

ANNEXES

ANNEX 1: SCOPING CORRESPONDENCE FROM KEY STAKEHOLDERS

Scott, Jonathan (Leeds)

From: Geoghegan, Simon <Simon.Geoghegan@highwaysengland.co.uk>
Sent: 04 September 2018 13:56
To: Scott, Jonathan (Leeds)
Subject: South Humber Bank Energy Centre, South Marsh Road, Stallingborough: Scoping of Transport Assessment

Jonathan

Thank you for your email of August 13th 2018.

My consultant has reviewed your proposals for the scoping and comments as follows:

Highways England welcome the additional information provided, which will form the basis of the Transport Assessment to be submitted in support of the development proposals. In broad terms, the information provided is satisfactory. However, there are a couple of points which require addressing before the scope can be finalised:

- As per the CH2M Note (AE.18.37.01 TM001), the assessment years should be Circular 02/13 compliant, and a 2028 assessment year should be provided for completeness; and
- Committed development information should be provided through liaison with the LPA and not Highways England.

Please contact me again if I can provide further assistance.

Simon Geoghegan, Asset Manager, ADT(N)

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Scott, Jonathan (Leeds)

From: Scott, Jonathan (Leeds)
Sent: 13 August 2018 10:32
To: 'simon.geoghegan@highways.gsi.gov.uk'
Cc: Firth, Peter
Subject: South Humber Bank Energy Centre, South Marsh Road, Stallingborough: Scoping of Transport Assessment
Attachments: Appendix 1.pdf

Dear Simon,

AECOM have been appointed by EP SHB Ltd regarding the proposed South Humber Bank Energy Centre which will be located to the east of the existing South Humber Bank Power Station located off South Marsh Road, Stallingborough. Thank you for your initial comments on the EIA Scoping Report (letter dated 27th July 2018, Ref: TA 227 134) in which you broadly accept the scope of the Transport Assessment.

I am now writing to set out a more detailed scope of the Transport Assessment and would be grateful if you could review the information provided and confirm that the proposed scope is acceptable.

Proposed Development

The Proposed Development comprises an Energy from Waste Facility for the generation of electricity by combustion of refuse derived fuel (RDF). The annual fuel throughput will vary depending on the net calorific value (NCV) of fuel which could range from 8 to 14MJ/kg, but the Transport Assessment will consider the traffic associated with the lowest NCV fuel, which would equate to approximately 701,500 tonnes per annum (tpa). The Proposed Development site will be located to the east of EP SHB's existing South Humber Bank Power Station on vacant land which is within the ownership of EP SHB Ltd. Subject to being granted planning consent, it is anticipated that construction would commence in 2019 and last approximately 3 years with the development opening in 2022.



All fuel will be imported via road. HGV access to the Proposed Development is proposed via the A180, the A1173, Kiln Lane, Hobson Way and South Marsh Road. The proposed South Humber Bank Link Road to the south of the Proposed Development Site which is due to open mid 2020 will not change the proposed HGV access routing.

It is proposed that the Proposed Development will operate 24 hours a day. Fuel would be delivered to the site between 6am and 6pm 7 days a week. Although the timings allow for deliveries every day of the week, it is likely that the majority of fuel deliveries will be Monday to Friday.

Daily Traffic Generation – Construction

The peak of construction is anticipated to occur in 2020 with 750 construction workers expected on-site. Assuming an occupancy rate of 2 per vehicle which has been accepted on other recent power station construction projects including Eggborough CCGT and Knottingley CCGT, this equates to 375 daily one-way car movements per day. HGVs at the peak of construction are anticipated to be 58 one-way movements per day. The profile of traffic during construction is attached as Appendix 1.

Construction hours are anticipated to be 07:00 – 19:00.

Construction Distribution and Assignment

In terms of construction worker trips, the distribution will be based on the population of towns and cities within a 45 minute drive time of the site and the shortest / quickest route to the Site.

HGV access to the Proposed Development is proposed via the A180, the A1173, Kiln Lane, Hobson Way and South Marsh Road. At the junction of the A180, HGV assignment will be undertaken on the basis of a 50 / 50 A180 eastbound / A180 westbound split.

Daily Traffic Generation - Operation

The calculation of the number of Average Fuel Deliveries per Day is set out below and would likely be in the region of 188 HGVs per day based on deliveries occurring Monday to Friday.

- Fuel Tonnes per Annum: 701,500tpa
- Average HGV Payload: 16 tonnes
- Fuel Deliveries per Year: $701,500\text{tpa} / 16\text{t} = 43,844$ Fuel Deliveries per Year
- Assuming all Deliveries occur Monday to Friday between 6am and 6pm = 260 Delivery Days per Year, but allowing for outages this is expected to be reduced to c.233 Delivery Days per Year
- Fuel Deliveries per Day: $43,844 / 233 \text{ Days} = 188$ Average Fuel Deliveries per Day (one-way)
- Fuel Deliveries per Hour: $188 \text{ Deliveries per Day} / 12 \text{ Hours} = 16$ Average Fuel Deliveries per Hour (one-way).

To estimate the peak daily and hourly traffic flow, the following variables have been applied to ensure a robust assessment.

- Daily variation of fuel deliveries will occur due to sourcing and fuel suppliers. As an approximation, it is estimated that daily traffic flows might vary by +/- 20%. This imposes a 20% increase on the average daily flows.
- Hourly flows are difficult to control, depending on HGV drivers and loading times at other facilities. It is estimated that the hourly peak flow during a day is likely to be about twice that of the average hourly flow.

Based on the above variables, peak daily and hourly Fuel Deliveries are as follows:

- Daily Peak Fuel Deliveries: 226 HGVs (one-way);
- Hourly Peak Fuel Deliveries: 32 HGVs (one-way).

In addition, there would be a maximum of 5 HGV consumable deliveries per day (5 in + 5 out) or 1 in 1 out during the hourly peak. There would also be HGV movements associated with bottom ash and APC residues with a maximum of 61 HGVs per day (61 in + 61 out) or 9 in and 9 out during the hourly peak.

Total HGV movements at the site would therefore be 292 in and 292 out per day and a maximum of 42 in and 42 out in any one hour.

It is estimated that around 56 staff will be required on a shift basis to be spread over a 24 hour period. Site operation is likely to be undertaken via three 8hr shifts (00:00 – 08:00, 08:00 – 16:00, 16:00 – 00:00). Assuming a vehicle occupancy of 1 per vehicle this equates to 56 vehicle arrivals per day (56 in + 56 out).

Operational Assignment

Staff trips will be assigned to the network based on Journey to Work Census data.

HGV access to the Proposed Development is proposed via the A180, the A1173, Kiln Lane, Hobson Way and South Marsh Road. At the junction of the A180, HGV assignment will be undertaken on the basis of a 50 / 50 A180 eastbound / A180 westbound split.

Identification of Peak Hours for Assessment

Peak Hour Junction Counts between the hours of (07:00 – 10:00 and 16:00 – 19:00) have been obtained for the following junctions:

- South Marsh Road / Hobson Way: June 2018 Count
- Laporte Road / Hobson Way / Kiln Lane: June 2018 Count
- A1173 / Kiln Lane: June 2018 Count
- A180 / A1173: July 2017 Count

Total flows into each junction will be calculated to determine the AM and PM Peak Hours for Assessment.

Junction Capacity Assessment

Junction modelling will be undertaken for the identified AM and PM Peak hours for the junction listed above.

The following scenarios will be tested:

- 2018 Base;
- 2020 Base + Committed Development;
- 2020 Base + Committed + Peak of Construction;
- 2022 Base + Committed Development;
- 2022 Base + Committed + Operation.

Committed Development

Highways England are asked to provide a list of committed developments to be included in the baseline flows.

South Humber Link Road

An application for a new South Humber Bank Link Road to the south of the Site connecting Hobson Way with Moody Lane was submitted in March 2018 and is pending determination. The proposed Link Road is due to open in mid-2020. According to the South Humber Bank Link Road Transport Assessment prepared by Atkins in January 2018 the Link Road will result in a redistribution of trips to / from the areas at either end of the Proposed Link Road as shown in Figures 1 and 2.

Figure 1



Figure 2



The proposed net change in traffic flows as a result of the proposed Link Road is set out in Table 1 below.

Link	AM Peak	PM Peak
Hobson Way	+ 740	+ 615
Kiln Lane (West of Hobson Way)	+ 287	+ 296
Kiln Lane (East of A1173)	- 464	- 469
A1173	- 519	- 357

Table 1 above shows that opening of the proposed Link Road would result in increased flows on Hobson Way and Kiln Lane (between Hobson Way and North Moss Lane) and a reduction in flows travelling on Kiln Lane (between North Moss Lane and the A1173), the A1173 and the A180 / A1173 junction.

The effect of the proposed Link Road on the Proposed Development would be additional road capacity at the A180 / A1173 interchange, the A1173 and Kiln Lane to the east of the A1173. Whilst the proposed Link Road would result in reduced capacity on Hobson Way and Kiln Lane (west of Hobson Way), junction modelling undertaken at the Kiln Lane / Laporte Road / Hobson Way roundabout as part of the South Humber Bank Link Road Transport Assessment for the future scenario 2026 with Committed Development and Proposed Link Road shows a maximum Ratio of Flow to Capacity (RFC) of 0.43

Given the above, it is not considered that any junction modelling with the South Humber Bank Link Road in place is considered necessary to support the planning application for the Proposed Development.

We trust that this approach is acceptable and would be grateful if you could confirm.

Kind Regards,
Jonathan

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Scott, Jonathan (Leeds)

From: Rachel Gennery (Engie) <Rachel.Gennery@Nelincs.gov.uk>
Sent: 19 September 2018 16:26
To: Scott, Jonathan (Leeds)
Cc: Lara Hattle (Engie); Cheryl Jarvis (Engie); Mark Gibbons (Engie); Firth, Peter
Subject: South Humber Bank Energy Centre: Transport Assessment Scoping

Importance: High

Hi Jonathan,

Apologies for the delay in my response. Please find my comments on the scoping report below. I have given overall comments but I have also addressed individual items contained within your email.

We would expect the Transport Assessment to be structured in the following way and include, but not be limited to:

1. Executive Summary
2. Introduction
3. Policy Context
 - a. Revised NPPF
 - b. Newly Adopted Local Plan
 - c. Local Transport Plan
 - d. Site Specific Policies and Allocations
4. Background/Existing Situation/Baseline Data –
 - a. including access by public transport, walking and cycling
 - b. review of local road network
 - c. review of personal injury accident data (not using Crashmap unless it is the detailed description)
5. Description of Proposed Development – including
 - a. details of staff shift patterns,
 - b. parking provision (car, disabled, motorcycle, electric vehicle charging points, cycle parking etc. broken down for all users e.g. staff and visitors)
6. Details of Construction
 - a. Timeframe (scoping note states 2019-2022 3 year timeframe)
 - b. Expected vehicle types (including any abnormal loads and how these will be managed)
 - c. Frequency of deliveries for each phase of construction
 - d. Location of staff parking during construction
 - e. Location of construction storage areas
7. Multi Modal Trip Generation
 - a. Operational trip generation based on TRICS data and census data
 - b. Distribution and assignment of trips (Car and HGV – staff and operational deliveries etc.)
8. Impacts
 - a. Junction capacity analysis at the following junctions:
 - i. South Marsh Road / Hobson Way – staggered crossroads
 - ii. Laporte Road / Hobson Way / Kiln Lane - roundabout
 - iii. A1173 / Kiln Lane – roundabout
 - iv. Kiln Lane/North Moss Lane/Trondheim Way - roundabout
 - v. A180 / A1173

- vi. A180 / Moody Lane / Pyewipe Road (Westgate roundabout)
- b. Peak hour allocation – this should be based on survey data (*it should be noted that due to port activities that peak hours have previously identified as 0600-0700 and 0500-0600)
- c. Calculations of background traffic growth (TEMPRO adjusted growth factors)
- d. Committed Development to include:
 - i. South Humber Bank Link Road (SHBLR) – this should be included for operational traffic as it will be open by the time your site is operational. It should not be included when looking at construction traffic as we would expect that the construction of the link road will occur concurrently with the construction of the proposed Energy Centre.
 - ii. SHIP (including access roundabout)
 - iii. A1173 / Kiln Lane Roundabout (improvements via ABLE UK planning app)
- e. Consideration of Kings Road / Pelham Road AQMA roundabout
- f. Consideration of diverted flows due to A18 closure

9. Proposed Mitigation and Residual Impacts

10. Summary and Conclusions

- A Travel Plan will be required to be submitted as part of the planning application. This can be in draft form with a condition to agree details. You should contact our Business Travel Planning Officer for further information on what should be included within the Travel Plan (Eve.Jenkins@nelincs.gov.uk). A Draft should be submitted as part of the planning application submission.
- Due to the number of construction workers required at the site we would also request a Construction Travel Plan to deal with how staff are going to travel to the site during the construction phases.
- A Construction Management Plan will be required to detail how traffic will be managed during the construction phase. A Draft should be submitted as part of the planning application submission.
- A Delivery and Servicing Plan will be required to demonstrate how deliveries and servicing will be managed. This should include (but not be limited to) details of banksmen requirements, scheduling to ensure that vehicles are not left waiting on the highway, time restrictions etc. A Draft should be submitted as part of the planning application submission.

I have provided additional commentary on your scoping notes in the email below in **green**.

If you have any queries please do let me know.

Kind regards,

Rachel

Rachel Gennery | Senior Highways & Transport Planner | ENGIE

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From: Scott, Jonathan (Leeds)
Sent: 29 August 2018 13:27
To: Rachel Gennery (Engie)
Cc: Lara Hattle (Engie) ; Firth, Peter
Subject: RE: South Humber Bank Energy Centre: Transport Assessment Scoping

Rachel,

AECOM have been appointed by EP SHB Limited to prepare the Transport Assessment to support the planning application for the Proposed South Humber Bank Energy Centre near Stallingborough.

We have prepared a detailed transport scoping note in order to agree with you the parameters of the Transport Assessment. This was forwarded to you on 22nd August by your colleague Cheryl Jarvis (see below email chain).

I trust that the approach adopted for the Transport Assessment is acceptable and would be grateful if you could confirm. Alternatively if you prefer to discuss the scoping note over the phone, I would be happy to give you a call.

Kind Regards,
Jonathan

Jonathan Scott BSc (Hons), MSc, MCIHT
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From: Cheryl Jarvis (Engie) <Cheryl.Jarvis@nelincs.gov.uk>
Sent: 22 August 2018 14:54
To: Rachel Gennery (Engie) <Rachel.Gennery@Nelincs.gov.uk>
Cc: Lara Hattle (Engie) <Lara.Hattle@nelincs.gov.uk>; Colin Turnbull <colin.turnbull@dwdlp.com>;
'ian.campbell@aecom.com' <ian.campbell@aecom.com>
Subject: FW: South Humber Bank Energy Centre: Transport Assessment Scoping

Hi Rachel,

See below and attached from Colin.

Colin, if I could be kept in the loop that would be great thanks.

Kind Regards

Cheryl Jarvis MSc | Principal Town Planner | **ENGIE**
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www.engie.com/en  cheryl.jarvis@nelincs.gov.uk

Please note – We are moving Offices shortly. From Wednesday 15th August to 20th August, please phone to make an appointment to see a member of our team. From Monday 20th August we will be in our new offices at New Oxford House, George Street, Grimsby, North East Lincolnshire, DN31 1HB.

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From: Colin Turnbull [<mailto:colin.turnbull@dwdllp.com>]
Sent: 22 August 2018 14:39
To: Cheryl Jarvis (Engie)
Cc: Campbell, Ian
Subject: FW: South Humber Bank Energy Centre: Transport Assessment Scoping

Cheryl

Please could I ask for the below to be sent to your highways colleagues? Alternatively we are content to speak with them directly. In either case please let us know whether you wish to be kept in the loop with the associated technical discussions.

Kind regards

Colin

From: Campbell, Ian
Sent: 22 August 2018 10:56
To: Colin Turnbull (colin.turnbull@dwdllp.com)
Cc: Geoff Bullock (geoff.bullock@dwdllp.com); Cobb, Kirsty; Kearns, Laura; Lowe, Richard; Scott, Jonathan (Leeds)
Subject: FW: South Humber Bank Energy Centre: Transport Assessment Scoping

Dr Ian Campbell, CGeol FGS
Principal Environmental Scientist, Waste Minerals and Resources
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AECOM have been appointed by EP SHB Ltd regarding the proposed South Humber Bank Energy Centre which will be located to the east of the existing South Humber Bank Power Station located off South Marsh Road, Stallingborough. You may have seen the EIA Scoping Report which was submitted in July which provides an overview of the Proposed Development. NELC Planning ref DM/0575/18/SCO. As set out paragraph 6.49 in the Scoping Report, I am writing to set out the detail of the proposed scope of the Transport Assessment and would be grateful if this can be forwarded to NELC Highways and Highways England so that that they can review the information provided and confirm that the proposed scope is acceptable and ensure their specific requirements can be accommodated within the TA.

