrolled pedestrian crossing shall be provided across the development access on Old Greenhills Road, with buff-coloured tactile

paving and dropped kerbs to either side. STOP road markings and signage shall be placed at the exit from the development, and kerb radii at the development access junction shall be restricted to 4.5m, to discourage high vehicle speeds on entrance or exit to/from the development.

Refer to the following CS Consulting drawings for further details of the development's vehicular access arrangements:

- D092-CSC-XX-XX-DR-C-0006 (Road Layout)
- D092-CSC-XX-XX-DR-C-0007 (Road Markings and Signs)
- D092-CSC-XX-XX-DR-C-0008 (Sightlines)

7.2 Internal Site Layout

The main element of the development's internal road network is an internal service road with a carriageway width of 6.0m, which extends westward from the development access on Old Greenhills Road before continuing northward between apartment buildings and finally running eastward in line with the southern face of the nursing home building. Perpendicular car parking spaces are positioned along either side of the service road, and a turning head is provided at its far end to accommodate the movements of larger vehicles.

Refer to the following CS Consulting drawings for further details of the development's internal layout:

- D092-CSC-XX-XX-DR-C-0006 (Road Layout)
- D092-CSC-XX-XX-DR-C-0007 (Road Markings and Signs)
- D092-CSC-XX-XX-DR-C-0009 (Swept Path Analysis)
- D092-CSC-XX-XX-DR-C-0010 (Cross Sections)

7.3 Pedestrians & Cyclists

Pedestrian and cyclist access to the development shall be accommodated via the main access on Old Greenhills Road. Footpaths with a minimum width of 1.8m are provided along the development's internal service road, positioned behind on-street car parking spaces. Additional segregated footpaths and paved areas ensure good pedestrian and cyclist permeability through the site.

A total of 52no. bicycle parking spaces shall be provided within the development, comprising 29no. long-term cycle storage spaces for residents and staff, and 23no. short stay cycle parking spaces for visitors.

7.4 Servicing and Waste Collection

The internal layout of the development allows both development servicing (such as deliveries) and waste collection to be conducted within the development itself, thereby avoiding the obstruction of either vehicular or pedestrian traffic on Old Greenhills Road.

7.5 Swept Path Analysis

Swept path analyses have been carried out for cars manoeuvring within the proposed development, as well as for a refuse vehicle, a fire tender, and a minibus. These analyses, provided on drawing D092-CSC-XX-XX-DR-C-0009 within this planning application, indicate that the design of the development accesses and internal layout can accommodate these vehicle movements where required.

7.6 Public Transport

Bus stops on Greenhills Road and on Main Street, within a 5-minute walk of the subject site, are served by 3no. Dublin Bus routes (nos. 27, 54a, and 65)

providing direct connections to Dublin city centre. One of these (route no. 27) is a high-frequency service operating at intervals of 10 minutes. Bus stops within a 10-minute walk are served by one further Dublin Bus route (no. 77a) and by 2no. additional Go-Ahead bus routes (nos. 75/75a and 175).

The development site is also within a 20-minute walk of the Tallaght Square stop on the Luas Red Line, which is served by frequent trams to and from Dublin city centre.

For further details of public transport services and accessibility in the vicinity of the development, refer to the Mobility Management Plan prepared by CS Consulting and submitted separately in support of this planning application.

8.0 SUMMARY & CONCLUSIONS

This report examines the impact of a proposed nursing home development at St. Mary's Priory, Old Greenhills Road, Tallaght, Dublin 24 on the performance of the surrounding road network, and assesses the development's internal layout, car and bicycle parking provision, cyclist and pedestrian facilities, servicing arrangements, and public transport availability.

The main observations and conclusions of this study are as follows:

- The proposed development shall generate only modest vehicular traffic flows. Total vehicle trips (arrivals and departures combined) of 27 PCU are predicted during the AM peak hour (08:00-09:00), and total vehicle trips of 34 PCU in the PM peak hour (15:00-16:00).
- The existing junction of Old Greenhills Road with Tallaght Main Street currently operates well within its effective capacity on all approaches and shall continue to do so when the development is completed in 2024 and beyond the year 2039 (15 years after development completion). Traffic related to the proposed development shall have a negligible impact on the operation of this junctions, having no discernible effect on mean approach queue length and adding no more than 1 second to the mean vehicle delay on any junction approach.
- Vehicular traffic related to the proposed development shall result in a maximum increase of 1.2% in total peak hour traffic flows at the junction of Greenhills Road and Tallaght Main Street, below the threshold value for detailed operational analysis.
- The development's overall car parking provision does not exceed the maximum permitted by the Local Authority development plan.

- The development's provisions of disabled-accessible car parking, bicycle parking, and EV charging meet the requirements of the Local Authority development plan.
- Clear sightlines of 24m in both directions along Old Greenhills Road are achieved at the development's vehicular access, in accordance with the requirements of the *Design Manual for Urban Roads and Streets*.
- Swept path analyses have been conducted for cars manoeuvring within the proposed development, as well as for a refuse vehicle, a fire tender, and a minibus. These indicate that the design of the development access and its internal layout can accommodate these vehicle movements where required.

In summary, the assessment indicates that the proposed development can be supported by the existing road infrastructure, that the parking provision for the proposed development conforms to Local Authority standards, and that the development's access arrangement and internal layout are fit for purpose and comply with the *Design Manual for Urban Roads and Streets*.

Appendix A

TRICS Data

Calculation Reference: AUDIT-656801-210517-0513

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : F - CARE HOME (ELDERLY RESIDENTIAL)
TOTAL VEHICLES

Selected regions and areas:

05	**EAST MIDLANDS**		
	DS	DERBYSHIRE	1 days
09	**NORTH**		
	TW	TYNE & WEAR	1 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: Number of residents
Actual Range: 52 to 70 (units:)
Range Selected by User: 16 to 180 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 05/11/19

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:

Tuesday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	2 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)	2

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	2

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:

C2	2 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

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	2 days

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

Population within 5 miles:

250,001 to 500,000	2 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	1 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	2 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	2 days

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

LIST OF SITES relevant to selection parameters

1 **DS-05-F-01** **NURSING HOME** **DERBYSHIRE**
29 VILLAGE STREET
DERBY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of residents: 70
Survey date: TUESDAY *21/10/14* *Survey Type: MANUAL*

2 **TW-05-F-03** **NURSING HOME** **TYNE & WEAR**
MOORE STREET
GATESHEAD
FELLING SHORE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of residents: 52
Survey date: THURSDAY *02/05/19* *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 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)
TOTAL VEHICLES
Calculation factor: 1 RESIDE
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	2	61	0.049	2	61	0.016	2	61	0.065
08:00 - 09:00	**2**	**61**	**0.115**	2	61	0.074	**2**	**61**	**0.189**
09:00 - 10:00	2	61	0.041	2	61	0.008	2	61	0.049
10:00 - 11:00	2	61	0.025	2	61	0.033	2	61	0.058
11:00 - 12:00	2	61	0.025	2	61	0.033	2	61	0.058
12:00 - 13:00	2	61	0.033	2	61	0.016	2	61	0.049
13:00 - 14:00	2	61	0.025	2	61	0.033	2	61	0.058
14:00 - 15:00	2	61	0.057	2	61	0.057	2	61	0.114
15:00 - 16:00	2	61	0.057	**2**	**61**	**0.107**	2	61	0.164
16:00 - 17:00	2	61	0.049	2	61	0.066	2	61	0.115
17:00 - 18:00	2	61	0.033	2	61	0.049	2	61	0.082
18:00 - 19:00	2	61	0.008	2	61	0.016	2	61	0.024
19:00 - 20:00	2	61	0.090	2	61	0.041	2	61	0.131
20:00 - 21:00	2	61	0.016	2	61	0.074	2	61	0.090
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.623			0.623			1.246