Proposed Development

The Proposed Development comprises an Energy from Waste Facility for the generation of electricity by combustion of refuse derived fuel (RDF). The annual fuel throughput will vary depending on the net calorific value (NCV) of fuel which could range from 9 to 14MJ/kg, but the Transport Assessment will consider the traffic associated with the lowest NCV fuel, which would equate to a maximum of around 300 HGV movements per day. The Proposed Development site will be located to the east of EP SHB's existing South Humber Bank Power Station on vacant land which is within the ownership of EP SHB Ltd. Subject to being granted planning consent, it is anticipated that construction would commence in 2019 and last approximately 3 years with the development opening in 2022.



All fuel will be imported via road. HGV access to the Proposed Development is proposed via the A180, the A1173, Kiln Lane, Hobson Way and South Marsh Road. The proposed South Humber Bank Link Road to the south of the Proposed Development Site which is due to open mid 2020 will not change the proposed HGV access routing.

Accepted.

It is proposed that the Proposed Development will operate 24 hours a day. Fuel would be delivered to the site between 6am and 6pm 7 days a week. Although the timings allow for deliveries every day of the week, it is likely that the majority of fuel deliveries will be Monday to Friday. Accepted

Daily Traffic Generation – Construction

The peak of construction is anticipated to occur in 2020 with 750 construction workers expected on-site. Assuming an occupancy rate of 2 per vehicle which has been accepted on other recent power station construction projects

including Eggborough CCGT and Knottingley CCGT, this equates to 375 daily one-way car movements per day. HGVs at the peak of construction are anticipated to be 58 one-way movements per day. The profile of traffic during construction is attached as Appendix 1.

Construction hours are anticipated to be 07:00 – 19:00. [See comments above on provision of a Construction Management Plan, Construction Travel Plan and additional details within the TA on how construction will be routed and managed.](#)

Construction Distribution and Assignment

In terms of construction worker trips, the distribution will be based on the population of towns and cities within a 45 minute drive time of the site and the shortest / quickest route to the Site.

HGV access to the Proposed Development is proposed via the A180, the A1173, Kiln Lane, Hobson Way and South Marsh Road. At the junction of the A180, HGV assignment will be undertaken on the basis of a 50 / 50 A180 eastbound / A180 westbound split. – [Is a 50/50 split realistic? What evidence has this been based on or is this assumed? Can you not provide a more detailed split with a justification based on expected locations of where materials will be coming from?](#)

[See additional comments above on provision of a Construction Management Plan, Construction Travel Plan and additional details within the TA on how construction will be routed and managed.](#)

Daily Traffic Generation - Operation

To estimate the peak daily and hourly traffic flow, the following variables have been applied to ensure a robust assessment.

- Daily variation of fuel deliveries will occur due to sourcing and fuel suppliers. As an approximation, it is estimated that daily traffic flows might vary by +/- 20%. This imposes a 20% increase on the average daily flows.
- Hourly flows are difficult to control, depending on HGV drivers and loading times at other facilities. It is estimated that the hourly peak flow during a day is likely to be about twice that of the average hourly flow.

Based on the above variables, peak daily and hourly Fuel Deliveries are as follows:

- Daily Peak Fuel Deliveries: 242 HGVs (one-way);
- Hourly Peak Fuel Deliveries: 34 HGVs (one-way).

In addition, there would be a maximum of 5 HGV consumable deliveries per day (5 in + 5 out) or 1 in 1 out during the hourly peak. There would also be HGV movements associated with bottom ash and APC residues with a maximum of 65 HGVs per day (65 in + 65 out) or 9 in and 9 out during the hourly peak.

Total HGV movements at the site would therefore be 312 in and 312 out per day and a maximum of 44 deliveries in any one hour.

It is estimated that around 56 staff will be required on a shift basis to be spread over a 24 hour period. Site operation is likely to be undertaken via three 8hr shifts (00:00 – 08:00, 08:00 – 16:00, 16:00 – 00:00). Assuming a vehicle occupancy of 1 per vehicle this equates to 56 vehicle arrivals per day (56 in + 56 out).

[It is understood that this site will generate a significant number of HGV movements. The routing of these movements and the suitability of the proposed routes will need to be carefully justified. Swept path analysis showing HGVs manoeuvring the route to the site should be provided.](#)

Operational Assignment

Staff trips will be assigned to the network based on Journey to Work Census data. [Accepted.](#)

HGV access to the Proposed Development is proposed via the A180, the A1173, Kiln Lane, Hobson Way and South Marsh Road. At the junction of the A180, HGV assignment will be undertaken on the basis of a 50 / 50 A180 eastbound / A180 westbound split. **Is a 50/50 split realistic? What evidence has this been based on or is this assumed? Can you not provide a more detailed split with a justification based on expected locations of where materials will be coming from?**

Identification of Peak Hours for Assessment

Peak Hour Junction Counts between the hours of (07:00 – 10:00 and 16:00 – 19:00) have been obtained for the following junctions:

- South Marsh Road / Hobson Way: June 2018 Count
- Laporte Road / Hobson Way / Kiln Lane: June 2018 Count
- A1173 / Kiln Lane: June 2018 Count
- A180 / A1173: July 2017 Count

Total flows into each junction will be calculated to determine the AM and PM Peak Hours for Assessment.

See list of junctions required for junction capacity analysis.

Junction Capacity Assessment

Junction modelling will be undertaken for the identified AM and PM Peak hours for the junction listed above.

The following scenarios will be tested:

- 2018 Base;
- 2020 Base + Committed Development;
- 2020 Base + Committed + Peak of Construction;
- 2022 Base + Committed Development;
- 2022 Base + Committed + Operation.

Agreed.

Committed Development

North East Lincolnshire Council are asked to provide a list of committed developments to be included in the baseline flows.##

See comments above.

South Humber Link Road

An application for a new South Humber Bank Link Road to the south of the Site connecting Hobson Way with Moody Lane was submitted in March 2018 and is pending determination. The proposed Link Road is due to open in mid-2020. According to the South Humber Bank Link Road Transport Assessment prepared by Atkins in January 2018 the Link Road will result in a redistribution of trips to / from the areas at either end of the Proposed Link Road as shown in Figures 1 and 2.

Figure 1



Figure 2



The proposed net change in traffic flows as a result of the proposed Link Road is set out in Table 1 below.

Link	AM Peak	PM Peak
Hobson Way	+ 740	+ 615
Kiln Lane (West of Hobson Way)	+ 287	+ 296
Kiln Lane (East of A1173)	- 464	- 469
A1173	- 519	- 357

Table 1 above shows that opening of the proposed Link Road would result in increased flows on Hobson Way and Kiln Lane (between Hobson Way and North Moss Lane) and a reduction in flows travelling on Kiln Lane (between North Moss Lane and the A1173), the A1173 and the A180 / A1173 junction.

The effect of the proposed Link Road on the Proposed Development would be additional road capacity at the A180 / A1173 interchange, the A1173 and Kiln Lane to the east of the A1173. Whilst the proposed Link Road would result in reduced capacity on Hobson Way and Kiln Lane (west of Hobson Way), junction modelling undertaken at the Kiln Lane / Laporte Road / Hobson Way roundabout as part of the South Humber Bank Link Road Transport Assessment for the future scenario 2026 with Committed Development and Proposed Link Road shows a maximum Ratio of Flow to Capacity (RFC) of 0.43

Given the above, it is not considered that any junction modelling with the South Humber Bank Link Road in place is considered necessary to support the planning application for the Proposed Development.

For accuracy and completeness this should be included for operational traffic as it will be open by the time your site is operational. It should not be included when looking at construction traffic as we would expect that the construction of the link road will occur concurrently with the construction of the proposed Energy Centre.

We trust that this approach is acceptable and would be grateful if you could confirm.

Kind Regards,
Jonathan

Jonathan Scott BSc (Hons), MSc, MCIHT
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Scott, Jonathan (Leeds)

From: Geoghegan, Simon <[REDACTED]>
Sent: 02 December 2019 16:08
To: Scott, Jonathan (Leeds); planning@nelincs.gov.uk
Cc: Firth, Peter; Newsome, Donna
Subject: DM/0575/18/SCO - South Humber Bank Energy Centre DCO Application - Request for Comment on Transport Assessment Scope
Attachments: AECOM - Scoping - DM-0575-18-SCO - South Marsh Road DCO Power Station.pdf

FO: Jonathan Scott, Cheryl Jarvis

I write on behalf of Highways England in response to a Request for Scoping Opinion - Construction and operation of an energy from waste power station with a maximum gross electrical output of 49.9 MW, at South Humber Bank Power Station South Marsh Road Stallingborough, Grimsby.

Highways England have reviewed a Technical Memorandum [TM] recently submitted by Jonathan Scott of AECOM, and the purpose of this communication is to review that TM, which is attached here. We found three deficiencies.

Please contact me if I can assist further.

Simon Geoghegan, Planning and Development

Highways England | Lateral | 8 City Walk | Leeds | LS11 9AT

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GTN: 0300 470 2420

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Our ref: TA 227 134
Your ref: DM/0575/18/SCO

Jonathan Scott
AECOM
2 City Walk
Leeds
LS11 9AR

Simon GP Geoghegan
Asset Manager
3 SOUTH
Lateral
8 City Walk
Leeds LS11 9AT

Direct Line: 0300 470 2420

2 December 2019

For the attention of Jonathan Scott

Dear Mr Scott

SOUTH HUMBER BANK ENERGY CENTRE DCO APPLICATION - TRANSPORT SCOPING NOTE

Task Overview

The purpose of this Technical Memorandum [TM] is to respond to AECOM's email received on 21st November 2019 [the email] which was prepared and submitted in response to the previous Technical Memorandum (DevHU0015.TM001) regarding South Humber Bank Power Station - Discharge of Condition 10.

The development proposal is located at South Marsh Road, Stallingborough - located close to the A180, which forms part of the Strategic Road Network [SRN], hence the requirement for Highways England to be consulted.

Planning permission was granted for the development proposals in April 2019, and AECOM has now approached Highways England via email regarding the transport documentation required to support a Development Consent Order [DCO] application, with the aspiration to agree the transport parameters in advance of the submission.

This TM reviews the background of the development proposals and correspondence to date, before reviewing the contents of the AECOM email, in the order in which the issues are presented. A summary and conclusions are presented at the end of the TM.

Background

Highways England have been advised on three previous occasions regarding the development proposals at South Humber Bank Power Station. For completeness, deficiencies, conclusions and recommendations from each review are listed below in order:

TM001 679066.AE.18.37.01, South Humber Bank Energy Centre: EIA Scoping – CH2M Review, 25th July 2018

- The Environmental Statement [ES] – and the CEMP – will need to be reviewed and accepted by Highways England before construction can commence at the site;
- No junctions on the SRN have been included within the study area, and as such, justification is required as to this omission;
- Given that the EIA identifies that the SRN needs be considered during the construction and operation phases, the SRN should be considered within the study area;
- Whilst this early consideration of the construction and operational traffic is welcomed, more precise information will be required within the Transport Assessment [TA];
- The TA should pay due cognisance to the requirements of Circular 02/2013;
- The scope of the TA looks broadly acceptable at this point in the process. However, has concerns that the SRN is not being considered within the assessment of the impact of the construction and operational trips before said trips have been derived and agreed. As such, until it can be demonstrated that the development proposals will not severely impact the capacity, operation and safety of the SRN, the SRN should be included within the scope of the TA; and
- The proposed link road – Planning application reference: DM/0094/18/FUL – from Hobson Way to Moody Lane should be considered within the study area as the link road will impact upon the distribution of trips to and from the development proposals

TM001a, 679006.AE.18.62.12, South Humber Bank Energy Centre: Review of Transport Assessment and Travel Plan, 1st February 2019

A holding direction was recommended to be placed on the application until further information was provided:

- The ATC counts have not been provided for review and should be provided to Highways England for completeness;
- There some discrepancies in HGV development traffic which should be clarified;
- It is not clear what distribution committed developments are using and this should be identified;
- It is considered that the CTMP should be secured by a planning condition by Highways England to protect Highways England's interests with regards the SRN; and
- It is considered that the Travel Plan should be secured by a planning condition by Highways England to protect Highways England's interests with regards the SRN.

Subsequently, in reply to AECOM's response via email on 25th February 2019, it was agreed that a CTMP and CWTP would be secured by planning condition.

TM001, Dev HU0015, 679066.AA.19.17.07, South Humber Bank Power Station – discharge of condition 10, 20th August 2019

No objection was raised, although noting there were assessment deficiencies:

- Clarification on the distribution of HGV delivery trips that take place between 07:00 – 19:00

Assessment Scenarios

It is stated that whilst the DCO is being sought, the applicant is likely to progress the development proposals in accordance with the planning permission obtained in April 2019.

In addition, it is stated that there will be a three-year construction programme for the development proposals, with construction expected to commence in Quarter 1 (Q1) 2020. Furthermore, it is stated that following grant of a DCO for the development proposals – which is stated as being anticipated around Q3 2021 – approximately half way through the three-year construction programme for the development proposals - the additional works that would be required (in addition to those which currently benefit from the planning permission) would then be constructed, and the development would commence operation in 2023.

However, whilst AECOM state that the above is the most likely construction programme scenario for the development proposals, two other potential construction programme scenarios are also being considered in order to ensure that a robust assessment of environmental effects is undertaken. This approach is welcomed as it covers a range of scenarios.

The alternative scenarios relate to the potential for the development proposals to be constructed and operated pursuant to only the DCO and commencing either in Q3 2021 (when the DCO would be granted) or Q3 2026 (before the DCO would expire). It is stated that in these alternative scenarios the development proposals would commence operation in 2024 or 2029 respectively.

In terms of translating these scenarios into a TA, it is stated that the 'worst case' scenario would be the latest construction start date (2026) because baseline traffic flows would be higher. We agree with this statement.

However, for the purposes of the EIA, it is stated that the earliest construction start date (Q1 2020) and the latest construction start date (Q3 2026) are both being assessed for completeness; and if construction starts in Q1 2020, before the final ES and TA are completed for the DCO application, the later construction scenario will be discounted.

We welcome the detail provided with regards to the range of scenarios. However, from the information provided, it is unclear as to whether there will be two separate construction phases, and therefore overlap between the two. As such, clarity should be provided on this. In addition, it is accepted that the 'worst case' scenario would indeed be with the latest construction date (2026), but more importantly, the assessment year used in the TA should be realistic as well as compliant with Circular 02/2013.

Baseline Traffic Data

It is proposed by AECOM to use the baseline traffic counts that were agreed for inclusion within the consented TA. These counts were undertaken in 2018 and include the following:

- MCC 1: South Marsh Road / Hobson Way;
- MCC 2: Hobson Way / Laporte Road / Kiln Lane;
- MCC 3: Kiln Lane / North Moss Lane / Trondheim Way;
- MCC 4: A1173 / Kiln Lane;
- MCC 5: A1173 / A180 Stallingborough Interchange; and
- MCC 6: A180 / Moody Lane / Pyewipe Road (Westgate Roundabout).
- ATC 1: South Marsh Road (East of Hobson Way);
- ATC 2: South Marsh Road (West of Hobson Way);
- ATC 3: Hobson Way (North of South Marsh Road);
- ATC 4: Kiln Lane (West of Hobson Way);
- ATC 5: A1173 (West of North Moss Lane);
- ATC 6: A1173 (North of A180); and
- ATC 7: A180 (East of Westgate Roundabout).

Given that these locations have already been agreed by Highways England, the proposed study area for the DCO application is agreed.

Accident Data

It is stated that accident data will be collected via CrashMap for the same study area as the consented TA and will be collected for the dates 1st January 2014 to 31st December 2018.

We accept the use of the consented study area, but if the TA is delayed into early 2020, it may be possible to collect more up to date information including 2019 statistics.

Fuel Delivery Hours

TM001 (20th August 2019) requested clarification on the distribution of HGV delivery trips that take place between 07:00 – 19:00.

Since planning permission was granted, it is stated that discussions with potential fuel suppliers have progressed and it is now clarified that fuel deliveries will be Monday to Sunday 00:00 – 23:59 (excluding Christmas Day, Boxing Day and New Year's Day). But for the purposes of the proposed TA, as a 'worst case' it is assumed that all deliveries (consumables and fuel) and collections (bottom ash and flue gas treatment residues) will take place between 06:00 and 18:00.

Given that this results in more HGVs being assessed in the network peak hours, this is considered a robust approach and is accepted.

Trip Generation and Assignment

It is stated that as the sources of fuel are not yet known, the consented assumed a 50:50 east:west split at the A180 Stallingborough Interchange, and that the same assumptions are proposed for the proposed TA.

This is accepted at this point. However, given that it is stated that discussions with potential fuel suppliers have progressed, it is considered that this information should be used to inform the trip distribution at the SRN.

Growth Factors

The email states that the development proposals are to be fully operational at the earliest in 2023, and the latest in 2029, and these have therefore been identified as the assessment years for the proposed TA. As mentioned earlier within this TM, we would expect the TA to be compliant with Circular 02/2013.