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.*

Parameter summary

Trip rate parameter range selected:	52 - 70 (units:)
Survey date date range:	01/01/13 - 05/11/19
Number of weekdays (Monday-Friday):	2
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.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

TAXIS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	2	61	0.000	2	61	0.000	2	61	0.000
08:00 - 09:00	**2**	**61**	**0.008**	**2**	**61**	**0.008**	**2**	**61**	**0.016**
09:00 - 10:00	2	61	0.000	2	61	0.000	2	61	0.000
10:00 - 11:00	2	61	0.000	2	61	0.000	2	61	0.000
11:00 - 12:00	2	61	0.000	2	61	0.000	2	61	0.000
12:00 - 13:00	2	61	0.008	2	61	0.000	2	61	0.008
13:00 - 14:00	2	61	0.000	2	61	0.000	2	61	0.000
14:00 - 15:00	2	61	0.000	2	61	0.008	2	61	0.008
15:00 - 16:00	2	61	0.000	2	61	0.000	2	61	0.000
16:00 - 17:00	2	61	0.000	2	61	0.000	2	61	0.000
17:00 - 18:00	2	61	0.008	2	61	0.000	2	61	0.008
18:00 - 19:00	2	61	0.000	2	61	0.008	2	61	0.008
19:00 - 20:00	2	61	0.000	2	61	0.000	2	61	0.000
20:00 - 21:00	2	61	0.000	2	61	0.000	2	61	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.024			0.048

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.*

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)
PSVS
Calculation factor: 1 RESIDE
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	2	61	0.008	2	61	0.008	2	61	0.016
08:00 - 09:00	2	61	0.000	2	61	0.000	2	61	0.000
09:00 - 10:00	2	61	0.000	2	61	0.000	2	61	0.000
10:00 - 11:00	2	61	0.008	2	61	0.008	2	61	0.016
11:00 - 12:00	2	61	0.000	2	61	0.000	2	61	0.000
12:00 - 13:00	2	61	0.000	2	61	0.000	2	61	0.000
13:00 - 14:00	2	61	0.000	2	61	0.000	2	61	0.000
14:00 - 15:00	2	61	0.000	2	61	0.000	2	61	0.000
15:00 - 16:00	**2**	**61**	**0.016**	**2**	**61**	**0.016**	**2**	**61**	**0.032**
16:00 - 17:00	2	61	0.008	2	61	0.008	2	61	0.016
17:00 - 18:00	2	61	0.000	2	61	0.000	2	61	0.000
18:00 - 19:00	2	61	0.000	2	61	0.000	2	61	0.000
19:00 - 20:00	2	61	0.000	2	61	0.000	2	61	0.000
20:00 - 21:00	2	61	0.000	2	61	0.000	2	61	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.040			0.040			0.080

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.*

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

CYCLISTS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	**2**	**61**	**0.008**	**2**	**61**	**0.008**	**2**	**61**	**0.016**
08:00 - 09:00	2	61	0.000	2	61	0.000	2	61	0.000
09:00 - 10:00	2	61	0.000	2	61	0.000	2	61	0.000
10:00 - 11:00	2	61	0.008	2	61	0.000	2	61	0.008
11:00 - 12:00	2	61	0.000	2	61	0.000	2	61	0.000
12:00 - 13:00	2	61	0.000	2	61	0.008	2	61	0.008
13:00 - 14:00	2	61	0.008	2	61	0.000	2	61	0.008
14:00 - 15:00	2	61	0.000	2	61	0.008	2	61	0.008
15:00 - 16:00	2	61	0.000	2	61	0.000	2	61	0.000
16:00 - 17:00	2	61	0.000	2	61	0.000	2	61	0.000
17:00 - 18:00	2	61	0.008	2	61	0.000	2	61	0.008
18:00 - 19:00	2	61	0.000	2	61	0.008	2	61	0.008
19:00 - 20:00	2	61	0.000	2	61	0.000	2	61	0.000
20:00 - 21:00	2	61	0.000	2	61	0.000	2	61	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.032			0.064

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.*

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

CARS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	2	61	0.033	2	61	0.000	2	61	0.033
08:00 - 09:00	**2**	**61**	**0.107**	2	61	0.066	**2**	**61**	**0.173**
09:00 - 10:00	2	61	0.033	2	61	0.008	2	61	0.041
10:00 - 11:00	2	61	0.016	2	61	0.016	2	61	0.032
11:00 - 12:00	2	61	0.016	2	61	0.025	2	61	0.041
12:00 - 13:00	2	61	0.025	2	61	0.016	2	61	0.041
13:00 - 14:00	2	61	0.016	2	61	0.033	2	61	0.049
14:00 - 15:00	2	61	0.057	2	61	0.041	2	61	0.098
15:00 - 16:00	2	61	0.033	**2**	**61**	**0.090**	2	61	0.123
16:00 - 17:00	2	61	0.041	2	61	0.049	2	61	0.090
17:00 - 18:00	2	61	0.025	2	61	0.049	2	61	0.074
18:00 - 19:00	2	61	0.008	2	61	0.008	2	61	0.016
19:00 - 20:00	2	61	0.082	2	61	0.041	2	61	0.123
20:00 - 21:00	2	61	0.016	2	61	0.066	2	61	0.082
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.508			0.508			1.016

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.*

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)
LGVS
Calculation factor: 1 RESIDE
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	**2**	**61**	**0.008**	**2**	**61**	**0.008**	**2**	**61**	**0.016**
08:00 - 09:00	2	61	0.000	2	61	0.000	2	61	0.000
09:00 - 10:00	2	61	0.008	2	61	0.000	2	61	0.008
10:00 - 11:00	2	61	0.000	2	61	0.008	2	61	0.008
11:00 - 12:00	2	61	0.008	2	61	0.008	2	61	0.016
12:00 - 13:00	2	61	0.000	2	61	0.000	2	61	0.000
13:00 - 14:00	2	61	0.008	2	61	0.000	2	61	0.008
14:00 - 15:00	2	61	0.000	2	61	0.008	2	61	0.008
15:00 - 16:00	2	61	0.008	2	61	0.000	2	61	0.008
16:00 - 17:00	2	61	0.000	2	61	0.008	2	61	0.008
17:00 - 18:00	2	61	0.000	2	61	0.000	2	61	0.000
18:00 - 19:00	2	61	0.000	2	61	0.000	2	61	0.000
19:00 - 20:00	2	61	0.008	2	61	0.000	2	61	0.008
20:00 - 21:00	2	61	0.000	2	61	0.008	2	61	0.008
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.048			0.048			0.096

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.*

Calculation Reference: AUDIT-656801-210517-0507

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : P - ASSISTED LIVING
TOTAL VEHICLES

Selected regions and areas:

04	**EAST ANGLIA**		
	NF	NORFOLK	2 days
11	**SCOTLAND**		
	AD	ABERDEEN CITY	1 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: 24 to 40 (units:)
Range Selected by User: 11 to 58 (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: 01/01/13 to 22/11/19

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:

Wednesday	1 days
Friday	2 days

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

Selected survey types:

Manual count	3 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)	1
Edge of Town	1
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	2
No Sub Category	1

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	3 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:

10,001 to 15,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

125,001 to 250,000	3 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

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	3 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	3 days

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

LIST OF SITES relevant to selection parameters

1	**AD-03-P-01**	**ASSISTED LIVING**		**ABERDEEN CITY**
	ST MACHAR DRIVE			
	ABERDEEN			
	OLD ABERDEEN			
	Neighbourhood Centre (PPS6 Local Centre)			
	No Sub Category			
	Total No of Dwellings:		24	
	Survey date: WEDNESDAY		*20/11/19*	*Survey Type: MANUAL*
2	**NF-03-P-01**	**ASSISTED LIVING**		**NORFOLK**
	MOUNTBATTEN DRIVE			
	NORWICH			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		40	
	Survey date: FRIDAY		*08/11/19*	*Survey Type: MANUAL*
3	**NF-03-P-02**	**ASSISTED LIVING**		**NORFOLK**
	LAKENFIELDS			
	NORWICH			
	LAKENHAM			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:		40	
	Survey date: FRIDAY		*22/11/19*	*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/P - ASSISTED LIVING
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	3	35	0.115	3	35	0.067	3	35	0.182
08:00 - 09:00	3	35	0.077	3	35	0.038	3	35	0.115
09:00 - 10:00	**3**	**35**	**0.250**	3	35	0.135	**3**	**35**	**0.385**
10:00 - 11:00	3	35	0.212	3	35	0.135	3	35	0.347
11:00 - 12:00	3	35	0.144	3	35	0.202	3	35	0.346
12:00 - 13:00	3	35	0.106	3	35	0.135	3	35	0.241
13:00 - 14:00	3	35	0.154	3	35	0.173	3	35	0.327
14:00 - 15:00	3	35	0.115	**3**	**35**	**0.212**	3	35	0.327
15:00 - 16:00	3	35	0.144	3	35	0.125	3	35	0.269
16:00 - 17:00	3	35	0.087	3	35	0.115	3	35	0.202
17:00 - 18:00	3	35	0.029	3	35	0.029	3	35	0.058
18:00 - 19:00	3	35	0.048	3	35	0.058	3	35	0.106
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.481			1.424			2.905

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.*

Parameter summary

Trip rate parameter range selected:	24 - 40 (units:)
Survey date date range:	01/01/13 - 22/11/19
Number of weekdays (Monday-Friday):	3
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.

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	3	35	0.000	3	35	0.000	3	35	0.000
08:00 - 09:00	3	35	0.000	3	35	0.000	3	35	0.000
09:00 - 10:00	3	35	0.000	3	35	0.000	3	35	0.000
10:00 - 11:00	3	35	0.010	3	35	0.010	3	35	0.020
11:00 - 12:00	**3**	**35**	**0.038**	**3**	**35**	**0.038**	**3**	**35**	**0.076**
12:00 - 13:00	3	35	0.000	3	35	0.000	3	35	0.000
13:00 - 14:00	3	35	0.019	3	35	0.019	3	35	0.038
14:00 - 15:00	3	35	0.000	3	35	0.000	3	35	0.000
15:00 - 16:00	3	35	0.010	3	35	0.010	3	35	0.020
16:00 - 17:00	3	35	0.000	3	35	0.000	3	35	0.000
17:00 - 18:00	3	35	0.000	3	35	0.000	3	35	0.000
18:00 - 19:00	3	35	0.000	3	35	0.000	3	35	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.077			0.077			0.154

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	3	35	0.000	3	35	0.000	3	35	0.000
08:00 - 09:00	**3**	**35**	**0.010**	**3**	**35**	**0.010**	**3**	**35**	**0.020**
09:00 - 10:00	3	35	0.000	3	35	0.000	3	35	0.000
10:00 - 11:00	3	35	0.000	3	35	0.000	3	35	0.000
11:00 - 12:00	3	35	0.000	3	35	0.000	3	35	0.000
12:00 - 13:00	3	35	0.000	3	35	0.000	3	35	0.000
13:00 - 14:00	3	35	0.000	3	35	0.000	3	35	0.000
14:00 - 15:00	3	35	0.000	3	35	0.000	3	35	0.000
15:00 - 16:00	3	35	0.000	3	35	0.000	3	35	0.000
16:00 - 17:00	3	35	0.000	3	35	0.000	3	35	0.000
17:00 - 18:00	3	35	0.000	3	35	0.000	3	35	0.000
18:00 - 19:00	3	35	0.000	3	35	0.000	3	35	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.010			0.020

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING

CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	**3**	**35**	**0.019**	**3**	**35**	**0.019**	**3**	**35**	**0.038**
08:00 - 09:00	3	35	0.000	3	35	0.000	3	35	0.000
09:00 - 10:00	3	35	0.010	3	35	0.000	3	35	0.010
10:00 - 11:00	3	35	0.000	3	35	0.010	3	35	0.010
11:00 - 12:00	3	35	0.010	3	35	0.000	3	35	0.010
12:00 - 13:00	3	35	0.000	3	35	0.000	3	35	0.000
13:00 - 14:00	3	35	0.000	3	35	0.000	3	35	0.000
14:00 - 15:00	3	35	0.000	3	35	0.000	3	35	0.000
15:00 - 16:00	3	35	0.000	3	35	0.000	3	35	0.000
16:00 - 17:00	3	35	0.000	3	35	0.000	3	35	0.000
17:00 - 18:00	3	35	0.000	3	35	0.000	3	35	0.000
18:00 - 19:00	3	35	0.000	3	35	0.000	3	35	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.039			0.029			0.068

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.

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TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING

CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	3	35	0.106	3	35	0.058	3	35	0.164
08:00 - 09:00	3	35	0.048	3	35	0.019	3	35	0.067
09:00 - 10:00	**3**	**35**	**0.183**	3	35	0.067	3	35	0.250
10:00 - 11:00	3	35	0.173	3	35	0.115	**3**	**35**	**0.288**
11:00 - 12:00	3	35	0.077	3	35	0.115	3	35	0.192
12:00 - 13:00	3	35	0.077	3	35	0.125	3	35	0.202
13:00 - 14:00	3	35	0.115	3	35	0.154	3	35	0.269
14:00 - 15:00	3	35	0.096	**3**	**35**	**0.163**	3	35	0.259
15:00 - 16:00	3	35	0.135	3	35	0.115	3	35	0.250
16:00 - 17:00	3	35	0.087	3	35	0.106	3	35	0.193
17:00 - 18:00	3	35	0.029	3	35	0.029	3	35	0.058
18:00 - 19:00	3	35	0.038	3	35	0.058	3	35	0.096
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.164			1.124			2.288

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING

LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	3	35	0.000	3	35	0.000	3	35	0.000
08:00 - 09:00	3	35	0.019	3	35	0.010	3	35	0.029
09:00 - 10:00	**3**	**35**	**0.067**	**3**	**35**	**0.067**	**3**	**35**	**0.134**
10:00 - 11:00	3	35	0.029	3	35	0.010	3	35	0.039
11:00 - 12:00	3	35	0.029	3	35	0.048	3	35	0.077
12:00 - 13:00	3	35	0.029	3	35	0.010	3	35	0.039
13:00 - 14:00	3	35	0.019	3	35	0.000	3	35	0.019
14:00 - 15:00	3	35	0.019	3	35	0.048	3	35	0.067
15:00 - 16:00	3	35	0.000	3	35	0.000	3	35	0.000
16:00 - 17:00	3	35	0.000	3	35	0.010	3	35	0.010
17:00 - 18:00	3	35	0.000	3	35	0.000	3	35	0.000
18:00 - 19:00	3	35	0.010	3	35	0.000	3	35	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.221			0.203			0.424

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/P - ASSISTED LIVING

MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	**3**	**35**	**0.010**	**3**	**35**	**0.010**	**3**	**35**	**0.020**
08:00 - 09:00	3	35	0.000	3	35	0.000	3	35	0.000
09:00 - 10:00	3	35	0.000	3	35	0.000	3	35	0.000
10:00 - 11:00	3	35	0.000	3	35	0.000	3	35	0.000
11:00 - 12:00	3	35	0.000	3	35	0.000	3	35	0.000
12:00 - 13:00	3	35	0.000	3	35	0.000	3	35	0.000
13:00 - 14:00	3	35	0.000	3	35	0.000	3	35	0.000
14:00 - 15:00	3	35	0.000	3	35	0.000	3	35	0.000
15:00 - 16:00	3	35	0.000	3	35	0.000	3	35	0.000
16:00 - 17:00	3	35	0.000	3	35	0.000	3	35	0.000
17:00 - 18:00	3	35	0.000	3	35	0.000	3	35	0.000
18:00 - 19:00	3	35	0.000	3	35	0.000	3	35	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.010			0.020