Furthermore, it is stated that traffic growth factors will be based on TEMPRO Version 7.2 for the North East Lincolnshire District, as per the consented TA, and this is accepted.

Committed Developments

The following committed developments that were included within the consented TA are stated as being considered within the proposed TA:

- North Beck Energy Centre;
- Stallingborough Employment Site;
- End-of-Life Tyre Pyrolysis Plant, Scandinavian Way;
- Paragon/ Kia Development, Kiln Lane;
- Renewable Power Facility, Kiln Lane; and
- Stallingborough Link Road.

In addition to the committed developments outlined above, it is stated that a proposed sustainable transport fuels facility at Portlink 180, Hobson Way, Stallingborough will also be included in the proposed TA.

We agree with the list provided, but it is considered that liaison is undertaken with North Lincolnshire Council to ensure the list of committed developments is exhaustive.

Junction Capacity Assessment

AECOM state that junction capacity assessments will be undertaken at the following junctions, as agreed for the consented TA:

- Hobson Way/ South Marsh Road (East of Hobson Way) T-Junction;
- Hobson Way/ South Marsh Road (West of Hobson Way) T-Junction;
- Laporte Road/ Kiln Lane/ Hobson Way Roundabout;
- A1173/ Kiln Lane Roundabout;
- A1173/ SHIIP Site Access;
- A180 Stallingborough Interchange; and
- A180/ Moody Lane/ Pyewipe Road (Westgate Roundabout).

These are accepted by our Transport Consultants.

In addition, it is stated to undertake junction capacity assessments will be undertaken for the following scenarios:

- 2018 Base;
- 2023 Base + Committed Development;
- 2023 Base + Committed Development + Proposed Development;
- 2030 Base + Committed Development; and
- 2030 Base + Committed Development + Proposed Development.

It is recommended that the assessment scenarios should be compliant with Circular 02/2013.

Construction Traffic Assessment

It is stated that no changes are proposed to construction workforce numbers, construction HGV numbers or the assignment of construction vehicles to the network as set out in the consented TA are proposed for the proposed TA.

Should construction not start in early 2020, the 'worst case' scenario in terms of traffic would be construction starting in 2026, with the peak construction period anticipated to be 2027. With this in mind, junction capacity assessments are to be undertaken at each of the junctions listed above for the following scenarios:

- 2021 Base + Committed Development;
- 2021 Base + Committed Development + Proposed Development;
- 2027 Base + Committed Development; and
- 2027 Base + Committed Development + Proposed Development.

As commented upon previously, it is recommended that the assessment scenarios should be compliant with Circular 02/2013.

Additional Reports

AECOM state that as agreed for the consented TA, the following reports will accompany the proposed TA:

- Framework Operational Travel Plan;
- Framework Construction Travel Plan;
- Framework Construction Traffic Management Plan; and
- Delivery and Servicing Plan.

These are accepted by our Transport Consultants.

Summary and Conclusions

Highways England commissioned CH2M to respond to AECOM's email, 21st November 2019, regarding South Humber Bank Power Station – Discharge of Condition 10.

The development proposals are located near to the A180, part of Highways England's Strategic Road Network; and planning permission has been granted for the development in April 2019.

AECOM has asked Highways England for guidance regarding the transport documentation required to support a Development Consent Order application, with the aim to agree the transport parameters in advance of the submission.

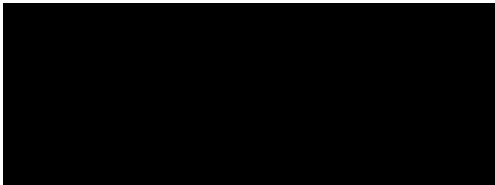
This Technical Memorandum has been prepared to advise Highways England on the suitability of the information provided at this stage, paying due cognisance to the impact of the development proposals on the capacity, operation and safety of the Strategic Road Network.

On the basis of this review, some key deficiencies have been highlighted and are:

1. Clarity as to the construction phases planned and the potential overlap between the construction phases / consented development;
2. The assignment of HGVs at the SRN should be informed by the discussions held with fuel suppliers to ensure it is as accurate as possible; and,
3. The Transport Assessment should be compliant with Circular 02/2013.

Please contact me if I can assist further with this matter.

Yours sincerely



Simon GP Geoghegan
Planning and Development
Email: 

Scott, Jonathan (Leeds)

From: Lara Hattle (Engie) [REDACTED] >
Sent: 25 November 2019 09:27
To: Scott, Jonathan (Leeds); 'Rachel'
Cc: Firth, Peter; Cheryl Jarvis (Engie)
Subject: RE: South Humber Bank Energy Centre DCO Application - Request for comment on Transport Assessment Scope

Good morning Jonathan,

Thank you for the email below.

Just for info Rachel is currently on long term sick (hopefully you received an out of office).

I have provided comments in red in your text below. Once you have confirmed these we should be fine to approve the scoping.

If you have any further queries please do come back to me.

Kind regards
Lara

Lara Hattle BA HONS | Highway and Transport Planner | ENGIE

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From: Scott, Jonathan (Leeds) [REDACTED]
Sent: 21 November 2019 15:58
To: Lara Hattle (Engie) [REDACTED] Rachel Gennery (Engie) <[REDACTED]>
Cc: Firth, Peter <[REDACTED]>

Subject: South Humber Bank Energy Centre DCO Application - Request for Comment on Transport Assessment Scope

Lara / Rachel,

Request for Comment on Transport Assessment Scope

Full planning permission was granted by North East Lincolnshire Council in April 2019 for an energy from waste power station known as South Humber Bank Energy Centre on vacant land at South Humber Bank Power Station. This 'Consented Development' has a generation capacity of up to 49.9 MW and an Environmental Impact Assessment (EIA) and Transport Assessment (TA) were carried out for it. Since that time, an opportunity to increase the output to up to 95 MW, with no change to the fuel throughput or the maximum building dimensions or stacks, has been identified. This is referred to as the 'Proposed Development'. Some additional works and items of plant would be required and as the capacity would be over 50 MW, a Development Consent Order (DCO) is required to authorise its development.

We are currently undertaking an EIA and TA of the Proposed Development on behalf of the promoter, EP Waste Management Limited. A Preliminary Environmental Information (PEI) Report was published for consultation recently under section 42 of the Planning Act 2008, and is available on the project website at www.shbenergycentre.co.uk along with our other consultation documents. Following consultation the EIA and TA will then be finalised and an Environmental Statement (ES) including the TA report will be included with the DCO application and submitted to the Secretary of State in early 2020. Your organisation is a statutory consultee and has been formally notified via letter. The notification letter (copy at <https://www.shbenergycentre.co.uk/download/1760/>) was sent to the 'Head of Development Management Services' and explains the response methods and the deadline of 13 December 2019.

As a matter of good practice we like to discuss and agree certain specific matters while drafting the ES and TA report and would welcome a discussion or a response to this e-mail on these. This would be separate to the ongoing statutory consultation.

- assessment scenarios;
- baseline traffic data;
- accident data;
- fuel delivery hours;
- trip generation and assignment;
- committed developments;
- junction capacity assessment;
- construction traffic assessment; and
- additional reports.

Alternatively, if all these matters will be covered in your statutory consultation response then a discussion may not be necessary.

Assessment Scenarios

Whilst the DCO is being sought, the Applicant is likely to progress the Consented Development in accordance with the planning permission. Approximately a three year construction programme is anticipated for the Consented Development, with construction expected to commence in Quarter 1 (Q1) 2020. Following grant of a DCO for the Proposed Development (which would be anticipated around Q3 2021, approximately half way through the three year construction programme for the Consented Development), the additional works that would be required (in addition to those which benefit from the planning permission) would then be constructed, and the Proposed Development would commence operation in 2023.

Whilst this is the most likely construction programme scenario for the Proposed Development, two other potential construction programme scenarios are also being considered in order that a robust assessment of environmental effects is undertaken. The alternative scenarios relate to the potential for the Proposed Development to be

constructed and operated pursuant to only the DCO and commencing either in Q3 2021 (when the DCO would be granted) or Q3 2026 (before the DCO would expire). In these two alternative scenarios the Proposed Development would commence operation in 2024 or 2029 respectively.

For the purposes of the TA (in terms of highway/ junction capacity) the worst case scenario would be the latest construction start date (2026) because baseline traffic flows would be higher. However, for the purposes of the EIA the earliest construction start date (Q1 2020) and the latest construction start date (Q3 2026) are both being assessed for completeness. If construction starts in Q1 2020, before the final ES and TA are completed for the DCO application, the later construction scenario will be discounted.

We would be grateful for your confirmation that the assessment scenarios cover the 'worst case' in terms of the traffic assessment.

Baseline Traffic Data

It is proposed to use the baseline traffic counts that were agreed for the Consented Development TA. These counts were undertaken in 2018 and are therefore still valid and include the following:

- MCC 1: South Marsh Road / Hobson Way;
- MCC 2: Hobson Way / Laporte Road / Kiln Lane;
- MCC 3: Kiln Lane / North Moss Lane / Trondheim Way;
- MCC 4: A1173 / Kiln Lane;
- MCC 5: A1173 / A180 Stallingborough Interchange; and
- MCC 6: A180 / Moody Lane / Pyewipe Road (Westgate Roundabout);

Please include Pyewipe and Lockhill roundabouts in this. Whilst it is acknowledged that in your previous scoping this was missed, this is a new scope and must be included.

Please also consider distribution post Link Road completion (due to scenarios 2 & 3 going operational post link road opening). You may wish to look at that application with regards to distribution and turning proportions (including minor junctions such as Woad/Moody, Moody/Gilbey) as a full assessment with the link road in place should be undertaken.

- ATC 1: South Marsh Road (East of Hobson Way);
- ATC 2: South Marsh Road (West of Hobson Way);
- ATC 3: Hobson Way (North of South Marsh Road);
- ATC 4: Kiln Lane (West of Hobson Way);
- ATC 5: A1173 (West of North Moss Lane)
- ATC 6: A1173 (North of A180); and
- ATC 7: A180 (East of Westgate Roundabout).

We would be grateful for your confirmation that this study area remains appropriate and 2018 data remains valid.

Accident Data

As agreed for the Consented Development TA, accident data will be obtained from Crashmap. This will cover the period 1st January 2014 to 31st December 2018.

We would be grateful for your confirmation that Crashmap accident data for this period is appropriate for use in the TA.

Fuel Delivery Hours

No changes are proposed in terms of the overall layout, fuel throughput, staffing levels, HGV routing or vehicle access. However since planning permission was granted for the Consented Development, discussions with potential

fuel suppliers have progressed and it is now clarified that fuel deliveries will be Monday to Sunday 00:00 – 23:59 (excluding Christmas Day, Boxing Day and New Years Day). However, for the purposes of the Proposed Development TA, as a 'worst case' it is assumed that all deliveries (consumables and fuel) and collections (bottom ash and flue gas treatment residues) will take place between 06:00 and 18:00, as per the Consented Development TA.

We would be grateful for your confirmation that this approach will provide a worst case assessment for traffic.

Trip Generation and Assignment

The operational vehicle movements assessed in the Consented Development TA were based on several worst case assumptions (including minimum fuel calorific value/ maximum tonnage and 16 tonne HGV loads). As the sources of fuel are not yet known, the Consented Development TA assumed a 50:50 east:west split at the A180 Stallingborough Interchange. The same assumptions are proposed for the Proposed Development TA.

We would be grateful for your confirmation that this approach will provide an appropriate, worst case assessment for traffic.

Growth Factors

As described above the Proposed Development is due to be fully operational at the earliest in 2023 and the latest in 2029 and these have therefore been identified as the assessment years for the Proposed Development TA. If construction starts in Q1 2020, before the final TA is completed for the DCO application, the later construction scenario will be discounted.

As agreed for the Consented Development TA, traffic growth factors will be based on TEMPRO Version 7.2 for the North East Lincolnshire District. A future operational year of 2030 will also be assessed (10 years following submission of DCO application).

We would be grateful for your confirmation that the use of these growth factors is appropriate.

Committed Developments

The following committed developments that were included within the Consented Development TA will be taken account of within the Proposed Development TA:

- North Beck Energy Centre;
- Stallingborough Employment Site;
- End-of-Life Tyre Pyrolysis Plant, Scandinavian Way
- Paragon/ Kia Development, Kiln Lane;
- Renewable Power Facility, Kiln Lane
- Stallingborough Link Road.

In addition to the committed developments outlined above, a proposed sustainable transport fuels facility at Portlink 180, Hobson Way, Stallingborough will also be included in the Proposed Development TA.

We would be grateful for your confirmation that this list of committed developments is appropriate for the TA.

Junction Capacity Assessment

Junction capacity assessments will be undertaken at the following junctions as agreed for the Consented Development TA:

- Hobson Way/ South Marsh Road (East of Hobson Way) T-Junction;
- Hobson Way/ South Marsh Road (West of Hobson Way) T-Junction;
- Laporte Road/ Kiln Lane/ Hobson Way Roundabout;

- A1173/ Kiln Lane Roundabout;
- A1173/ SHIP Site Access;
- A180 Stallingborough Interchange; and
- A180/ Moody Lane/ Pyewipe Road (Westgate Roundabout).

Again please include Pyewipe and Lockhill.

Junction capacity assessments will be undertaken for the following scenarios:

- 2018 Base;
- 2023 Base + Committed Development;
- 2023 Base + Committed Development + Proposed Development;
- 2030 Base + Committed Development; and
- 2030 Base + Committed Development + Proposed Development.

Please also include the scenarios in which completion would be 2024.

We would be grateful for your confirmation that the list of junctions to be modelled and the operational junction capacity assessment scenarios are appropriate for the TA.

Construction Traffic Assessment

No changes are proposed to construction workforce numbers, construction HGV numbers or the assignment of construction vehicles to the network as set out in the Consented Development TA are proposed for the Proposed Development TA.

Will there really be no change or addition of further materials or resource required? Assignment of construction vehicles may vary for alternative scenarios (2021 & 2026) dependant on availability of link road currently scheduled for completion September 2020.

As described above construction of the Proposed Development is due to start in Q1 2020 with the construction programme lasting around 36 months and the peak construction period anticipated to be in 2021. However should construction not start in early 2020, the worst case scenario in terms of traffic would be construction starting in 2026 with the peak construction period anticipated to be 2027.

Junction capacity assessments will be undertaken at each of the junctions listed above for the following scenarios:

- 2021 Base + Committed Development;
- 2021 Base + Committed Development + Proposed Development;
- 2027 Base + Committed Development; and
- 2027 Base + Committed Development + Proposed Development.

What about scenario in which completion would be 2024? Would the peak of construction traffic then be 2022, could this be included?

We would be grateful for your confirmation that the construction junction capacity assessment scenarios are appropriate for the TA.

Additional Reports

As agreed for the Consented Development TA, the following reports will accompany the Proposed Development TA:

- Framework Operational Travel Plan;
- Framework Construction Travel Plan;
- Framework Construction Traffic Management Plan; and
- Delivery and Servicing Plan.

We would be grateful for your confirmation that no other specific reports are required to accompany the TA.

Yours sincerely

Jonathan Scott BSc (Hons), MSc, MCIHT
Senior Transport Planner, Development Planning



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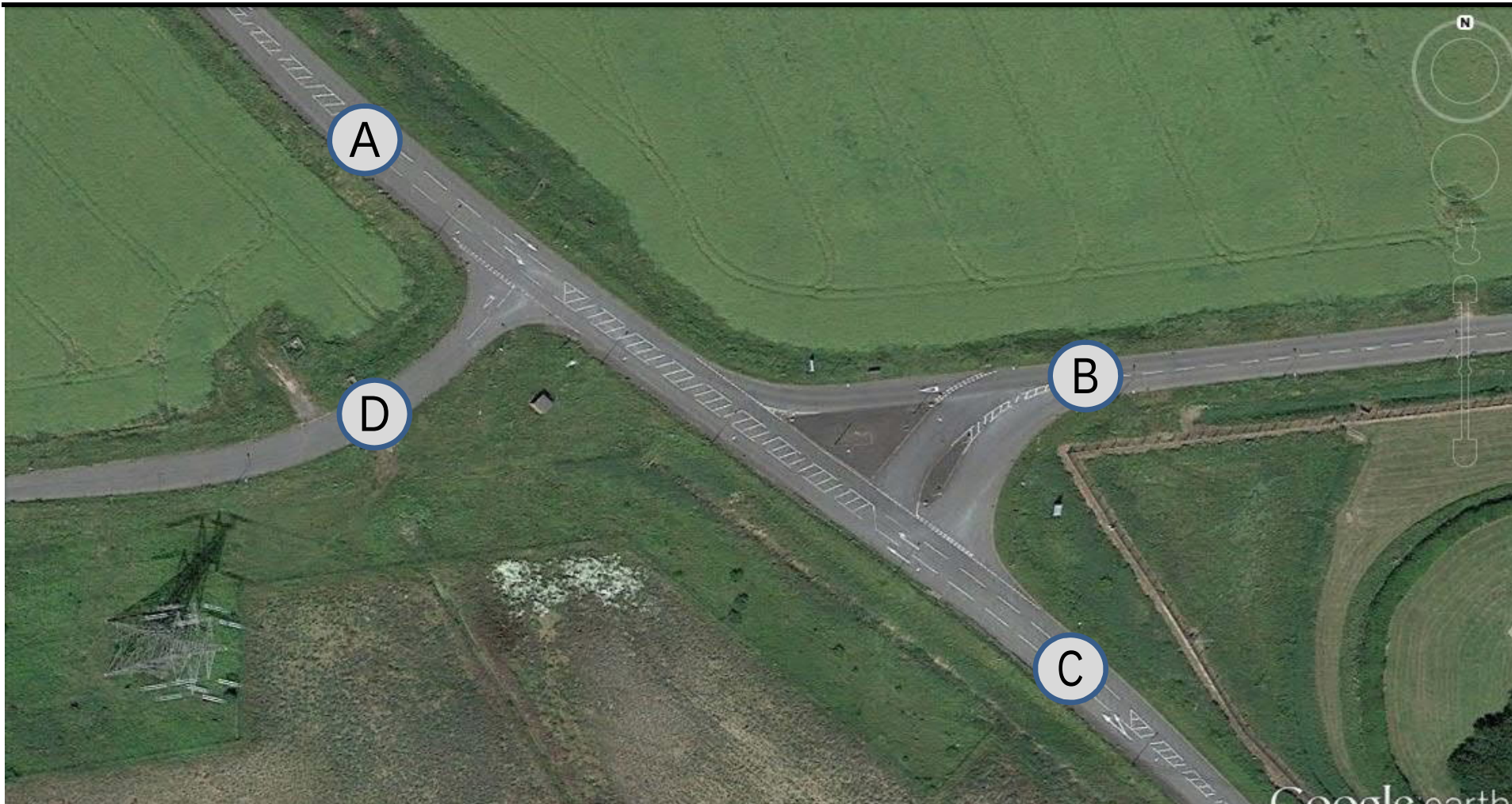
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ANNEX 2: RAW TRAFFIC COUNT DATA

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **1**
Location: **Hobson Way / S Marsh Road**





Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0		1		1				1	3	3.5
16:15									0	0		1		2					3	5.6
16:30									0	0				2					2	4.6
16:45									0	0								1	1	0.2
H/Total	0	0	0	0	0	0	0	0	0	0	0	2	0	5	0	0	0	2	9	13.9
17:00									0	0									0	0
17:15									0	0		1							1	1
17:30									0	0	2							1	3	2.2
17:45									0	0	1							1	2	1.2
H/Total	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	2	6	4.4
18:00									0	0	7							2	7	7
18:15									0	0	2			1					3	4.3
18:30									0	0	3								4	3.2
18:45									0	0	3	1						1	4	4
H/Total	0	0	0	0	0	0	0	0	0	0	15	1	0	1	0	0	0	1	18	18.5
Total	0	0	0	0	0	0	0	0	0	0	18	4	0	6	0	0	0	5	33	36.5

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **1**
Location: **Hobson Way / S Marsh Road**
Date: **07 June 2018, Thursday**



Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	9								9	9	3								3	3
07:15	7								7	7		1							1	1
07:30	10	1							11	11									0	0
07:45	7								7	7	1								1	1
H/Total	33	1	0	0	0	0	0	0	34	34	4	1	0	0	0	0	0	0	5	5
08:00									0	0									0	0
08:15	3	1							4	4	2								2	2
08:30									0	0									0	0
08:45									0	0									0	0
H/Total	3	1	0	0	0	0	0	0	4	4	2	0	0	0	0	0	0	0	2	2
09:00									0	0									0	0
09:15									0	0		1							2	1.2
09:30	2								2	2	1							1	1	1
09:45									0	0	1	1							2	2
H/Total	2	0	0	0	0	0	0	0	2	2	2	2	0	0	0	0	0	1	5	4.2
Total	38	2	0	0	0	0	0	0	40	40	8	3	0	0	0	0	0	1	12	11.2

Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0	20	4						1	25	24.2
16:15									0	0	28	4							32	32
16:30	1								1	1	36	3						1	40	39.2
16:45	4								4	4	18								19	18.2
H/Total	5	0	0	0	0	0	0	0	5	5	102	11	0	0	0	0	0	3	116	113.6
17:00	1			1					2	3.3	32	1						1	34	33.2
17:15	2		1	1					4	5.8	22	1						2	25	23.4
17:30	5	1							6	6	9								9	9
17:45	3			2					5	7.6	10							1	11	10.2
H/Total	11	1	1	4	0	0	0	0	17	22.7	73	2	0	0	0	0	0	4	79	75.8
18:00	2	2							4	4	6						1		7	6.4
18:15	2								2	2	1								1	1
18:30				1					1	2.3	4						1		5	4.4
18:45				1					1	2.3	2								2	2
H/Total	4	2	0	2	0	0	0	0	8	10.6	13	0	0	0	0	0	2	0	15	13.8
Total	20	3	1	6	0	0	0	0	30	38.3	188	13	0	0	0	0	2	7	210	203.2

[illegible]

Project Number: **TSP13850**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **1**
 Location: **Hobson Way / S Marsh Road**
 Date: **07 June 2018, Thursday**



Time	B - C										B - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0	1								1	1
07:15									0	0	1								1	1
07:30									0	0								1	1	0.2
07:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	3	2.2
08:00									0	0									0	0
08:15	1								1	1	2								2	2
08:30									0	0									0	0
08:45									0	0				1					1	2.3
H/Total	1	0	0	0	0	0	0	0	1	1	2	0	0	1	0	0	0	0	3	4.3
09:00									0	0									0	0
09:15	1								1	1									0	0
09:30			1						1	1.5									1	1
09:45									0	0	1	1							2	2
H/Total	1	0	1	0	0	0	0	0	2	2.5	1	2	0	0	0	0	0	0	3	3
Total	2	0	1	0	0	0	0	0	3	3.5	5	2	0	1	0	0	0	1	9	9.5

Time	B - C										B - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0	7	1							9	8.2
16:15									0	0	5	3						1	11	8.6
16:30			1						1	1.5	10	1							11	11
16:45									0	0	3						1		4	3.4
H/Total	0	0	1	0	0	0	0	0	1	1.5	25	5	0	0	0	0	1	4	35	31.2
17:00									0	0	4								4	4
17:15									0	0	5								5	5
17:30									0	0	3	1							4	4
17:45									0	0	12	1						1	15	15.2
H/Total	0	0	0	0	0	0	0	0	0	0	24	2	0	0	0	1	0	1	28	28.2
18:00		1							1	1	3	2							5	5
18:15									0	0	2								2	2
18:30									0	0	1								1	1
18:45									0	0	2								2	2
H/Total	0	1	0	0	0	0	0	0	1	1	8	2	0	0	0	0	0	0	10	10
Total	0	1	1	0	0	0	0	0	2	2.5	57	9	0	0	0	1	1	5	73	69.4

[illegible]

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **1**
Location: **Hobson Way / S Marsh Road**
Date: **07 June 2018, Thursday**



Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0									0	0
07:15									0	0									0	0
07:30									0	0									0	0
07:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00									0	0									0	0
08:15									0	0	2								2	2
08:30									0	0									0	0
08:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
09:00									0	0									0	0
09:15									0	0									0	0
09:30									0	0									0	0
09:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2

Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0	1								1	1
16:15									0	0									0	0
16:30									0	0		1							1	1
16:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	2
17:00									0	0									0	0
17:15									0	0			1						1	1.5
17:30									0	0	1	3							4	4
17:45									0	0								1	10	9.2
H/Total	0	0	0	0	0	0	0	0	0	0	10	3	1	0	0	0	0	1	15	14.7
18:00									0	0	10								10	10
18:15									0	0	3								3	3
18:30									0	0	1								1	1
18:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	14	14
Total	0	0	0	0	0	0	0	0	0	0	25	4	1	0	0	0	0	1	31	30.7

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 1
Location: Hobson Way / S Marsh Road
Date: 07 June 2018, Thursday



Time	D - A										D - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	11	2						2	15	13.4	4	2							6	6
07:15	12	1						3	16	13.6	8			1		1		1	11	12.5
07:30	27								27	27	6	1						1	8	7.2
07:45	22	3						2	27	25.4	11	6					1		18	17.4
H/Total	72	6	0	0	0	0	0	7	85	79.4	29	9	0	1	0	1	1	2	43	43.1
08:00	17							1	18	17.2	5	1						1	7	6.2
08:15	19							1	20	19.2	6	1		1					8	9.3
08:30	21	2							23	23	6								6	6
08:45	9							1	10	9.2	3								3	3
H/Total	66	2	0	0	0	0	0	3	71	68.6	20	2	0	1	0	0	0	1	24	24.5
09:00	7								7	7	1								1	1
09:15	3								3	3	2								2	2
09:30	2	1							3	3	2	1							3	3
09:45									0	0	1								1	1
H/Total	12	1	0	0	0	0	0	0	13	13	6	1	0	0	0	0	0	0	7	7
Total	150	9	0	0	0	0	0	10	169	161	55	12	0	2	0	1	1	3	74	74.6

Time	D - A										D - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00		1							1	1									0	0
16:15	1	1							2	2									0	0
16:30							1		1	0.4			1						1	1.5
16:45									0	0									0	0
H/Total	1	2	0	0	0	0	1	0	4	3.4	0	0	1	0	0	0	0	0	1	1.5
17:00	1								1	1								1	1	0.2
17:15	2								2	2								1	1	0.2
17:30	1								1	1	1								1	1
17:45	1								1	1	2						1	2	5	2.8
H/Total	5	0	0	0	0	0	0	0	5	5	3	0	0	0	0	0	1	4	8	4.2
18:00							1	1	2	0.6	4								4	4
18:15	3								3	3									0	0
18:30	2								2	2									0	0
18:45	1								1	1									0	0
H/Total	6	0	0	0	0	0	1	1	8	6.6	4	0	0	0	0	0	0	0	4	4
Total	12	2	0	0	0	0	2	1	17	15	7	0	1	0	0	0	1	4	13	9.7

[illegible]

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **1**
Location: **Hobson Way / S Marsh Road**
Date: **07 June 2018, Thursday**



Time	From A										To A										
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	
07:00	27	0	0	0	0	0	0	0	27	27	13	2	2	0	0	0	0	0	2	19	18.4
07:15	14	1	1	1	0	0	0	0	17	18.8	15	1	0	0	0	0	0	0	4	20	16.8
07:30	20	5	1	0	0	0	0	0	26	26.5	27	0	0	0	0	0	0	0	6	33	28.2
07:45	22	4	0	0	0	0	0	0	26	26	25	4	1	2	0	0	0	0	3	35	35.7
H/Total	83	10	2	1	0	0	0	0	96	98.3	80	7	3	2	0	0	0	0	15	107	99.1
08:00	4	1	1	0	0	0	0	0	6	6.5	17	0	0	1	0	0	0	0	2	20	19.7
08:15	11	5	0	1	0	0	0	0	17	18.3	20	0	1	0	0	0	0	0	1	22	21.7
08:30	6	0	0	0	0	0	0	0	6	6	22	3	0	1	0	0	0	0	1	27	27.5
08:45	4	1	2	1	0	0	0	0	8	10.3	9	1	1	1	0	0	0	0	1	13	14
H/Total	25	7	3	2	0	0	0	0	37	41.1	68	4	2	3	0	0	0	0	5	82	82.9
09:00	3	1	0	1	0	0	0	0	5	6.3	8	1	1	1	0	0	0	0	1	12	13
09:15	4	1	0	0	0	0	0	1	6	5.2	4	0	0	0	0	0	0	0	0	4	4
09:30	5	1	6	1	0	0	0	0	13	17.3	5	2	1	0	0	0	0	0	0	8	8.5
09:45	1	1	3	3	0	0	0	0	8	13.4	2	3	3	0	0	0	0	0	0	8	9.5
H/Total	13	4	9	5	0	0	0	1	32	42.2	19	6	5	1	0	0	0	0	1	32	35
Total	121	21	14	8	0	0	0	1	165	181.6	167	17	10	6	0	0	0	0	21	221	217

Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	20	5	0	1	0	0	0	2	28	27.7	5	2	0	0	0	0	0	0	7	7
16:15	28	5	0	2	0	0	0	0	35	37.6	5	2	1	2	0	0	0	0	10	13.1
16:30	37	3	0	2	0	0	0	1	43	44.8	9	2	0	0	0	0	1	0	12	11.4
16:45	22	0	0	0	0	0	0	2	24	22.4	10	0	0	0	0	0	0	0	10	10
H/Total	107	13	0	5	0	0	0	5	130	132.5	29	6	1	2	0	0	1	0	39	41.5
17:00	33	1	0	1	0	0	0	1	36	36.5	9	0	0	0	0	0	0	0	9	9
17:15	24	2	1	1	0	0	0	2	30	30.2	6	0	1	0	0	0	0	0	7	7.5
17:30	16	1	0	0	0	0	0	1	18	17.2	2	2	0	2	0	0	0	1	7	8.8
17:45	14	0	0	2	0	0	0	2	18	19	56	2	0	3	0	0	1	0	62	65.3
H/Total	87	4	1	4	0	0	0	6	102	102.9	73	4	1	5	0	0	1	1	85	90.6
18:00	15	2	0	0	0	0	1	0	18	17.4	21	5	0	0	0	0	1	3	30	27
18:15	5	0	0	1	0	0	0	0	6	7.3	6	0	0	0	0	0	0	0	6	6
18:30	7	0	0	1	0	0	1	1	10	9.9	8	0	0	0	0	0	0	0	8	8
18:45	5	1	0	1	0	0	0	0	7	8.3	6	0	1	0	0	0	0	0	7	7.5
H/Total	32	3	0	3	0	0	2	1	41	42.9	41	5	1	0	0	0	1	3	51	48.5
Total	226	20	1	12	0	0	2	12	273	278.3	143	15	3	7	0	0	3	4	175	180.6

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 1
Location: Hobson Way / S Marsh Road
Date: 07 June 2018, Thursday



Time	From B										To B										
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	
07:00	2	0	0	0	0	0	0	0	2	2	19	2	0	0	0	0	0	0	21	21	
07:15	4	0	0	0	0	0	0	1	5	4.2	15	0	1	2	0	1	0	1	20	23.3	
07:30	0	0	0	0	0	0	0	7	7	1.4	16	5	1	0	0	0	0	1	23	22.7	
07:45	2	1	1	2	0	0	0	1	7	9.3	25	10	0	0	0	0	1	0	36	35.4	
H/Total	8	1	1	2	0	0	0	9	21	16.9	75	17	2	2	0	1	1	2	100	102.4	
08:00	0	0	0	1	0	0	0	1	2	2.5	10	2	1	0	0	0	0	1	14	13.7	
08:15	4	0	1	0	0	0	0	0	5	5.5	13	5	0	2	0	0	0	0	20	22.6	
08:30	1	1	0	1	0	0	0	1	4	4.5	12	1	0	0	0	0	0	0	13	13	
08:45	0	1	1	2	0	0	0	0	4	7.1	7	1	2	1	0	0	0	0	11	13.3	
H/Total	5	2	2	4	0	0	0	2	15	19.6	42	9	3	3	0	0	0	1	58	62.6	
09:00	1	1	1	1	0	0	0	1	5	6	4	1	0	1	0	0	0	0	6	7.3	
09:15	2	0	0	0	0	0	0	0	2	2	7	0	0	0	0	0	0	0	7	7	
09:30	3	2	2	0	0	0	0	0	7	8	4	2	6	1	0	0	0	0	13	17.3	
09:45	2	4	2	0	0	0	0	0	8	9	2	0	3	3	0	0	0	0	8	13.4	
H/Total	8	7	5	1	0	0	0	1	22	25	17	3	9	5	0	0	0	0	34	45	
Total	21	10	8	7	0	0	0	12	58	61.5	134	29	14	10	0	1	1	3	192	210	

Time	From B										To B										
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	
16:00	12	2	0	0	0	0	0	0	15	14.2	0	1	0	1	0	0	0	0	1	3	3.5
16:15	8	4	0	2	0	0	0	3	17	17.2	0	1	0	2	0	0	0	0	3	5.6	
16:30	17	3	1	0	0	0	0	0	21	21.5	0	0	1	2	0	0	0	0	3	6.1	
16:45	7	0	0	0	0	0	1	0	8	7.4	0	0	0	0	0	0	0	1	1	0.2	
H/Total	44	9	1	2	0	0	1	4	61	60.3	0	2	1	5	0	0	0	2	10	15.4	
17:00	11	0	0	0	0	0	0	0	11	11	0	0	0	0	0	0	0	1	1	0.2	
17:15	6	0	0	0	0	0	0	0	6	6	0	1	0	0	0	0	0	1	2	1.2	
17:30	3	3	0	2	0	0	0	1	9	10.8	3	0	0	0	0	0	0	1	4	3.2	
17:45	28	3	0	1	0	1	0	1	34	35.5	3	0	0	0	0	0	1	3	7	4	
H/Total	48	6	0	3	0	1	0	2	60	63.3	6	1	0	0	0	0	1	6	14	8.6	
18:00	9	7	0	0	0	0	0	2	18	16.4	11	0	0	0	0	0	0	0	11	11	
18:15	4	0	0	0	0	0	0	0	4	4	2	0	0	1	0	0	0	0	3	4.3	
18:30	4	0	0	0	0	0	0	0	4	4	3	0	0	0	0	0	0	1	4	3.2	
18:45	6	0	1	0	0	0	0	0	7	7.5	3	1	0	0	0	0	0	0	4	4	
H/Total	23	7	1	0	0	0	0	2	33	31.9	19	1	0	1	0	0	0	1	22	22.5	
Total	115	22	2	5	0	1	1	8	154	155.5	25	4	1	6	0	0	1	9	46	46.5	