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.*

Appendix B

Traffic Flow Matrices

Peak Hour Traffic Flow Matrices (Passenger Car Units) - Junction 1

2018 AM Peak (08 00-09 00) — SURVEYED TRAFFIC FLOWS

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		80	219	43	342
L3021 East	153		72	82	307
R819 South	382	205		10	597
L3021 West	84	131	5		220
TOTALS	619	416	296	135	1466

2018 PM Peak (15 00-16.00) — SURVEYED TRAFFIC FLOWS

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		103	295	89	487
L3021 East	104		138	88	330
R819 South	290	134		29	453
L3021 West	74	94	20		188
TOTALS	468	331	453	206	1458

2022 AM Peak — BASELINE TRAFFIC FLOWS (surveyed flows + TII growth factor)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		85	234	46	365
L3021 East	163		77	87	327
R819 South	407	219		11	637
L3021 West	90	140	5		235
TOTALS	660	444	316	144	1564

2022 PM Peak — BASELINE TRAFFIC FLOWS (surveyed flows + TII growth factor)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		110	315	95	520
L3021 East	111		147	94	352
R819 South	309	143		31	483
L3021 West	79	100	21		200
TOTALS	499	353	483	220	1555

2024 AM Peak — Other committed development flows

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		10	25	5	40
L3021 East	6				6
R819 South	12				12
L3021 West	2				2
TOTALS	20	10	25	5	60

2024 PM Peak — Other committed development flows

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		4	14	3	21
L3021 East	6				6
R819 South	16				16
L3021 West	4				4
TOTALS	26	4	14	3	47

2024 AM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		98	266	52	416
L3021 East	174		79	90	343
R819 South	433	226		11	670
L3021 West	95	144	6		245
TOTALS	702	468	351	153	1674

2024 PM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		117	339	101	557
L3021 East	121		152	97	370
R819 South	335	148		32	515
L3021 West	85	104	22		211
TOTALS	541	369	513	230	1653

2024 AM Peak — SUBJECT DEVELOPMENT FLOWS

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North				2	2
L3021 East				3	3
R819 South					0
L3021 West	3	1			7
TOTALS	3	4	0	5	12

2024 PM Peak — SUBJECT DEVELOPMENT FLOWS

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North				3	3
L3021 East				3	3
R819 South				1	1
L3021 West	5	6	1		12
TOTALS	5	6	1	7	19

2024 AM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev + subject dev)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		98	266	54	418
L3021 East	174		79	93	346
R819 South	433	226		11	670
L3021 West	98	148	6		252
TOTALS	705	472	351	158	1686

2024 PM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev + subject dev)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		117	339	104	560
L3021 East	121		152	100	373
R819 South	335	148		33	516
L3021 West	90	110	23		223
TOTALS	546	375	514	237	1672

2029 AM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		105	286	56	447
L3021 East	189		86	98	373
R819 South	468	245		12	725
L3021 West	102	156	6		264
TOTALS	759	506	378	166	1809

2029 PM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		127	366	109	602
L3021 East	130		165	105	400
R819 South	362	160		35	557
L3021 West	92	112	24		228
TOTALS	584	399	555	249	1787

2029 AM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev + subject dev)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		105	286	58	449
L3021 East	189		86	101	376
R819 South	468	245		12	725
L3021 West	105	160	6		271
TOTALS	762	510	378	171	1821

2029 PM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev + subject dev)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		127	366	112	605
L3021 East	130		165	108	403
R819 South	362	160		36	558
L3021 West	97	118	25		240
TOTALS	589	405	556	256	1806

2039 AM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		112	303	60	475
L3021 East	200		91	104	395
R819 South	497	260		13	770
L3021 West	109	166	6		281
TOTALS	806	538	400	177	1921

2039 PM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		135	389	116	640
L3021 East	138		175	112	425
R819 South	384	170		37	591
L3021 West	93	119	25		242
TOTALS	620	424	589	265	1898

2039 AM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev + subject dev)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		112	303	62	477
L3021 East	200		91	107	398
R819 South	497	260		13	770
L3021 West	112	170	6		288
TOTALS	809	542	400	182	1933

2039 PM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev + subject dev)

From \ To	R819 North	L3021 East	R819 South	L3021 West	TOTALS
R819 North		135	389	119	643
L3021 East	138		175	115	428
R819 South	384	170		38	592
L3021 West	103	125	26		254
TOTALS	625	430	590	272	1917

Peak Hour Traffic Flow Matrices (Passenger Car Units) - Junction 2

2018 AM Peak (08:00-09:00) — SURVEYED TRAFFIC FLOWS

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		20	210	230
Old Greenhills Rd	5		10	15
L3021 East	124	8		132
TOTALS	129	28	220	377

2018 PM Peak (15:00-16:00) — SURVEYED TRAFFIC FLOWS

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		12	172	184
Old Greenhills Rd	9		15	24
L3021 East	192	14		206
TOTALS	201	26	187	414

2022 AM Peak — BASELINE TRAFFIC FLOWS (surveyed flows + TII growth factor)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		21	224	245
Old Greenhills Rd	5		11	16
L3021 East	132	9		141
TOTALS	137	30	235	402

2022 PM Peak — BASELINE TRAFFIC FLOWS (surveyed flows + TII growth factor)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		13	183	196
Old Greenhills Rd	10		16	26
L3021 East	205	15		220
TOTALS	215	28	199	442

2024 AM Peak — Other committed development flows

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West			2	2
Old Greenhills Rd				0
L3021 East	5			5
TOTALS	5	0	2	7

2024 PM Peak — Other committed development flows

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West				0
Old Greenhills Rd				0
L3021 East	3			3
TOTALS	3	0	0	3

2024 AM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		22	233	255
Old Greenhills Rd	6		11	17
L3021 East	142	9		151
TOTALS	148	31	244	423

2024 PM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		13	189	202
Old Greenhills Rd	10		17	27
L3021 East	214	15		229
TOTALS	224	28	206	458

2024 AM Peak — SUBJECT DEVELOPMENT FLOWS

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		12		12
Old Greenhills Rd	3		7	10
L3021 East		5		5
TOTALS	3	17	7	27

2024 PM Peak — SUBJECT DEVELOPMENT FLOWS

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		7		7
Old Greenhills Rd	7		12	19
L3021 East		8		8
TOTALS	7	15	12	34

2024 AM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		34	233	267
Old Greenhills Rd	9		18	27
L3021 East	142	14		156
TOTALS	151	48	251	450

2024 PM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		20	189	209
Old Greenhills Rd	17		29	46
L3021 East	214	23		237
TOTALS	231	43	218	492

2029 AM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		24	253	277
Old Greenhills Rd	6		12	18
L3021 East	153	10		163
TOTALS	159	34	265	458

2029 PM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		14	205	219
Old Greenhills Rd	11		18	29
L3021 East	232	17		249
TOTALS	243	31	223	497

2029 AM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		36	253	289
Old Greenhills Rd	9		19	28
L3021 East	153	15		168
TOTALS	162	51	272	485

2029 PM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		21	205	226
Old Greenhills Rd	18		30	48
L3021 East	232	25		257
TOTALS	250	46	235	531

2039 AM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		25	269	294
Old Greenhills Rd	6		13	19
L3021 East	162	10		172
TOTALS	168	35	282	485

2039 PM Peak — WITHOUT SUBJECT DEVELOPMENT (surveyed flows + TII growth factor + committed development)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		15	218	233
Old Greenhills Rd	11		19	30
L3021 East	247	18		265
TOTALS	258	33	237	528