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **1**
Location: **Hobson Way / S Marsh Road**
Date: **07 June 2018, Thursday**



Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	1	0	2	0	0	0	0	0	3	4	13	0	0	0	0	0	0	1	14	13.2
07:15	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	0	13	13
07:30	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	0	0	0	14	14
07:45	1	0	0	0	0	0	0	0	1	1	10	0	0	0	0	0	0	0	10	10
H/Total	2	0	2	0	0	0	0	0	4	5	48	2	0	0	0	0	0	1	51	50.2
08:00	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	1	1
08:15	3	0	0	0	0	0	0	0	3	3	4	1	0	0	0	0	0	0	5	5
08:30	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/Total	4	1	0	0	0	0	0	0	5	5	4	2	0	0	0	0	0	0	6	6
09:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
09:15	1	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2	2
09:30	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	3	3.5
09:45	2	0	1	0	0	0	0	0	3	3.5	1	0	0	0	0	0	0	0	1	1
H/Total	3	0	1	0	0	0	0	0	4	4.5	7	0	1	0	0	0	0	0	8	8.5
Total	9	1	3	0	0	0	0	0	13	14.5	59	4	1	0	0	0	0	1	65	64.7

Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
16:15	1	0	1	0	0	0	0	0	2	2.5	0	1	0	0	0	0	0	0	1	1
16:30	2	1	0	0	0	0	0	0	3	3	2	0	1	0	0	0	0	0	3	3.5
16:45	6	0	0	0	0	0	0	0	6	6	5	0	0	0	0	0	0	0	5	5
H/Total	10	1	1	0	0	0	0	0	12	12.5	7	1	1	0	0	0	0	0	9	9.5
17:00	1	0	0	0	0	0	0	0	1	1	3	0	0	1	0	0	0	0	4	5.3
17:15	3	0	2	0	0	0	0	0	5	6	3	0	1	1	0	0	0	0	5	6.8
17:30	2	3	0	0	0	0	0	0	5	5	5	1	0	0	0	0	0	0	6	6
17:45	48	0	0	2	0	0	1	1	52	53.2	4	0	0	2	0	0	0	0	6	8.6
H/Total	54	3	2	2	0	0	1	1	63	65.2	15	1	1	4	0	0	0	0	21	26.7
18:00	25	1	0	0	0	0	0	0	26	26	4	3	0	0	0	0	0	0	7	7
18:15	4	0	0	0	0	0	0	0	4	4	3	0	0	0	0	0	0	0	3	3
18:30	4	0	0	0	0	0	0	0	4	4	0	0	0	1	0	0	0	0	1	2.3
18:45	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	2.3
H/Total	34	1	0	0	0	0	0	0	35	35	7	3	0	2	0	0	0	0	12	14.6
Total	98	5	3	2	0	0	1	1	110	112.7	29	5	2	6	0	0	0	0	42	50.8

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 1
Location: Hobson Way / S Marsh Road
Date: 07 June 2018, Thursday



Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	19	4	0	0	0	0	0	3	26	23.6	4	0	0	0	0	0	0	0	4	4
07:15	25	2	0	1	0	1	0	4	33	32.1	1	1	0	0	0	0	0	0	2	2
07:30	36	1	0	0	0	0	0	1	38	37.2	0	0	0	0	0	0	0	1	1	0.2
07:45	36	9	0	0	0	0	1	2	48	45.8	1	0	0	0	0	0	0	0	1	1
H/Total	116	16	0	1	0	1	1	10	145	138.7	6	1	0	0	0	0	0	1	8	7.2
08:00	22	2	0	0	0	0	0	2	26	24.4	0	0	0	0	0	0	0	0	0	0
08:15	25	1	0	1	0	0	0	1	28	28.5	6	0	0	0	0	0	0	0	6	6
08:30	27	2	0	0	0	0	0	0	29	29	0	0	0	0	0	0	0	0	0	0
08:45	12	0	0	0	0	0	0	1	13	12.2	0	0	0	1	0	0	0	0	1	2.3
H/Total	86	5	0	1	0	0	0	4	96	94.1	6	0	0	1	0	0	0	0	7	8.3
09:00	10	0	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
09:15	6	0	0	0	0	0	0	0	6	6	0	1	0	0	0	0	0	1	2	1.2
09:30	4	2	0	0	0	0	0	0	6	6	1	1	0	0	0	0	0	0	2	2
09:45	2	0	0	0	0	0	0	0	2	2	2	2	0	0	0	0	0	0	4	4
H/Total	22	2	0	0	0	0	0	0	24	24	3	4	0	0	0	0	0	1	8	7.2
Total	224	23	0	2	0	1	1	14	265	256.8	15	5	0	1	0	0	0	2	23	22.7

Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	0	1	0	0	0	0	0	0	1	1	28	5	0	0	0	0	0	2	35	33.4
16:15	1	2	0	0	0	0	0	0	3	3	33	7	0	0	0	0	0	3	43	40.6
16:30	1	0	1	0	0	0	1	0	3	2.9	46	5	0	0	0	0	0	1	52	51.2
16:45	1	0	0	0	0	0	0	0	1	1	21	0	0	0	0	0	1	1	23	21.6
H/Total	3	3	1	0	0	0	1	0	8	7.9	128	17	0	0	0	0	1	7	153	146.8
17:00	3	0	0	0	0	0	0	1	4	3.2	36	1	0	0	0	0	0	1	38	37.2
17:15	3	0	0	0	0	0	0	1	4	3.2	27	1	1	0	0	0	0	2	31	29.9
17:30	2	0	0	0	0	0	0	0	2	2	13	4	0	0	0	0	0	0	17	17
17:45	4	0	0	0	0	0	1	2	7	4.8	31	1	0	0	0	1	0	3	36	34.6
H/Total	12	0	0	0	0	0	1	4	17	13.2	107	7	1	0	0	1	0	6	122	118.7
18:00	6	0	0	0	0	0	1	1	8	6.6	19	2	0	0	0	0	1	0	22	21.4
18:15	4	0	0	0	0	0	0	0	4	4	6	0	0	0	0	0	0	0	6	6
18:30	2	0	0	0	0	0	0	0	2	2	6	0	0	0	0	0	1	0	7	6.4
18:45	1	0	0	0	0	0	0	0	1	1	4	0	0	0	0	0	0	0	4	4
H/Total	13	0	0	0	0	0	1	1	15	13.6	35	2	0	0	0	0	2	0	39	37.8
Total	28	3	1	0	0	0	3	5	40	34.7	270	26	1	0	0	1	3	13	314	303.3

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **1**
Location: **Hobson Way / S Marsh Road**
Date: **07 June 2018, Thursday**



Time	Whole Junction									TOTAL	TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY			
07:00	49	4	2	0	0	0	0	3	58	56.6	
07:15	43	3	1	2	0	1	0	5	55	55.1	
07:30	56	6	1	0	0	0	0	8	71	65.1	
07:45	61	14	1	2	0	0	1	3	82	82.1	
H/Total	209	27	5	4	0	1	1	19	266	258.9	
08:00	27	3	1	1	0	0	0	3	35	34.4	
08:15	43	6	1	2	0	0	0	1	53	55.3	
08:30	34	4	0	1	0	0	0	1	40	40.5	
08:45	16	2	3	3	0	0	0	1	25	29.6	
H/Total	120	15	5	7	0	0	0	6	153	159.8	
09:00	14	2	1	2	0	0	0	1	20	22.3	
09:15	13	1	0	0	0	0	0	1	15	14.2	
09:30	12	5	8	1	0	0	0	0	26	31.3	
09:45	7	5	6	3	0	0	0	0	21	27.9	
H/Total	46	13	15	6	0	0	0	2	82	95.7	
Total	375	55	25	17	0	1	1	27	501	514.4	

Peak Hours	Totals
07:00 08:00	266
07:15 08:15	243
07:30 08:30	241
07:45 08:45	210

08:00 09:00	153
08:15 09:15	138
08:30 09:30	100
08:45 09:45	86

09:00 10:00	82
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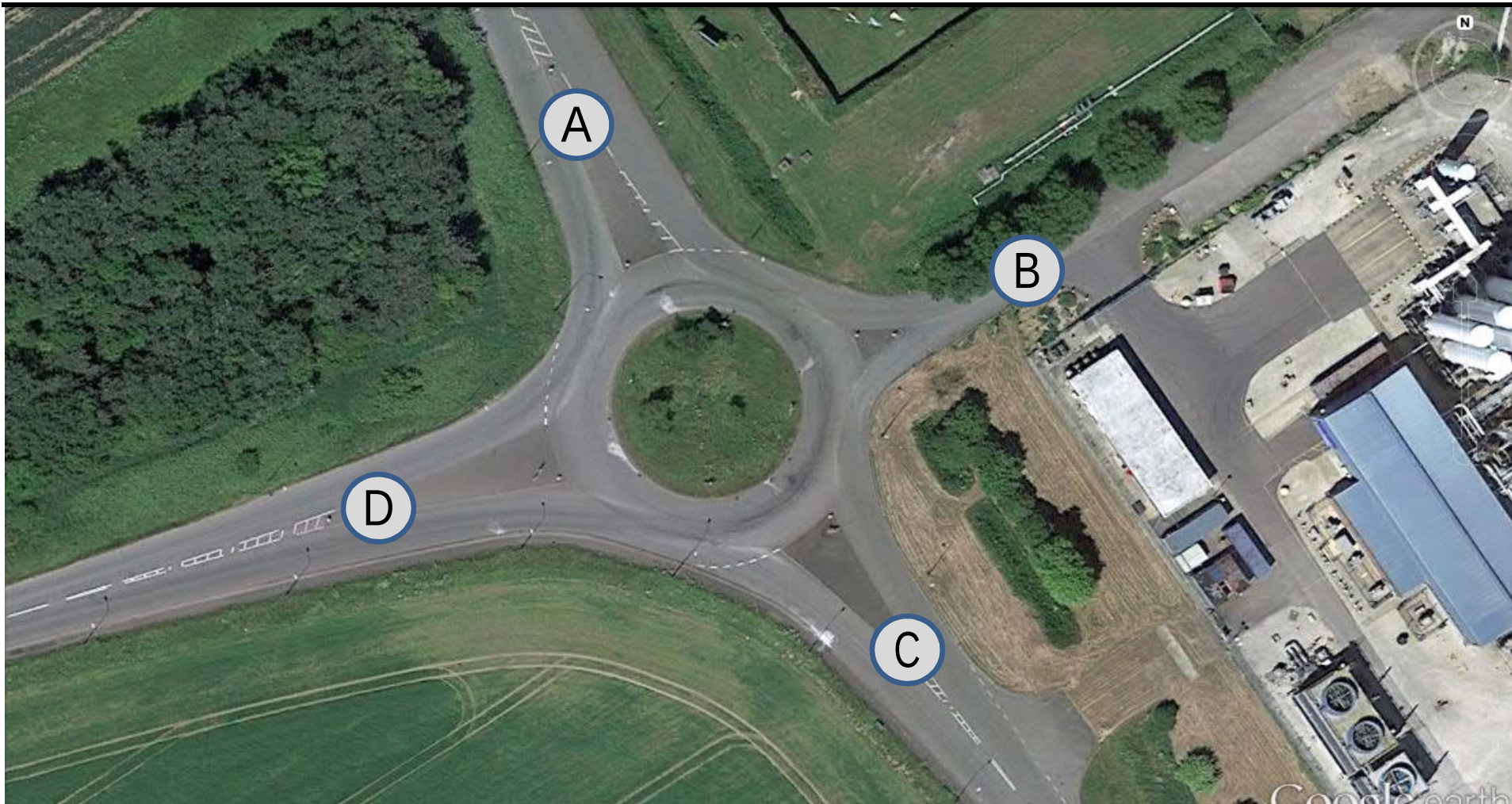
Time	Whole Junction									TOTAL	TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY			
16:00	33	8	0	1	0	0	0	3	45	43.9	
16:15	38	11	1	4	0	0	0	3	57	60.3	
16:30	57	7	2	2	0	0	1	1	70	72.2	
16:45	36	0	0	0	0	0	1	2	39	36.8	
H/Total	164	26	3	7	0	0	2	9	211	213.2	
17:00	48	1	0	1	0	0	0	2	52	51.7	
17:15	36	2	3	1	0	0	0	3	45	45.4	
17:30	23	7	0	2	0	0	0	2	34	35	
17:45	94	3	0	5	0	1	2	6	111	112.5	
H/Total	201	13	3	9	0	1	2	13	242	244.6	
18:00	55	10	0	0	0	0	2	3	70	66.4	
18:15	17	0	0	1	0	0	0	0	18	19.3	
18:30	17	0	0	1	0	0	1	1	20	19.9	
18:45	13	1	1	1	0	0	0	0	16	17.8	
H/Total	102	11	1	3	0	0	3	4	124	123.4	
Total	467	50	7	19	0	1	7	26	577	581.2	

Peak Hours	Totals
16:00 17:00	211
16:15 17:15	218
16:30 17:30	206
16:45 17:45	170

17:00 18:00	242
17:15 18:15	260
17:30 18:30	233
17:45 18:45	219

18:00 19:00	124
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Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Laporte Road / Hobson Way / Kiln Lane**



Project Number: TSP13850
 Project Name: Immingham, North East Lincolnshire
 Survey Type: Manual Classified Turning Count
 Site No: 2
 Location: Laporte Road / Hobson Way / Kiln Lane
 Date: 07 June 2018, Thursday



	1	1	1.5	2.3	2	2	0.4	0.2												
Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0									0	0
07:15									0	0									0	0
07:30									0	0									0	0
07:45									0	0		1							1	1
H/Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
08:00									0	0									0	0
08:15									0	0									0	0
08:30									0	0									0	0
08:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00									0	0									0	0
09:15									0	0									0	0
09:30									0	0									0	0
09:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1

Time	A - A										A - B										
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	
16:00									0	0									0	0	
16:15									0	0									0	0	
16:30									0	0									0	0	
16:45									0	0									0	0	
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:00									0	0									0	0	
17:15									0	0									0	0	
17:30									0	0									0	0	
17:45									0	0									0	0	
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18:00									0	0									0	0	
18:15									0	0									0	0	
18:30									0	0									0	0	
18:45									0	0									0	0	
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 2
Location: Laporte Road / Hobson Way / Kiln Lane
Date: 07 June 2018, Thursday



Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	5								5	5	11	3	1	2					17	20.1
07:15									0	0	3			2					5	7.6
07:30	3	1							4	4	6	1		5					12	18.5
07:45	5	1							6	6	5	1	1	4					11	16.7
H/Total	13	2	0	0	0	0	0	0	15	15	25	5	2	13	0	0	0	0	45	62.9
08:00		1	1						2	2.5	11	2	1	5					19	26
08:15	3	2		1					6	7.3	16	4		3					23	26.9
08:30	1								1	1	17	3	2	6					28	36.8
08:45									0	0	17	2		5					24	30.5
H/Total	4	3	1	1	0	0	0	0	9	10.8	61	11	3	19	0	0	0	0	94	120.2
09:00									0	0	21	1	1	6					29	37.3
09:15		1							2	1.2	3	2	2	1					8	10.3
09:30	3	2						1	5	5	8			3		1			14	18.9
09:45	1								1	1	3	2		4					9	14.2
H/Total	4	3	0	0	0	0	0	1	8	7.2	35	7	3	14	0	1	0	0	60	80.7
Total	21	8	1	1	0	0	0	1	32	33	121	23	8	46	0	1	0	0	199	263.8

Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	19	4						3	26	23.6	26	4	2	12					44	60.6
16:15	26	4							30	30	39	8	2	8			2		59	69.2
16:30	34	3		1					40	39.7	43	3	3	6			1		56	64.7
16:45	17								18	17.2	22			5					31	38.7
H/Total	96	11	0	1	0	0	0	6	114	110.5	130	15	12	30	0	0	3	0	190	233.2
17:00	29	1						1	31	30.2	25	1					1		27	26.4
17:15	21	1		1					25	24.7	18	3	1	8					30	40.9
17:30	7								8	7.2	14	1	3	8					26	37.9
17:45	9			1					11	11.5	10		1	4					15	20.7
H/Total	66	2	0	2	0	0	0	5	75	73.6	67	5	5	20	0	0	1	0	98	125.9
18:00	7						1		8	7.4	10	1	2	3			1		17	21.3
18:15	2								2	2	5	1		3					9	12.9
18:30	3						1		4	3.4	21	1		1					23	24.3
18:45	2								2	2	6	1	1						8	8.5
H/Total	14	0	0	0	0	0	2	0	16	14.8	42	4	3	7	0	0	1	0	57	67
Total	176	13	0	3	0	0	2	11	205	198.9	239	24	20	57	0	0	5	0	345	426.1