2039 AM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		37	269	306
Old Greenhills Rd	9		20	29
L3021 East	162	15		177
TOTALS	171	52	289	512

2039 PM Peak — WITH SUBJECT DEVELOPMENT IN PLACE (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	L3021 West	Old Greenhills Rd	L3021 East	TOTALS
L3021 West		22	218	240
Old Greenhills Rd	18		31	49
L3021 East	247	26		273
TOTALS	265	48	249	562

CS CONSULTING GROUP

Appendix C

PICADY Modelling Results

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.3.332 [14595 13/11/2013]

Filename: D092 PICADY Model 20220128 arc8
Path: J:\D_JOBS\Job-D092\B_Documents\Civil\Civil Reports\Second Application 202112\Transport\Modelling
Report generation date: 28/01/2022 07:51:25

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	- 2022 Baseline									
Stream B-AC	0.03	7.09	0.03	A	492 %	0.06	7.37	0.06	A	425 %
Stream C-AB	0.02	4.99	0.02	A	[Stream B-AC]	0.04	4.75	0.03	A	[Stream B-AC]
	- 2024 No Dev									
Stream B-AC	0.04	7.25	0.04	A	459 %	0.06	7.38	0.06	A	409 %
Stream C-AB	0.02	4.97	0.02	A	[Stream B-AC]	0.04	4.73	0.03	A	[Stream B-AC]
	- 2024 With Dev									
Stream B-AC	0.06	7.39	0.06	A	405 %	0.11	7.75	0.10	A	329 %
Stream C-AB	0.03	5.02	0.03	A	[Stream B-AC]	0.06	4.79	0.04	A	[Stream B-AC]
	- 2029 No Dev									
Stream B-AC	0.04	7.30	0.04	A	419 %	0.07	7.53	0.06	A	368 %
Stream C-AB	0.02	4.97	0.02	A	[Stream B-AC]	0.04	4.72	0.03	A	[Stream B-AC]
	- 2029 With Dev									
Stream B-AC	0.06	7.47	0.06	A	372 %	0.12	7.90	0.10	A	300 %
Stream C-AB	0.04	5.02	0.03	A	[Stream B-AC]	0.07	4.77	0.05	A	[Stream B-AC]
	- 2039 No Dev									
Stream B-AC	0.04	7.34	0.04	A	392 %	0.07	7.59	0.07	A	344 %
Stream C-AB	0.02	4.96	0.02	A	[Stream B-AC]	0.05	4.69	0.04	A	[Stream B-AC]
	- 2039 With Dev									
Stream B-AC	0.07	7.53	0.06	A	350 %	0.12	7.98	0.11	A	282 %
Stream C-AB	0.04	5.01	0.03	A	[Stream B-AC]	0.08	4.75	0.05	A	[Stream B-AC]

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

"D1 - 2022 Baseline, AM" model duration: 07:45 - 09:15
"D2 - 2022 Baseline, PM" model duration: 14:45 - 16:15
"D3 - 2024 No Dev, AM" model duration: 07:45 - 09:15
"D4 - 2024 No Dev, PM" model duration: 14:45 - 16:15
"D5 - 2024 With Dev, AM" model duration: 07:45 - 09:15
"D6 - 2024 With Dev, PM" model duration: 14:45 - 16:15
"D7 - 2029 No Dev, AM" model duration: 07:45 - 09:15
"D8 - 2029 No Dev, PM" model duration: 14:45 - 16:15
"D9 - 2029 With Dev, AM" model duration: 07:45 - 09:15
"D10 - 2029 With Dev, PM" model duration: 14:45 - 16:15
"D11 - 2039 No Dev, AM" model duration: 07:45 - 09:15
"D12 - 2039 No Dev, PM" model duration: 14:45 - 16:15
"D13 - 2039 With Dev, AM" model duration: 07:45 - 09:15
"D14 - 2039 With Dev, PM" model duration: 14:45 - 16:15

Run using Junctions 8.0.3.332 at 28/01/2022 07:51:17

File summary

File Description

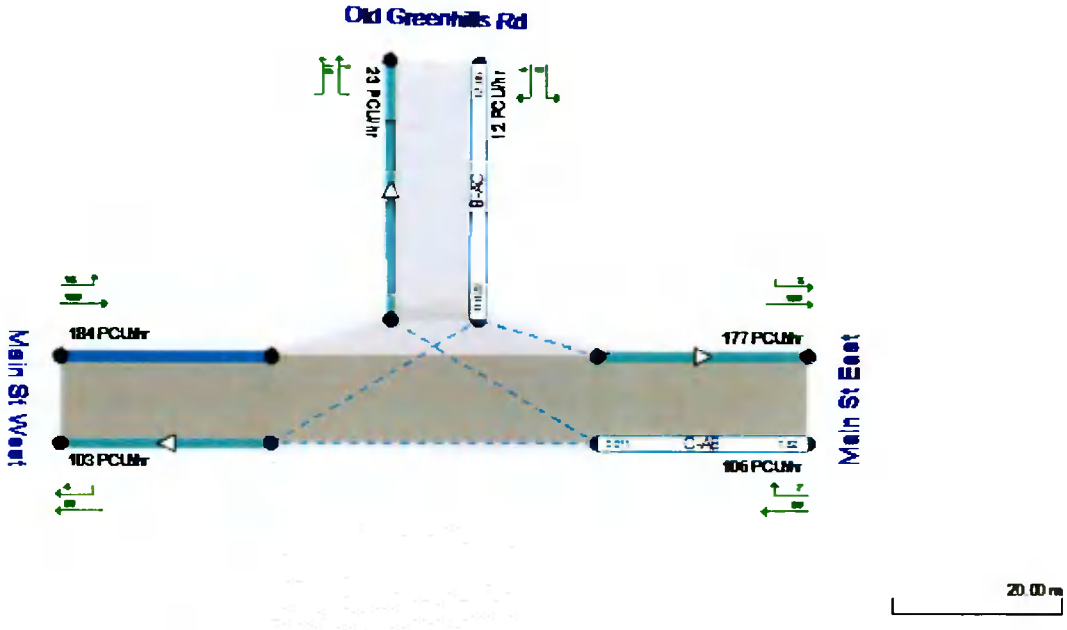
Title	Old Greenhills Road
Location	Tallaght, Dublin 24
Site Number	
Date	28/01/2022
Version	
Status	
Identifier	
Client	
Jobnumber	D092
Enumerator	GF
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75		✓	RFC	0.90	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



Text overlays show modelled flow through the junction (entry and exit flows, PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ().

Time Segment (07:45-08:00)
Showing Analysis Set "A1 - ", Demand Set "D1 - 2022 Baseline, AM"

The junction diagram reflects the last run of ARCADY

- 2022 Baseline, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2022 Baseline AM	2022 Baseline	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.24	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	492	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-

2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only, they may differ for subsequent time segments

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	245.00	100.000
Old Greenhills Rd	ONE HOUR	✓	16.00	100.000
Main St East	ONE HOUR	✓	141.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Main St West	184.45	184.45		
07:45-08:00	Old Greenhills Rd	12.05	12.05		
07:45-08:00	Main St East	106.15	106.15		
08:00-08:15	Main St West	220.25	220.25		
08:00-08:15	Old Greenhills Rd	14.38	14.38		
08:00-08:15	Main St East	126.76	126.76		
08:15-08:30	Main St West	269.75	269.75		
08:15-08:30	Old Greenhills Rd	17.62	17.62		
08:15-08:30	Main St East	155.24	155.24		
08:30-08:45	Main St West	269.75	269.75		
08:30-08:45	Old Greenhills Rd	17.62	17.62		
08:30-08:45	Main St East	155.24	155.24		
08:45-09:00	Main St West	220.25	220.25		
08:45-09:00	Old Greenhills Rd	14.38	14.38		
08:45-09:00	Main St East	126.76	126.76		
09:00-09:15	Main St West	184.45	184.45		
09:00-09:15	Old Greenhills Rd	12.05	12.05		
09:00-09:15	Main St East	106.15	106.15		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	21.000	224.000
	B	5.000	0.000	11.000
	C	132.000	9.000	3.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.00	0.09	0.91
	B	0.31	0.00	0.69
	C	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	7.09	0.03	A
C-AB	0.02	4.99	0.02	A

- 2022 Baseline, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2022 Baseline PM	2022 Baseline	PM		ONE HOUR	14:45	16:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.24	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	425	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	196.00	100.000
Old Greenhills Rd	ONE HOUR	✓	26.00	100.000

Main St East	ONE HOUR	✓	220.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
14:45-15:00	Main St West	147.56	147.56		
14:45-15:00	Old Greenhills Rd	19.57	19.57		
14:45-15:00	Main St East	165.63	165.63		
15:00-15:15	Main St West	176.20	176.20		
15:00-15:15	Old Greenhills Rd	23.37	23.37		
15:00-15:15	Main St East	197.78	197.78		
15:15-15:30	Main St West	215.80	215.80		
15:15-15:30	Old Greenhills Rd	28.63	28.63		
15:15-15:30	Main St East	242.22	242.22		
15:30-15:45	Main St West	215.80	215.80		
15:30-15:45	Old Greenhills Rd	28.63	28.63		
15:30-15:45	Main St East	242.22	242.22		
15:45-16:00	Main St West	176.20	176.20		
15:45-16:00	Old Greenhills Rd	23.37	23.37		
15:45-16:00	Main St East	197.78	197.78		
16:00-16:15	Main St West	147.56	147.56		
16:00-16:15	Old Greenhills Rd	19.57	19.57		
16:00-16:15	Main St East	165.63	165.63		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	13.000	183.000
	B	10.000	0.000	16.000
	C	205.000	15.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.00	0.07	0.93
	B	0.38	0.00	0.62
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000

	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	7.37	0.06	A
C-AB	0.03	4.75	0.04	A

- 2024 No Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 No Dev_AM	2024 No Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.36	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	459	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D

Minor Arm Geometry

Name	Minor Arm	Lane Width	Lane Width	Lane Width	Width at give-way	Width at 5m	Width at	Width at	Width at	Estimate Flare	Flare Length	Visibility	Visibility To Right

	Type	(m)	(Left) (m)	(Right) (m)	(m)	(m)	10m (m)	15m (m)	20m (m)	Length	(PCU)	To Left (m)	(m)
Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted

Values are shown for the first time segment only; they may differ for subsequent time segments

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	255.00	100.000
Old Greenhills Rd	ONE HOUR	✓	17.00	100.000
Main St East	ONE HOUR	✓	151.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Main St West	191.98	191.98		
07:45-08:00	Old Greenhills Rd	12.80	12.80		
07:45-08:00	Main St East	113.68	113.68		
08:00-08:15	Main St West	229.24	229.24		
08:00-08:15	Old Greenhills Rd	15.28	15.28		
08:00-08:15	Main St East	135.75	135.75		
08:15-08:30	Main St West	280.76	280.76		
08:15-08:30	Old Greenhills Rd	18.72	18.72		
08:15-08:30	Main St East	166.25	166.25		
08:30-08:45	Main St West	280.76	280.76		
08:30-08:45	Old Greenhills Rd	18.72	18.72		

08:30-08:45	Main St East	166.25	166.25		
08:45-09:00	Main St West	229.24	229.24		
08:45-09:00	Old Greenhills Rd	15.28	15.28		
08:45-09:00	Main St East	135.75	135.75		
09:00-09:15	Main St West	191.98	191.98		
09:00-09:15	Old Greenhills Rd	12.80	12.80		
09:00-09:15	Main St East	113.68	113.68		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	22.000	233.000
	B	6.000	0.000	11.000
	C	142.000	9.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.00	0.09	0.91
	B	0.35	0.00	0.65
	C	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	7.25	0.04	A
C-AB	0.02	4.97	0.02	A

- 2024 No Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 No Dev PM	2024 No Dev	PM		ONE HOUR	14:45	16:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.26	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	409	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	202.00	100.000
Old Greenhills Rd	ONE HOUR	✓	27.00	100.000
Main St East	ONE HOUR	✓	229.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
14:45-15:00	Main St West	152.08	152.08		
14:45-15:00	Old Greenhills Rd	20.33	20.33		
14:45-15:00	Main St East	172.40	172.40		
15:00-15:15	Main St West	181.59	181.59		
15:00-15:15	Old Greenhills Rd	24.27	24.27		
15:00-15:15	Main St East	205.87	205.87		
15:15-15:30	Main St West	222.41	222.41		
15:15-15:30	Old Greenhills Rd	29.73	29.73		
15:15-15:30	Main St East	252.13	252.13		
15:30-15:45	Main St West	222.41	222.41		
15:30-15:45	Old Greenhills Rd	29.73	29.73		
15:30-15:45	Main St East	252.13	252.13		
15:45-16:00	Main St West	181.59	181.59		
15:45-16:00	Old Greenhills Rd	24.27	24.27		
15:45-16:00	Main St East	205.87	205.87		
16:00-16:15	Main St West	152.08	152.08		
16:00-16:15	Old Greenhills Rd	20.33	20.33		
16:00-16:15	Main St East	172.40	172.40		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	13.000	189.000
	B	10.000	0.000	17.000
	C	214.000	15.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C

From	A	0.00	0.06	0.94
	B	0.37	0.00	0.63
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	7.38	0.06	A
C-AB	0.03	4.73	0.04	A

- 2024 With Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 With Dev, AM	2024 With Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.47	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	405	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only, they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	267.00	100.000
Old Greenhills Rd	ONE HOUR	✓	27.00	100.000
Main St East	ONE HOUR	✓	156.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Main St West	201.01	201.01		
07:45-08:00	Old Greenhills Rd	20.33	20.33		
07:45-08:00	Main St East	117.44	117.44		
08:00-08:15	Main St West	240.03	240.03		
08:00-08:15	Old Greenhills Rd	24.27	24.27		
08:00-08:15	Main St East	140.24	140.24		
08:15-08:30	Main St West	293.97	293.97		
08:15-08:30	Old Greenhills Rd	29.73	29.73		
08:15-08:30	Main St East	171.76	171.76		
08:30-08:45	Main St West	293.97	293.97		
08:30-08:45	Old Greenhills Rd	29.73	29.73		
08:30-08:45	Main St East	171.76	171.76		
08:45-09:00	Main St West	240.03	240.03		
08:45-09:00	Old Greenhills Rd	24.27	24.27		
08:45-09:00	Main St East	140.24	140.24		
09:00-09:15	Main St West	201.01	201.01		
09:00-09:15	Old Greenhills Rd	20.33	20.33		
09:00-09:15	Main St East	117.44	117.44		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	34.000	233.000
	B	9.000	0.000	18.000
	C	142.000	14.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.00	0.13	0.87
	B	0.33	0.00	0.67
	C	0.91	0.09	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	7.39	0.06	A
C-AB	0.03	5.02	0.03	A

- 2024 With Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 With Dev, PM	2024 With Dev	PM		ONE HOUR	14:45	16:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.57	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	329	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)

Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	209.00	100.000
Old Greenhills Rd	ONE HOUR	✓	46.00	100.000
Main St East	ONE HOUR	✓	237.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
14:45-15:00	Main St West	157.35	157.35		
14:45-15:00	Old Greenhills Rd	34.63	34.63		
14:45-15:00	Main St East	178.43	178.43		
15:00-15:15	Main St West	187.89	187.89		
15:00-15:15	Old Greenhills Rd	41.35	41.35		
15:00-15:15	Main St East	213.06	213.06		
15:15-15:30	Main St West	230.11	230.11		
15:15-15:30	Old Greenhills Rd	50.65	50.65		
15:15-15:30	Main St East	260.94	260.94		
15:30-15:45	Main St West	230.11	230.11		
15:30-15:45	Old Greenhills Rd	50.65	50.65		
15:30-15:45	Main St East	260.94	260.94		
15:45-16:00	Main St West	187.89	187.89		

15:45-16:00	Old Greenhills Rd	41.35	41.35		
15:45-16:00	Main St East	213.06	213.06		
16:00-16:15	Main St West	157.35	157.35		
16:00-16:15	Old Greenhills Rd	34.63	34.63		
16:00-16:15	Main St East	178.43	178.43		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	20.000	189.000
	B	17.000	0.000	29.000
	C	214.000	23.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.00	0.10	0.90
	B	0.37	0.00	0.63
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	7.75	0.11	A
C-AB	0.04	4.79	0.06	A

- 2029 No Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors

			100 000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 No Dev. AM	2029 No Dev	AM		ONE HOUR	07 45	09 15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6 35	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	419	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8 00		0 00		2 20	240 00	✓	0 00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3 00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504 506	0 084	0 212	0 133	0 303
2	B-C	644 711	0 090	0 228	-	-
2	C-B	712 950	0 252	0 252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	277.00	100.000
Old Greenhills Rd	ONE HOUR	✓	18.00	100.000
Main St East	ONE HOUR	✓	163.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Main St West	208.54	208.54		
07:45-08:00	Old Greenhills Rd	13.55	13.55		
07:45-08:00	Main St East	122.71	122.71		
08:00-08:15	Main St West	249.02	249.02		
08:00-08:15	Old Greenhills Rd	16.18	16.18		
08:00-08:15	Main St East	146.53	146.53		
08:15-08:30	Main St West	304.98	304.98		
08:15-08:30	Old Greenhills Rd	19.82	19.82		
08:15-08:30	Main St East	179.47	179.47		
08:30-08:45	Main St West	304.98	304.98		
08:30-08:45	Old Greenhills Rd	19.82	19.82		
08:30-08:45	Main St East	179.47	179.47		
08:45-09:00	Main St West	249.02	249.02		
08:45-09:00	Old Greenhills Rd	16.18	16.18		
08:45-09:00	Main St East	146.53	146.53		
09:00-09:15	Main St West	208.54	208.54		
09:00-09:15	Old Greenhills Rd	13.55	13.55		
09:00-09:15	Main St East	122.71	122.71		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	24.000	253.000
	B	6.000	0.000	12.000
	C	153.000	10.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C

From	A	0.00	0.09	0.91
	B	0.33	0.00	0.67
	C	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	7.30	0.04	A
C-AB	0.02	4.97	0.02	A

- 2029 No Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 No Dev, PM	2029 No Dev	PM		ONE HOUR	14.45	16.15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.29	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	368	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B Geometries for Arm A (if relevant) are measured opposite Arm D

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	219.00	100.000
Old Greenhills Rd	ONE HOUR	✓	29.00	100.000
Main St East	ONE HOUR	✓	249.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
14:45-15:00	Main St West	164.87	164.87		
14:45-15:00	Old Greenhills Rd	21.83	21.83		
14:45-15:00	Main St East	187.46	187.46		
15:00-15:15	Main St West	196.88	196.88		
15:00-15:15	Old Greenhills Rd	26.07	26.07		
15:00-15:15	Main St East	223.85	223.85		
15:15-15:30	Main St West	241.12	241.12		
15:15-15:30	Old Greenhills Rd	31.93	31.93		
15:15-15:30	Main St East	274.15	274.15		
15:30-15:45	Main St West	241.12	241.12		
15:30-15:45	Old Greenhills Rd	31.93	31.93		
15:30-15:45	Main St East	274.15	274.15		
15:45-16:00	Main St West	196.88	196.88		
15:45-16:00	Old Greenhills Rd	26.07	26.07		
15:45-16:00	Main St East	223.85	223.85		
16:00-16:15	Main St West	164.87	164.87		
16:00-16:15	Old Greenhills Rd	21.83	21.83		
16:00-16:15	Main St East	187.46	187.46		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	14.000	205.000
	B	11.000	0.000	18.000
	C	232.000	17.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.00	0.06	0.94
	B	0.38	0.00	0.62
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	7.53	0.07	A
C-AB	0.03	4.72	0.04	A

- 2029 With Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 With Dev, AM	2029 With Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.49	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	372	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B Geometries for Arm A (if relevant) are measured opposite Arm D

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)

Old Greenhills Rd	One lane	3.00									33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments
Streams may be combined, in which case capacity will be adjusted
Values are shown for the first time segment only, they may differ for subsequent time segments

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	289.00	100.000
Old Greenhills Rd	ONE HOUR	✓	28.00	100.000
Main St East	ONE HOUR	✓	168.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Main St West	217.57	217.57		
07:45-08:00	Old Greenhills Rd	21.08	21.08		
07:45-08:00	Main St East	126.48	126.48		
08:00-08:15	Main St West	259.81	259.81		
08:00-08:15	Old Greenhills Rd	25.17	25.17		
08:00-08:15	Main St East	151.03	151.03		
08:15-08:30	Main St West	318.19	318.19		
08:15-08:30	Old Greenhills Rd	30.83	30.83		
08:15-08:30	Main St East	184.97	184.97		
08:30-08:45	Main St West	318.19	318.19		
08:30-08:45	Old Greenhills Rd	30.83	30.83		
08:30-08:45	Main St East	184.97	184.97		
08:45-09:00	Main St West	259.81	259.81		

08:45-09:00	Old Greenhills Rd	25 17	25 17		
08:45-09:00	Main St East	151 03	151 03		
09:00-09:15	Main St West	217 57	217 57		
09:00-09:15	Old Greenhills Rd	21 08	21 08		
09:00-09:15	Main St East	126 48	126 48		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0 000	36 000	253.000
	B	9 000	0 000	19 000
	C	153.000	15 000	0 000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0 00	0 12	0 88
	B	0 32	0 00	0 68
	C	0 91	0 09	0 00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1 000	1 000
	B	1 000	1 000	1 000
	C	1.000	1 000	1 000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0 000	0 000	0 000
	B	0.000	0 000	0 000
	C	0 000	0 000	0 000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0 06	7 47	0 06	A
C-AB	0 03	5 02	0 04	A

- 2029 With Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors

			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2029 With Dev PM	2029 With Dev	PM		ONE HOUR	14:45	16:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.61	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	300	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	226.00	100.000
Old Greenhills Rd	ONE HOUR	✓	48.00	100.000
Main St East	ONE HOUR	✓	257.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
14:45-15:00	Main St West	170.14	170.14		
14:45-15:00	Old Greenhills Rd	36.14	36.14		
14:45-15:00	Main St East	193.48	193.48		
15:00-15:15	Main St West	203.17	203.17		
15:00-15:15	Old Greenhills Rd	43.15	43.15		
15:00-15:15	Main St East	231.04	231.04		
15:15-15:30	Main St West	248.83	248.83		
15:15-15:30	Old Greenhills Rd	52.85	52.85		
15:15-15:30	Main St East	282.96	282.96		
15:30-15:45	Main St West	248.83	248.83		
15:30-15:45	Old Greenhills Rd	52.85	52.85		
15:30-15:45	Main St East	282.96	282.96		
15:45-16:00	Main St West	203.17	203.17		
15:45-16:00	Old Greenhills Rd	43.15	43.15		
15:45-16:00	Main St East	231.04	231.04		
16:00-16:15	Main St West	170.14	170.14		
16:00-16:15	Old Greenhills Rd	36.14	36.14		
16:00-16:15	Main St East	193.48	193.48		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	21.000	205.000
	B	18.000	0.000	30.000
	C	232.000	25.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C

From	A	0.00	0.09	0.91
	B	0.38	0.00	0.63
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10	7.90	0.12	A
C-AB	0.05	4.77	0.07	A

- 2039 No Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2039 No Dev, AM	2039 No Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.40	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	392	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	294.00	100.000
Old Greenhills Rd	ONE HOUR	✓	19.00	100.000
Main St East	ONE HOUR	✓	172.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Main St West	221.34	221.34		
07:45-08:00	Old Greenhills Rd	14.30	14.30		
07:45-08:00	Main St East	129.49	129.49		
08:00-08:15	Main St West	264.30	264.30		
08:00-08:15	Old Greenhills Rd	17.08	17.08		
08:00-08:15	Main St East	154.62	154.62		
08:15-08:30	Main St West	323.70	323.70		
08:15-08:30	Old Greenhills Rd	20.92	20.92		
08:15-08:30	Main St East	189.38	189.38		
08:30-08:45	Main St West	323.70	323.70		
08:30-08:45	Old Greenhills Rd	20.92	20.92		
08:30-08:45	Main St East	189.38	189.38		
08:45-09:00	Main St West	264.30	264.30		
08:45-09:00	Old Greenhills Rd	17.08	17.08		
08:45-09:00	Main St East	154.62	154.62		
09:00-09:15	Main St West	221.34	221.34		
09:00-09:15	Old Greenhills Rd	14.30	14.30		
09:00-09:15	Main St East	129.49	129.49		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	25.000	269.000
	B	6.000	0.000	13.000
	C	162.000	10.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.00	0.09	0.91
	B	0.32	0.00	0.68
	C	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	7.34	0.04	A
C-AB	0.02	4.96	0.02	A

- 2039 No Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2039 No Dev PM	2039 No Dev	PM		ONE HOUR	14:45	16:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.28	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	344	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)

Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments
Streams may be combined in which case capacity will be adjusted
Values are shown for the first time segment only; they may differ for subsequent time segments

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	233.00	100.000
Old Greenhills Rd	ONE HOUR	✓	30.00	100.000
Main St East	ONE HOUR	✓	265.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
14:45-15:00	Main St West	175.41	175.41		
14:45-15:00	Old Greenhills Rd	22.59	22.59		
14:45-15:00	Main St East	199.51	199.51		
15:00-15:15	Main St West	209.46	209.46		
15:00-15:15	Old Greenhills Rd	26.97	26.97		
15:00-15:15	Main St East	238.23	238.23		
15:15-15:30	Main St West	256.54	256.54		
15:15-15:30	Old Greenhills Rd	33.03	33.03		
15:15-15:30	Main St East	291.77	291.77		
15:30-15:45	Main St West	256.54	256.54		
15:30-15:45	Old Greenhills Rd	33.03	33.03		
15:30-15:45	Main St East	291.77	291.77		
15:45-16:00	Main St West	209.46	209.46		

15:45-16:00	Old Greenhills Rd	26.97	26.97		
15:45-16:00	Main St East	238.23	238.23		
16:00-16:15	Main St West	175.41	175.41		
16:00-16:15	Old Greenhills Rd	22.59	22.59		
16:00-16:15	Main St East	199.51	199.51		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	15.000	218.000
	B	11.000	0.000	19.000
	C	247.000	18.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.00	0.06	0.94
	B	0.37	0.00	0.63
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.07	7.59	0.07	A
C-AB	0.04	4.69	0.05	A

- 2039 With Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors

		100 000		

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2039 With Dev_AM	2039 With Dev	AM		ONE HOUR	07 45	09 15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6 54	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	350	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8 00		0 00		2 20	240 00	✓	0 00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3 00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504 506	0 084	0 212	0 133	0 303
2	B-C	644 711	0 090	0 228	-	-
2	C-B	712 950	0 252	0 252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only, they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	306.00	100.000
Old Greenhills Rd	ONE HOUR	✓	29.00	100.000
Main St East	ONE HOUR	✓	177.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	Main St West	230.37	230.37		
07:45-08:00	Old Greenhills Rd	21.83	21.83		
07:45-08:00	Main St East	133.25	133.25		
08:00-08:15	Main St West	275.09	275.09		
08:00-08:15	Old Greenhills Rd	26.07	26.07		
08:00-08:15	Main St East	159.12	159.12		
08:15-08:30	Main St West	336.91	336.91		
08:15-08:30	Old Greenhills Rd	31.93	31.93		
08:15-08:30	Main St East	194.88	194.88		
08:30-08:45	Main St West	336.91	336.91		
08:30-08:45	Old Greenhills Rd	31.93	31.93		
08:30-08:45	Main St East	194.88	194.88		
08:45-09:00	Main St West	275.09	275.09		
08:45-09:00	Old Greenhills Rd	26.07	26.07		
08:45-09:00	Main St East	159.12	159.12		
09:00-09:15	Main St West	230.37	230.37		
09:00-09:15	Old Greenhills Rd	21.83	21.83		
09:00-09:15	Main St East	133.25	133.25		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	37.000	269.000
	B	9.000	0.000	20.000
	C	162.000	15.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C

From	A	0.00	0.12	0.88
	B	0.31	0.00	0.69
	C	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	7.53	0.07	A
C-AB	0.03	5.01	0.04	A

- 2039 With Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2039 With Dev, PM	2039 With Dev	PM		ONE HOUR	14:45	16:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main St / Old Greenhills Rd	T-Junction	Two-way	A,B,C	6.61	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	282	Stream B-AC

Arms

Arms

Name	Name	Description	Arm Type
Main St West	Main St West		Major
Old Greenhills Rd	Old Greenhills Rd		Minor
Main St East	Main St East		Major

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Main St East	8.00		0.00		2.20	240.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Old Greenhills Rd	One lane	3.00										33	33

Pedestrian Crossings

Name	Crossing Type
Main St West	None
Old Greenhills Rd	None
Main St East	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	504.506	0.084	0.212	0.133	0.303
2	B-C	644.711	0.090	0.228	-	-
2	C-B	712.950	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Main St West	ONE HOUR	✓	240.00	100.000
Old Greenhills Rd	ONE HOUR	✓	49.00	100.000
Main St East	ONE HOUR	✓	273.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Name	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
14:45-15:00	Main St West	180.68	180.68		
14:45-15:00	Old Greenhills Rd	36.89	36.89		
14:45-15:00	Main St East	205.53	205.53		
15:00-15:15	Main St West	215.76	215.76		
15:00-15:15	Old Greenhills Rd	44.05	44.05		
15:00-15:15	Main St East	245.42	245.42		
15:15-15:30	Main St West	264.24	264.24		
15:15-15:30	Old Greenhills Rd	53.95	53.95		
15:15-15:30	Main St East	300.58	300.58		
15:30-15:45	Main St West	264.24	264.24		
15:30-15:45	Old Greenhills Rd	53.95	53.95		
15:30-15:45	Main St East	300.58	300.58		
15:45-16:00	Main St West	215.76	215.76		
15:45-16:00	Old Greenhills Rd	44.05	44.05		
15:45-16:00	Main St East	245.42	245.42		
16:00-16:15	Main St West	180.68	180.68		
16:00-16:15	Old Greenhills Rd	36.89	36.89		
16:00-16:15	Main St East	205.53	205.53		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	22.000	218.000
	B	18.000	0.000	31.000
	C	247.000	26.000	0.000

Turning Proportions (PCU) - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.00	0.09	0.91
	B	0.37	0.00	0.63
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Main St / Old Greenhills Rd (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	7.98	0.12	A
C-AB	0.05	4.75	0.08	A