[illegible]

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 2
Location: Laporte Road / Hobson Way / Kiln Lane
Date: 07 June 2018, Thursday



Time	C - A										C - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	11	2		1					14	15.3									0	0
07:15	12	1						3	16	13.6									0	0
07:30	25						1	2	28	25.8									0	0
07:45	17	3						2	22	20.4									0	0
H/Total	65	6	0	1	0	0	1	7	80	75.1	0	0	0	0	0	0	0	0	0	0
08:00	18								18	18									0	0
08:15	17							2	19	17.4									0	0
08:30	19	2							21	21									0	0
08:45	7							1	8	7.2									0	0
H/Total	61	2	0	0	0	0	0	3	66	63.6	0	0	0	0	0	0	0	0	0	0
09:00	6			1					7	8.3									0	0
09:15			1						1	1.5									0	0
09:30	6	1							7	7									0	0
09:45	2	2	1						5	5.5									0	0
H/Total	14	3	2	1	0	0	0	0	20	22.3	0	0	0	0	0	0	0	0	0	0
Total	140	11	2	2	0	0	1	10	166	161	0	0	0	0	0	0	0	0	0	0

Time	C - A										C - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	1	1							2	2		1							1	1
16:15	2			1					3	4.3									0	0
16:30	1	1					1		3	2.4									0	0
16:45	2								2	2									0	0
H/Total	6	2	0	1	0	0	1	0	10	10.7	0	1	0	0	0	0	0	0	1	1
17:00	2			1					3	4.3									0	0
17:15	2								2	2									0	0
17:30	1								1	1									0	0
17:45	5			1					6	7.3									0	0
H/Total	10	0	0	2	0	0	0	0	12	14.6	0	0	0	0	0	0	0	0	0	0
18:00	1						1	3	5	2									0	0
18:15	4								4	4									0	0
18:30	2								2	2									0	0
18:45	1								1	1									0	0
H/Total	8	0	0	0	0	0	1	3	12	9	0	0	0	0	0	0	0	0	0	0
Total	24	2	0	3	0	0	2	3	34	34.3	0	1	0	0	0	0	0	0	1	1

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Laporte Road / Hobson Way / Kiln Lane**
Date: **07 June 2018, Thursday**



Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0	1	1	2					1	5	5.2
07:15									0	0	3			1					4	5.3
07:30									0	0								2	2	0.4
07:45									0	0	2	2	1	2				7	7	10.1
H/Total	0	0	0	0	0	0	0	0	0	0	6	3	3	3	0	0	0	3	18	21
08:00									0	0				1					1	2.3
08:15									0	0								0	0	0
08:30									0	0	3	1	1	1				1	7	8
08:45									0	0		1	1	1				3	3	4.8
H/Total	0	0	0	0	0	0	0	0	0	0	3	2	2	3	0	0	0	1	11	15.1
09:00									0	0	1	1	2						4	5
09:15									0	0	1	2						3	3	3
09:30									0	0	3	1	1	1				6	7.8	
09:45									0	0			2					2	2	3
H/Total	0	0	0	0	0	0	0	0	0	0	5	4	5	1	0	0	0	0	15	18.8
Total	0	0	0	0	0	0	0	0	0	0	14	9	10	7	0	0	0	4	44	54.9

Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0	5	3							9	8.4
16:15									0	0	5	1	1	1			1		8	9.8
16:30									0	0	8	1	1						10	10.5
16:45									0	0	15								15	15
H/Total	0	0	0	0	0	0	0	0	0	0	33	5	2	1	0	0	1	0	42	43.7
17:00									0	0	10			2					12	14.6
17:15									0	0	4		1					5	5.5	
17:30	1								1	1	1	2		1				4	5.3	
17:45									0	0	48	3	1	4			1	1	58	62.3
H/Total	1	0	0	0	0	0	0	0	1	1	63	5	2	7	0	0	1	1	79	87.7
18:00									0	0	21	5							26	26
18:15									0	0	3								3	3
18:30									0	0	4								4	4
18:45									0	0	8		1						9	9.5
H/Total	0	0	0	0	0	0	0	0	0	0	36	5	1	0	0	0	0	0	42	42.5
Total	1	0	0	0	0	0	0	0	1	1	132	15	5	8	0	0	2	1	163	173.9

[illegible]

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Laporte Road / Hobson Way / Kiln Lane**
Date: **07 June 2018, Thursday**



Time	D - C										D - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	19	1							20	20									0	0
07:15	17		1	1					19	20.8		1							1	1
07:30	16	4	2						22	23	2								2	2
07:45	19	5		1					25	26.3	2								2	2
H/Total	71	10	3	2	0	0	0	0	86	90.1	4	1	0	0	0	0	0	0	5	5
08:00	6								6	6									0	0
08:15	6	5	1						12	12.5									0	0
08:30	9		1						10	10.5	1								1	1
08:45	4	1	1	2					8	11.1		1							1	1
H/Total	25	6	3	2	0	0	0	0	36	40.1	1	1	0	0	0	0	0	0	2	2
09:00	3	4		1					8	9.3									0	0
09:15	6								6	6									0	0
09:30	3		7	1					11	15.8									0	0
09:45			3	4					7	13.7				1					1	2.3
H/Total	12	4	10	6	0	0	0	0	32	44.8	0	0	0	1	0	0	0	0	1	2.3
Total	108	20	16	10	0	0	0	0	154	175	5	2	0	1	0	0	0	0	8	9.3

Time	D - C										D - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	1	3		1					5	6.3									0	0
16:15	2			2					4	6.6									0	0
16:30	1		1	1					3	4.8									0	0
16:45	4			1					5	6.3		1							1	1
H/Total	8	3	1	5	0	0	0	0	17	24	0	1	0	0	0	0	0	0	1	1
17:00	2	1	1	2					6	9.1									0	0
17:15	1								1	1									0	0
17:30	6	1		1					8	9.3									0	0
17:45	4			1					5	6.3									0	0
H/Total	13	2	1	4	0	0	0	0	20	25.7	0	0	0	0	0	0	0	0	0	0
18:00	8	2							10	10									0	0
18:15	3			1					4	5.3									0	0
18:30	4			1					5	6.3									0	0
18:45	2	1		1					4	5.3									0	0
H/Total	17	3	0	3	0	0	0	0	23	26.9	0	0	0	0	0	0	0	0	0	0
Total	38	8	2	12	0	0	0	0	60	76.6	0	1	0	0	0	0	0	0	1	1

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 2
Location: Laporte Road / Hobson Way / Kiln Lane
Date: 07 June 2018, Thursday



Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	16	3	1	2	0	0	0	0	22	25.1	32	10	0	2	0	0	1	0	45	47
07:15	3	0	0	2	0	0	0	0	5	7.6	45	5	2	9	1	0	2	3	67	77.1
07:30	9	2	0	5	0	0	0	0	16	22.5	65	7	0	6	0	0	1	2	81	86.6
07:45	10	3	1	4	0	0	0	0	18	23.7	54	6	2	6	1	0	0	2	71	79.2
H/Total	38	8	2	13	0	0	0	0	61	78.9	196	28	4	23	2	0	4	7	264	289.9
08:00	11	3	2	5	0	0	0	0	21	28.5	43	8	3	4	0	0	1	0	59	65.1
08:15	19	6	0	4	0	0	0	0	29	34.2	42	7	1	3	0	1	0	2	56	59.8
08:30	18	3	2	6	0	0	0	0	29	37.8	35	7	3	3	0	0	0	0	48	53.4
08:45	17	2	0	5	0	0	0	0	24	30.5	20	4	1	5	0	0	0	1	31	37.2
H/Total	65	14	4	20	0	0	0	0	103	131	140	26	8	15	0	1	1	3	194	215.5
09:00	21	1	1	6	0	0	0	0	29	37.3	11	4	5	4	0	1	0	0	25	33.7
09:15	3	3	2	1	0	0	0	1	10	11.5	10	2	4	6	0	0	0	0	22	31.8
09:30	11	4	0	3	0	1	0	0	19	23.9	15	5	2	2	0	0	0	0	24	27.6
09:45	4	2	0	4	0	0	0	0	10	15.2	4	5	1	7	0	0	0	0	17	26.6
H/Total	39	10	3	14	0	1	0	1	68	87.9	40	16	12	19	0	1	0	0	88	119.7
Total	142	32	9	47	0	1	0	1	232	297.8	376	70	24	57	2	2	5	10	546	625.1

Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	45	8	2	12	0	0	0	3	70	84.2	12	4	0	5	0	0	0	0	21	27.5
16:15	65	12	2	8	0	0	2	0	89	99.2	3	3	1	6	1	0	0	0	14	23.3
16:30	77	6	3	7	0	0	1	2	96	104.4	8	2	4	3	0	0	1	0	18	23.3
16:45	39	0	5	4	0	0	0	1	49	55.9	5	2	0	2	0	0	0	0	9	11.6
H/Total	226	26	12	31	0	0	3	6	304	343.7	28	11	5	16	1	0	1	0	62	85.7
17:00	54	2	0	0	0	0	1	1	58	56.6	5	0	0	4	0	0	0	0	9	14.2
17:15	39	4	1	9	0	0	0	2	55	65.6	3	2	1	2	1	0	0	0	9	13.1
17:30	21	1	3	8	0	0	0	1	34	45.1	4	0	2	1	0	0	0	0	7	9.3
17:45	19	0	1	5	0	0	0	1	26	32.2	8	0	0	2	0	0	0	0	10	12.6
H/Total	133	7	5	22	0	0	1	5	173	199.5	20	2	3	9	1	0	0	0	35	49.2
18:00	17	1	2	3	0	0	2	0	25	28.7	6	1	1	1	0	0	1	3	13	11.8
18:15	7	1	0	3	0	0	0	0	11	14.9	20	3	0	1	0	0	1	0	25	25.7
18:30	24	1	0	1	0	0	1	0	27	27.7	16	2	1	1	0	0	1	0	21	22.2
18:45	8	1	1	0	0	0	0	0	10	10.5	7	0	0	1	0	0	0	0	8	9.3
H/Total	56	4	3	7	0	0	3	0	73	81.8	49	6	2	4	0	0	3	3	67	69
Total	415	37	20	60	0	0	7	11	550	625	97	19	10	29	2	0	4	3	164	203.9

Project Number: TSP13850
 Project Name: Immingham, North East Lincolnshire
 Survey Type: Manual Classified Turning Count
 Site No: 2
 Location: Laporte Road / Hobson Way / Kiln Lane
 Date: 07 June 2018, Thursday



Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
07:30	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
H/Total	1	0	0	0	0	0	0	0	1	1	3	1	0	0	0	0	0	0	4	4
08:00	0	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1
08:15	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	3.3
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/Total	0	1	0	0	0	0	0	0	1	1	2	0	0	1	0	0	0	0	3	4.3
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2.3
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
H/Total	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	2.3
Total	2	1	0	0	0	0	0	0	3	3	5	1	0	2	0	0	0	0	8	10.6

Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	1	1
16:15	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
16:30	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/Total	2	1	0	0	0	0	0	0	3	3	0	1	0	0	0	0	0	0	1	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	1	0	0	0	0	0	0	3	3	0	1	0	0	0	0	0	0	1	1

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 2
Location: Laporte Road / Hobson Way / Kiln Lane
Date: 07 June 2018, Thursday



Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	12	3	2	1	0	0	0	1	19	20.5	24	1	0	0	0	0	0	0	25	25
07:15	15	1	0	1	0	0	0	3	20	18.9	17	0	1	1	0	0	0	0	19	20.8
07:30	25	0	0	0	0	0	1	4	30	26.2	19	5	2	0	0	0	0	0	26	27
07:45	19	5	1	2	0	0	0	2	29	30.5	24	6	0	1	0	0	0	0	31	32.3
H/Total	71	9	3	4	0	0	1	10	98	96.1	84	12	3	2	0	0	0	0	101	105.1
08:00	18	0	0	1	0	0	0	0	19	20.3	6	1	1	0	0	0	0	0	8	8.5
08:15	17	0	0	0	0	0	0	2	19	17.4	9	7	1	1	0	0	0	0	18	19.8
08:30	22	3	1	1	0	0	0	1	28	29	10	0	1	0	0	0	0	0	11	11.5
08:45	7	1	1	1	0	0	0	1	11	12	4	1	1	2	0	0	0	0	8	11.1
H/Total	64	4	2	3	0	0	0	4	77	78.7	29	9	4	3	0	0	0	0	45	50.9
09:00	7	1	2	1	0	0	0	0	11	13.3	3	4	0	1	0	0	0	0	8	9.3
09:15	1	2	1	0	0	0	0	0	4	4.5	6	1	0	0	0	0	0	1	8	7.2
09:30	9	2	1	1	0	0	0	0	13	14.8	6	2	7	1	0	0	0	0	16	20.8
09:45	2	2	3	0	0	0	0	0	7	8.5	1	0	3	4	0	0	0	0	8	14.7
H/Total	19	7	7	2	0	0	0	0	35	41.1	16	7	10	6	0	0	0	1	40	52
Total	154	20	12	9	0	0	1	14	210	215.9	129	28	17	11	0	0	0	1	186	208

Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	6	5	0	0	0	0	1	0	12	11.4	20	7	0	1	0	0	0	3	31	29.9
16:15	7	1	1	2	0	0	0	0	11	14.1	28	4	0	2	0	0	0	0	34	36.6
16:30	9	2	1	0	0	0	1	0	13	12.9	35	4	1	2	0	0	0	2	44	45.5
16:45	17	0	0	0	0	0	0	0	17	17	21	0	0	1	0	0	0	1	23	23.5
H/Total	39	8	2	2	0	0	2	0	53	55.4	104	15	1	6	0	0	0	6	132	135.5
17:00	12	0	0	3	0	0	0	0	15	18.9	31	2	1	2	0	0	0	1	37	39.3
17:15	6	0	1	0	0	0	0	0	7	7.5	22	1	0	1	0	0	0	2	26	25.7
17:30	3	2	0	1	0	0	0	0	6	7.3	14	1	0	1	0	0	0	1	17	17.5
17:45	53	3	1	5	0	0	1	1	64	69.6	13	0	0	2	0	0	0	1	16	17.8
H/Total	74	5	2	9	0	0	1	1	92	103.3	80	4	1	6	0	0	0	5	96	100.3
18:00	22	5	0	0	0	0	1	3	31	28	15	2	0	0	0	0	1	0	18	17.4
18:15	7	0	0	0	0	0	0	0	7	7	5	0	0	1	0	0	0	0	6	7.3
18:30	6	0	0	0	0	0	0	0	6	6	7	0	0	1	0	0	1	0	9	9.7
18:45	9	0	1	0	0	0	0	0	10	10.5	4	1	0	1	0	0	0	0	6	7.3
H/Total	44	5	1	0	0	0	1	3	54	51.5	31	3	0	3	0	0	2	0	39	41.7
Total	157	18	5	11	0	0	4	4	199	210.2	215	22	2	15	0	0	2	11	267	277.5

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 2
Location: Laporte Road / Hobson Way / Kiln Lane
Date: 07 June 2018, Thursday



Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	41	9	0	1	0	0	1	0	52	52.7	12	4	3	2	0	0	0	1	22	25.3
07:15	52	5	3	10	1	0	2	0	73	87.3	6	1	0	3	0	0	0	0	10	13.9
07:30	58	11	2	6	0	0	0	0	77	85.8	9	1	0	5	0	0	0	2	17	21.9
07:45	58	8	2	7	1	0	0	0	76	87.1	9	3	2	6	0	0	0	0	20	28.8
H/Total	209	33	7	24	2	0	3	0	278	312.9	36	9	5	16	0	0	0	3	69	89.9
08:00	32	7	3	4	0	0	1	0	47	53.1	11	2	1	6	0	0	0	0	20	28.3
08:15	32	12	2	4	0	1	0	0	51	58.2	16	4	0	3	0	0	0	0	23	26.9
08:30	26	5	4	3	0	0	0	0	38	43.9	21	4	3	7	0	0	0	1	36	45.8
08:45	17	6	2	7	0	0	0	0	32	42.1	17	4	1	6	0	0	0	0	28	36.3
H/Total	107	30	11	18	0	1	1	0	168	197.3	65	14	5	22	0	0	0	1	107	137.3
09:00	8	8	5	5	0	1	0	0	27	37	22	2	3	6	0	0	0	0	33	42.3
09:15	16	2	3	6	0	0	0	0	27	36.3	4	4	2	1	0	0	0	0	11	13.3
09:30	12	4	9	3	0	0	0	0	28	36.4	11	3	1	4	0	1	0	0	20	26.7
09:45	2	3	3	12	0	0	0	0	20	37.1	4	2	2	5	0	0	0	0	13	20.5
H/Total	38	17	20	26	0	1	0	0	102	146.8	41	11	8	16	0	1	0	0	77	102.8
Total	354	80	38	68	2	2	4	0	548	657	142	34	18	54	0	1	0	4	253	330

Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	12	6	0	6	0	0	0	0	24	31.8	32	7	2	12	0	0	1	0	54	70
16:15	3	3	1	7	1	0	0	0	15	25.6	45	9	3	9	0	0	2	0	68	80
16:30	8	1	5	4	0	0	0	0	18	25.7	51	4	4	6	0	0	1	0	66	75.2
16:45	7	3	0	3	0	0	0	0	13	16.9	37	1	5	4	0	0	0	0	47	54.7
H/Total	30	13	6	20	1	0	0	0	70	100	165	21	14	31	0	0	4	0	235	279.9
17:00	5	1	1	5	0	0	0	0	12	19	35	1	0	2	0	0	1	0	39	41
17:15	2	2	1	2	1	0	0	0	8	12.1	22	3	2	8	0	0	0	0	35	46.4
17:30	9	1	2	2	0	0	0	0	14	17.6	15	3	3	9	0	0	0	0	30	43.2
17:45	7	0	0	2	0	0	0	0	9	11.6	58	3	2	8	0	0	1	1	73	83
H/Total	23	4	4	11	1	0	0	0	43	60.3	130	10	7	27	0	0	2	1	177	213.6
18:00	13	3	1	1	0	0	0	0	18	19.8	31	6	2	3	0	0	1	0	43	47.3
18:15	19	3	0	2	0	0	1	0	25	27	8	1	0	3	0	0	0	0	12	15.9
18:30	18	2	1	2	0	0	1	0	24	26.5	25	1	0	1	0	0	0	0	27	28.3
18:45	8	1	0	2	0	0	0	0	11	13.6	14	1	2	0	0	0	0	0	17	18
H/Total	58	9	2	7	0	0	2	0	78	86.9	78	9	4	7	0	0	1	0	99	109.5
Total	111	26	12	38	2	0	2	0	191	247.2	373	40	25	65	0	0	7	1	511	603

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Laporte Road / Hobson Way / Kiln Lane**
Date: **07 June 2018, Thursday**



Time	Whole Junction									TOTAL	TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY			
07:00	69	15	3	4	0	0	1	1	93	98.3	
07:15	70	6	3	13	1	0	2	3	98	113.8	
07:30	93	13	2	11	0	0	1	4	124	135.5	
07:45	87	16	4	13	1	0	0	2	123	141.3	
H/Total	319	50	12	41	2	0	4	10	438	488.9	
08:00	61	11	5	10	0	0	1	0	88	102.9	
08:15	68	18	2	8	0	1	0	2	99	109.8	
08:30	66	11	7	10	0	0	0	1	95	110.7	
08:45	41	9	3	13	0	0	0	1	67	84.6	
H/Total	236	49	17	41	0	1	1	4	349	408	
09:00	36	10	8	12	0	1	0	0	67	87.6	
09:15	20	7	6	7	0	0	0	1	41	52.3	
09:30	32	10	10	7	0	1	0	0	60	75.1	
09:45	9	7	6	16	0	0	0	0	38	61.8	
H/Total	97	34	30	42	0	2	0	1	206	276.8	
Total	652	133	59	124	2	3	5	15	993	1173.7	

Peak Hours	Totals
07:00 08:00	438
07:15 08:15	433
07:30 08:30	434
07:45 08:45	405

08:00 09:00	349
08:15 09:15	328
08:30 09:30	270
08:45 09:45	235

09:00 10:00	206
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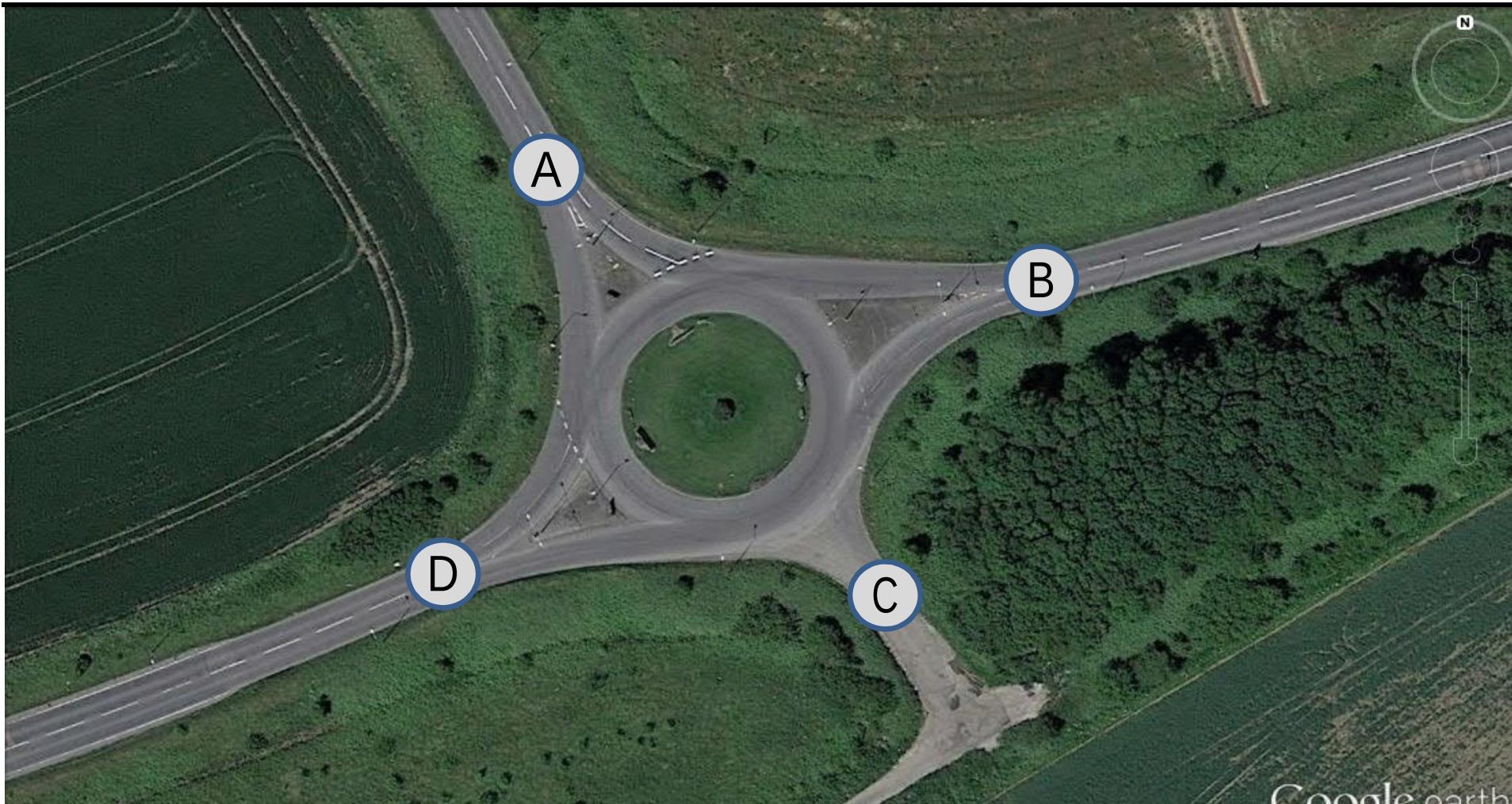
Time	Whole Junction									TOTAL	TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY			
16:00	64	19	2	18	0	0	1	3	107	128.4	
16:15	76	16	4	17	1	0	2	0	116	139.9	
16:30	94	10	9	11	0	0	2	2	128	144	
16:45	63	3	5	7	0	0	0	1	79	89.8	
H/Total	297	48	20	53	1	0	5	6	430	502.1	
17:00	71	3	1	8	0	0	1	1	85	94.5	
17:15	47	6	3	11	1	0	0	2	70	85.2	
17:30	33	4	5	11	0	0	0	1	54	70	
17:45	79	3	2	12	0	0	1	2	99	113.4	
H/Total	230	16	11	42	1	0	2	6	308	363.1	
18:00	52	9	3	4	0	0	3	3	74	76.5	
18:15	33	4	0	5	0	0	1	0	43	48.9	
18:30	48	3	1	3	0	0	2	0	57	60.2	
18:45	25	2	2	2	0	0	0	0	31	34.6	
H/Total	158	18	6	14	0	0	6	3	205	220.2	
Total	685	82	37	109	2	0	13	15	943	1085.4	

Peak Hours	Totals
16:00 17:00	430
16:15 17:15	408
16:30 17:30	362
16:45 17:45	288

17:00 18:00	308
17:15 18:15	297
17:30 18:30	270
17:45 18:45	273

18:00 19:00	205
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Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **3**
Location: **A1173 / Kiln Lane**



Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **3**
Location: **A1173 / Kiln Lane**
Date: **07 June 2018, Thursday**



	1 1 1.5 2.3 2 2 0.4 0.2																			
Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0	8			2				1	11	12.8
07:15									0	0	10		3	3				2	18	21.8
07:30									0	0	9	1	1	3				1	14	18.4
07:45									0	0	30	8	3	2				1	44	47.3
H/Total	0	0	0	0	0	0	0	0	0	0	57	9	7	10	0	0	0	4	87	100.3
08:00									0	0	6	2		1			1		10	10.7
08:15									0	0	19	3	4	5		1			32	41.5
08:30									0	0	9	1	3	1					14	16.8
08:45									0	0	11	4	2	1					18	20.3
H/Total	0	0	0	0	0	0	0	0	0	0	45	10	9	8	0	1	1	0	74	89.3
09:00									0	0	18	6	1	2					27	30.1
09:15									0	0	9	3	3	1					16	18.8
09:30									0	0	6		3	4					13	19.7
09:45									0	0	4	3	1	4					12	17.7
H/Total	0	0	0	0	0	0	0	0	0	0	37	12	8	11	0	0	0	0	68	86.3
Total	0	0	0	0	0	0	0	0	0	0	139	31	24	29	0	1	1	4	229	275.9

Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	1								0	0	17	4	3	4				1	29	34.9
16:15									0	0	7	3	6	9	1				26	41.7
16:30									1	1	13	4	4	8					29	41.4
16:45									0	0	10	2	11	3					26	35.4
H/Total	0	1	0	0	0	0	0	0	1	1	47	13	24	24	1	0	0	1	110	153.4
17:00									0	0	9	3	6	7				1	26	37.3
17:15									0	0	12	2	8	7	1		1		31	44.5
17:30									0	0	13	2	4	5				1	25	32.7
17:45									0	0	9	2	5	5			1		22	30.4
H/Total	0	0	0	0	0	0	0	0	0	0	43	9	23	24	1	0	2	2	104	144.9
18:00									0	0	5	2	4	4					15	22.2
18:15									0	0	4		4	3					11	16.9
18:30									0	0	6		1	1					8	9.8
18:45									0	0	2		3	2					7	11.1
H/Total	0	0	0	0	0	0	0	0	0	0	17	2	12	10	0	0	0	0	41	60
Total	0	1	0	0	0	0	0	0	1	1	107	24	59	58	2	0	2	3	255	358.3

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 3
Location: A1173 / Kiln Lane
Date: 07 June 2018, Thursday



Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0	24	2	1	4		1			32	38.7
07:15									0	0	27	5	2	10					44	58
07:30									0	0	42	3	3	14					62	81.7
07:45		1							1	1	40	10	4	10		2			66	83
H/Total	0	1	0	0	0	0	0	0	1	1	133	20	10	38	0	3	0	0	204	261.4
08:00									0	0	38	6	3	16					63	85.3
08:15									0	0	33	8	2	6					49	57.8
08:30									0	0	36	4	5	12			1		58	75.5
08:45									0	0	30	9	4	10			1		54	68.4
H/Total	0	0	0	0	0	0	0	0	0	0	137	27	14	44	0	0	2	0	224	287
09:00									0	0	31	6	4	15					56	77.5
09:15									0	0	26	7	5	8					46	58.9
09:30									0	0	29	7	1	10					47	60.5
09:45									0	0	29	7	2	8					46	57.4
H/Total	0	0	0	0	0	0	0	0	0	0	115	27	12	41	0	0	0	0	195	254.3
Total	0	1	0	0	0	0	0	0	1	1	385	74	36	123	0	3	2	0	623	802.7

Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0	186	38	2	6					235	243.6
16:15									0	0	85	17	2	4			2		110	115
16:30									0	0	176	22		9		1	6		214	223.1
16:45									0	0	127	22	1	5		1		1	157	164.2
H/Total	0	0	0	0	0	0	0	0	0	0	574	99	5	24	0	3	10	1	716	745.9
17:00									0	0	201	13	2	4			4		224	227.8
17:15									0	0	121	5	2	7			2		137	145.9
17:30									0	0	112	13	2	10					137	151
17:45									0	0	75	12	2	6			1		96	104.2
H/Total	0	0	0	0	0	0	0	0	0	0	509	43	8	27	0	0	7	0	594	628.9
18:00									0	0	82	14		4			2	1	103	109.6
18:15									0	0	66	7	2	4		2	1		82	89.6
18:30									0	0	54	5		3					62	65.9
18:45									0	0	53	6		3			1		63	66.3
H/Total	0	0	0	0	0	0	0	0	0	0	255	32	2	14	0	4	3	0	310	331.4
Total	0	0	0	0	0	0	0	0	0	0	1338	174	15	65	0	7	20	1	1620	1706.2

[illegible]

Project Number: TSP13850
Project Name: Immingham, North East Lincolnshire
Survey Type: Manual Classified Turning Count
Site No: 3
Location: A1173 / Kiln Lane
Date: 07 June 2018, Thursday



Time	B - C										B - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0	19	7	2	12					40	56.6
07:15									0	0	10	8	5	7					30	41.6
07:30									0	0	12	4	3	8					27	38.9
07:45									0	0	16	7	7	7					37	49.6
H/Total	0	0	0	0	0	0	0	0	0	0	57	26	17	34	0	0	0	0	134	186.7
08:00									0	0	19	9	6	9					43	57.7
08:15									0	0	10	11	7	8					36	49.9
08:30									0	0	12	9	8	10					39	56
08:45									0	0	15	9	5	15					44	66
H/Total	0	0	0	0	0	0	0	0	0	0	56	38	26	42	0	0	0	0	162	229.6
09:00									0	0	16	8	7	8					39	52.9
09:15									0	0	7	8	5	9					29	43.2
09:30	2								2	2	14	11	5	5					35	44
09:45									0	0	6	14	4	5					29	37.5
H/Total	2	0	0	0	0	0	0	0	2	2	43	41	21	27	0	0	0	0	132	177.6
Total	2	0	0	0	0	0	0	0	2	2	156	105	64	103	0	0	0	0	428	593.9

Time	B - C										B - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0	98	20	2	13		1	1		135	153.3
16:15									0	0	81	19	6	5	1	1	1		113	122.9
16:30									0	0	107	14	4	9			3		137	148.9
16:45									0	0	88	12	2	7			1		110	119.5
H/Total	0	0	0	0	0	0	0	0	0	0	374	65	14	34	1	1	6	0	495	544.6
17:00									0	0	103	7		8			2		120	129.2
17:15									0	0	56	8	3	9					76	89.2
17:30									0	0	50	18	5	8			1		82	94.3
17:45									0	0	91	6	2	5			2		106	112.3
H/Total	0	0	0	0	0	0	0	0	0	0	300	39	10	30	0	0	5	0	384	425
18:00									0	0	80	10	1				2		93	92.3
18:15									0	0	30	3		5			1		39	44.9
18:30									0	0	47	2	1	5					55	62
18:45									0	0	33	1	1	4		1			40	46.7
H/Total	0	0	0	0	0	0	0	0	0	0	190	16	3	14	0	1	3	0	227	245.9
Total	0	0	0	0	0	0	0	0	0	0	864	120	27	78	1	2	14	0	1106	1215.5



Time	C - A										C - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0									0	0
07:15									0	0									0	0
07:30									0	0									0	0
07:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00									0	0									0	0
08:15									0	0									0	0
08:30									0	0									0	0
08:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00									0	0									0	0
09:15									0	0									0	0
09:30									0	0									0	0
09:45	1								1	1	1								1	1
H/Total	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1
Total	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1

[illegible]

Project Number: TSP13850
 Project Name: Immingham, North East Lincolnshire
 Survey Type: Manual Classified Turning Count
 Site No: 3
 Location: A1173 / Kiln Lane
 Date: 07 June 2018, Thursday



Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0									0	0
07:15									0	0									0	0
07:30									0	0									0	0
07:45									0	0		1							1	1
H/Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
08:00									0	0									0	0
08:15									0	0									0	0
08:30									0	0									0	0
08:45									0	0	1								1	1
H/Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
09:00									0	0									0	0
09:15									0	0									0	0
09:30									0	0									0	0
09:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	2

Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0									0	0
16:15									0	0									0	0
16:30									0	0	1								1	1
16:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
17:00									0	0	1								1	1
17:15									0	0									0	0
17:30									0	0									0	0
17:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
18:00									0	0									0	0
18:15									0	0									0	0
18:30									0	0		1							1	1
18:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3	3

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **3**
Location: **A1173 / Kiln Lane**
Date: **07 June 2018, Thursday**



Time	D - A										D - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	124	25		5	1	1	1		157	164.9	80	25	3	7			3		118	126.8
07:15	158	31	3	8				1	201	212.1	90	14	3	13	1		1		122	140.8
07:30	153	24	3	3			3		186	189.6	122	19	1	13		1	1		157	174.8
07:45	132	20	2	8			1		163	173.8	116	23	4	8	1		2		154	166.2
H/Total	567	100	8	24	1	1	5	1	707	740.4	408	81	11	41	2	1	7	0	551	608.6
08:00	77	20	6	12		1	1	1	118	136.2	67	18	4	10	1		1		101	116.4
08:15	77	23	3	6		1	1		111	120.7	96	23	6	7					132	144.1
08:30	70	15	2	9					96	108.7	62	7	2	7			1		79	88.5
08:45	79	14	2	6		3			104	115.8	48	11	5	9		1			74	89.2
H/Total	303	72	13	33	0	5	2	1	429	481.4	273	59	17	33	1	1	2	0	386	438.2
09:00	44	8	2	15	1	1			71	93.5	32	11	4	11					58	74.3
09:15	33	8	6	8					55	68.4	32	11	3	8					54	65.9
09:30	38	10	1	6					55	63.3	16	14	10	9					49	65.7
09:45	33	11	4	7					55	66.1	19	4	8	9					40	55.7
H/Total	148	37	13	36	1	1	0	0	236	291.3	99	40	25	37	0	0	0	0	201	261.6
Total	1018	209	34	93	2	7	7	2	1372	1513.1	780	180	53	111	3	2	9	0	1138	1308.4

Time	D - A										D - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	37	9	2	5					53	60.5	24	12	2	17					55	78.1
16:15	31	7	2	7		1			48	59.1	22	6	6	8	1				43	57.4
16:30	39	7	1	8		1	2	1	59	68.9	14	7	2	9					32	44.7
16:45	40	9		9		1	2		61	72.5	9	4	2	11					26	41.3
H/Total	147	32	5	29	0	3	4	1	221	261	69	29	12	45	1	0	0	0	156	221.5
17:00	55	7	3	9			2	1	77	88.2	19	6	5	9					39	53.2
17:15	69	3	1	4			1		78	83.1	17	4	6	12					39	57.6
17:30	60	7	1	5		1	2		76	82.8	21	1	5	12					39	57.1
17:45	50	4	2	4		1	2		63	69	16	1	2	6					25	33.8
H/Total	234	21	7	22	0	2	7	1	294	323.1	73	12	18	39	0	0	0	0	142	201.7
18:00	42	3	1	6		1	4		57	63.9	25	4		8			2		39	48.2
18:15	64	4	3	2					73	77.1	22	4	1	10			2		39	51.3
18:30	52	3		1					56	57.3	18	2	3	2		1	1		27	31.5
18:45	25		1	2					28	31.1	9	3		5					17	23.5
H/Total	183	10	5	11	0	1	4	0	214	229.4	74	13	4	25	0	1	5	0	122	154.5
Total	564	63	17	62	0	6	15	2	729	813.5	216	54	34	109	1	1	5	0	420	577.7



Time	D - C										D - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0	1								1	1
07:15									0	0									0	0
07:30									0	0	1								1	1
07:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
08:00									0	0									0	0
08:15									0	0									0	0
08:30									0	0									0	0
08:45									0	0	1								1	1
H/Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
09:00									0	0									0	0
09:15									0	0									0	0
09:30									0	0									0	0
09:45									0	0		1							1	1
H/Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	4	4

[illegible]

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **3**
Location: **A1173 / Kiln Lane**
Date: **07 June 2018, Thursday**



Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	32	2	1	6	0	1	0	1	43	51.5	130	27	8	7	1	1	1	0	175	189.5
07:15	37	5	5	13	0	0	0	2	62	79.8	160	31	6	9	0	0	0	1	207	220.9
07:30	51	4	4	17	0	0	0	0	76	100.1	160	26	5	4	0	0	3	0	198	203.9
07:45	70	19	7	12	0	2	0	1	111	131.3	142	23	4	10	0	0	1	0	180	194.4
H/Total	190	30	17	48	0	3	0	4	292	362.7	592	107	23	30	1	1	5	1	760	808.7
08:00	44	8	3	17	0	0	1	0	73	96	85	24	12	13	0	1	2	1	138	159.9
08:15	52	11	6	11	0	1	0	0	81	99.3	84	25	5	7	0	2	1	0	124	137
08:30	45	5	8	13	0	0	1	0	72	92.3	78	19	5	11	0	0	0	0	113	129.8
08:45	41	13	6	11	0	0	1	0	72	88.7	85	14	6	11	0	3	0	0	119	139.3
H/Total	182	37	23	52	0	1	3	0	298	376.3	332	82	28	42	0	6	3	1	494	566
09:00	49	12	5	17	0	0	0	0	83	107.6	47	13	4	17	1	1	0	0	83	109.1
09:15	35	10	8	9	0	0	0	0	62	77.7	42	10	6	9	0	0	0	0	67	81.7
09:30	35	7	4	14	0	0	0	0	60	80.2	42	15	2	13	0	0	0	0	72	89.9
09:45	33	10	3	12	0	0	0	0	58	75.1	38	14	6	9	0	0	0	0	67	81.7
H/Total	152	39	20	52	0	0	0	0	263	340.6	169	52	18	48	1	1	0	0	289	362.4
Total	524	106	60	152	0	4	3	4	853	1079.6	1093	241	69	120	2	8	8	2	1543	1737.1

Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	203	42	5	10	0	1	2	1	264	278.5	48	16	4	8	0	0	0	1	77	88.6
16:15	92	20	8	13	1	0	2	0	136	156.7	45	17	5	10	0	1	0	0	78	94.5
16:30	189	27	4	17	0	1	6	0	244	265.5	55	16	2	13	0	1	2	4	93	107.5
16:45	137	24	12	8	0	1	0	1	183	199.6	49	11	2	11	0	1	2	0	76	91.1
H/Total	621	113	29	48	1	3	10	2	827	900.3	197	60	13	42	0	3	4	5	324	381.7
17:00	210	16	8	11	0	0	4	1	250	265.1	74	8	5	10	0	0	2	1	100	113.5
17:15	133	7	10	14	1	0	3	0	168	190.4	82	7	3	11	0	0	1	1	105	119.4
17:30	125	15	6	15	0	0	0	1	162	183.7	70	9	3	8	0	1	2	1	94	104.9
17:45	84	14	7	11	0	0	2	0	118	134.6	62	6	3	7	0	1	2	1	82	91.6
H/Total	552	52	31	51	1	0	9	2	698	773.8	288	30	14	36	0	2	7	4	381	429.4
18:00	87	16	4	8	0	2	1	0	118	131.8	59	9	2	6	0	1	5	0	82	88.8
18:15	70	7	6	7	0	2	1	0	93	106.5	76	4	4	4	0	0	0	1	89	95.4
18:30	60	5	1	4	0	0	0	0	70	75.7	61	4	3	2	0	0	0	0	70	74.1
18:45	55	6	3	5	0	0	1	0	70	77.4	32	1	2	3	0	0	0	0	38	42.9
H/Total	272	34	14	24	0	4	3	0	351	391.4	228	18	11	15	0	1	5	1	279	301.2
Total	1445	199	74	123	2	7	22	4	1876	2065.5	713	108	38	93	0	6	16	10	984	1112.3

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **3**
Location: **A1173 / Kiln Lane**
Date: **07 June 2018, Thursday**



Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	25	9	10	14	0	0	0	0	58	81.2	88	25	3	9	0	0	3	1	129	139.6
07:15	12	8	8	8	0	0	0	0	36	50.4	100	14	6	16	1	0	1	2	140	162.6
07:30	19	6	5	9	0	0	0	0	39	53.2	131	20	2	16	0	1	1	0	171	193.2
07:45	26	10	9	9	0	0	0	0	54	70.2	146	31	7	10	1	0	2	1	198	213.5
H/Total	82	33	32	40	0	0	0	0	187	255	465	90	18	51	2	1	7	4	638	708.9
08:00	27	13	12	10	0	0	1	0	63	81.4	73	20	4	11	1	0	2	0	111	127.1
08:15	17	13	9	9	0	1	0	0	49	66.2	115	26	10	12	0	1	0	0	164	185.6
08:30	20	13	11	12	0	0	0	0	56	77.1	71	8	5	8	0	0	1	0	93	105.3
08:45	21	9	9	20	0	0	0	0	59	89.5	59	15	7	10	0	1	0	0	92	109.5
H/Total	85	48	41	51	0	1	1	0	227	314.2	318	69	26	41	1	2	3	0	460	527.5
09:00	19	13	9	10	0	0	0	0	51	68.5	50	17	5	13	0	0	0	0	85	104.4
09:15	16	10	5	10	0	0	0	0	41	56.5	41	14	6	9	0	0	0	0	70	84.7
09:30	20	16	6	12	0	0	0	0	54	72.6	22	14	13	13	0	0	0	0	62	85.4
09:45	10	17	6	7	0	0	0	0	40	52.1	24	7	9	13	0	0	0	0	53	74.4
H/Total	65	56	26	39	0	0	0	0	186	249.7	137	52	33	48	0	0	0	0	270	348.9
Total	232	137	99	130	0	1	1	0	600	818.9	920	211	77	140	3	3	10	4	1368	1585.3

Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	109	27	4	16	0	1	1	1	159	181.4	41	16	5	21	0	0	0	1	84	113
16:15	95	29	9	8	1	0	1	0	143	158.3	29	9	12	17	2	0	0	0	69	99.1
16:30	123	22	5	14	0	0	3	3	170	186.5	27	11	6	17	0	0	0	0	61	86.1
16:45	97	14	4	9	0	0	1	0	125	138.1	19	6	13	14	0	0	0	0	52	76.7
H/Total	424	92	22	47	1	1	6	4	597	664.3	116	42	36	69	2	0	0	1	266	374.9
17:00	122	8	2	9	0	0	2	0	143	154.5	28	9	11	16	0	0	0	1	65	90.5
17:15	69	11	5	16	0	0	0	1	102	124.5	29	6	14	19	1	0	1	0	70	102.1
17:30	60	20	7	11	0	0	1	1	100	116.4	34	3	9	17	0	0	0	1	64	89.8
17:45	103	8	3	8	0	0	2	1	125	134.9	25	3	7	11	0	0	1	0	47	64.2
H/Total	354	47	17	44	0	0	5	3	470	530.3	116	21	41	63	1	0	2	2	246	346.6
18:00	97	16	2	0	0	0	3	0	118	117.2	30	6	4	12	0	0	2	0	54	70.4
18:15	42	3	1	7	0	0	1	1	55	63.2	26	4	5	13	0	0	2	0	50	68.2
18:30	56	3	4	6	0	0	0	0	69	78.8	24	2	4	3	0	1	1	0	35	41.3
18:45	39	2	2	5	0	1	0	0	49	57.5	11	3	3	7	0	0	0	0	24	34.6
H/Total	234	24	9	18	0	1	4	1	291	316.7	91	15	16	35	0	1	5	0	163	214.5
Total	1012	163	48	109	1	2	15	8	1358	1511.3	323	78	93	167	3	1	7	3	675	936

[illegible]

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **3**
Location: **A1173 / Kiln Lane**
Date: **07 June 2018, Thursday**



Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	205	50	3	12	1	1	4	0	276	292.7	44	9	3	16	0	1	0	0	73	96.3
07:15	248	45	6	21	1	0	1	1	323	352.9	37	13	7	17	0	0	0	0	74	99.6
07:30	276	43	4	16	0	1	4	0	344	365.4	55	7	6	22	0	0	0	0	90	121.6
07:45	248	43	6	16	1	0	3	0	317	340	56	18	11	17	0	2	0	0	104	133.6
H/Total	977	181	19	65	3	2	12	1	1260	1351	192	47	27	72	0	3	0	0	341	451.1
08:00	144	38	10	22	1	1	2	1	219	252.6	57	15	9	25	0	0	0	0	106	143
08:15	173	46	9	13	0	1	1	0	243	264.8	43	19	9	14	0	0	0	0	85	107.7
08:30	132	22	4	16	0	0	1	0	175	197.2	48	13	13	22	0	0	1	0	97	131.5
08:45	128	25	7	15	0	4	0	0	179	206	47	18	9	25	0	0	1	0	100	136.4
H/Total	577	131	30	66	1	6	4	1	816	920.6	195	65	40	86	0	0	2	0	388	518.6
09:00	76	19	6	26	1	1	0	0	129	167.8	47	14	11	23	0	0	0	0	95	130.4
09:15	65	19	9	16	0	0	0	0	109	134.3	33	15	10	17	0	0	0	0	75	102.1
09:30	54	24	11	15	0	0	0	0	104	129	43	18	6	15	0	0	0	0	82	104.5
09:45	52	16	12	16	0	0	0	0	96	122.8	35	22	6	13	0	0	0	0	76	95.9
H/Total	247	78	38	73	1	1	0	0	438	553.9	158	69	33	68	0	0	0	0	328	432.9
Total	1801	390	87	204	5	9	16	2	2514	2825.5	545	181	100	226	0	3	2	0	1057	1402.6

Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	61	21	4	22	0	0	0	0	108	138.6	284	58	4	19	0	2	3	0	370	396.9
16:15	53	13	8	15	1	1	0	0	91	116.5	166	36	8	9	1	0	3	0	223	237.9
16:30	53	14	3	17	0	1	2	1	91	113.6	284	36	4	18	0	1	9	0	352	373
16:45	49	13	2	20	0	1	2	0	87	113.8	215	34	3	12	0	1	1	1	267	283.7
H/Total	216	61	17	74	1	3	4	1	377	482.5	949	164	19	58	1	4	16	1	1212	1291.5
17:00	74	13	8	18	0	0	2	1	116	141.4	305	20	2	12	0	0	6	0	345	358
17:15	86	7	7	16	0	0	1	0	117	140.7	177	13	5	16	0	0	2	0	213	235.1
17:30	81	8	6	17	0	1	2	0	115	139.9	162	31	7	18	0	0	1	0	219	245.3
17:45	66	5	4	10	0	1	2	0	88	102.8	166	18	4	11	0	0	3	0	202	216.5
H/Total	307	33	25	61	0	2	7	1	436	524.8	810	82	18	57	0	0	12	0	979	1054.9
18:00	67	7	1	14	0	1	6	0	96	112.1	162	24	1	4	0	2	3	0	196	201.9
18:15	86	8	4	12	0	0	2	0	112	128.4	96	10	2	9	0	2	2	0	121	134.5
18:30	70	5	3	3	0	1	1	0	83	88.8	101	8	1	8	0	0	0	0	118	128.9
18:45	34	3	1	7	0	0	0	0	45	54.6	86	7	1	7	0	1	1	0	103	113
H/Total	257	23	9	36	0	2	9	0	336	383.9	445	49	5	28	0	5	6	0	538	578.3
Total	780	117	51	171	1	7	20	2	1149	1391.2	2204	295	42	143	1	9	34	1	2729	2924.7

Project Number: **TSP13850**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **3**
Location: **A1173 / Kiln Lane**
Date: **07 June 2018, Thursday**



Time	Whole Junction									TOTAL	TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY			
07:00	262	61	14	32	1	2	4	1		377	425.4
07:15	297	58	19	42	1	0	1	3		421	483.1
07:30	346	53	13	42	0	1	4	0		459	518.7
07:45	344	73	22	37	1	2	3	1		483	542.5
H/Total	1249	245	68	153	3	5	12	5		1740	1969.7
08:00	215	59	25	49	1	1	4	1		355	430
08:15	242	70	24	33	0	3	1	0		373	430.3
08:30	197	40	23	41	0	0	2	0		303	366.6
08:45	191	47	22	46	0	4	1	0		311	385.2
H/Total	845	216	94	169	1	8	8	1		1342	1612.1
09:00	144	44	20	53	1	1	0	0		263	343.9
09:15	116	39	22	35	0	0	0	0		212	268.5
09:30	109	47	21	41	0	0	0	0		218	281.8
09:45	97	43	21	35	0	0	0	0		196	252
H/Total	466	173	84	164	1	1	0	0		889	1146.2
Total	2560	634	246	486	5	14	20	6		3971	4728

Peak Hours	Totals
07:00 08:00	1740
07:15 08:15	1718
07:30 08:30	1670
07:45 08:45	1514

08:00 09:00	1342
08:15 09:15	1250
08:30 09:30	1089
08:45 09:45	1004

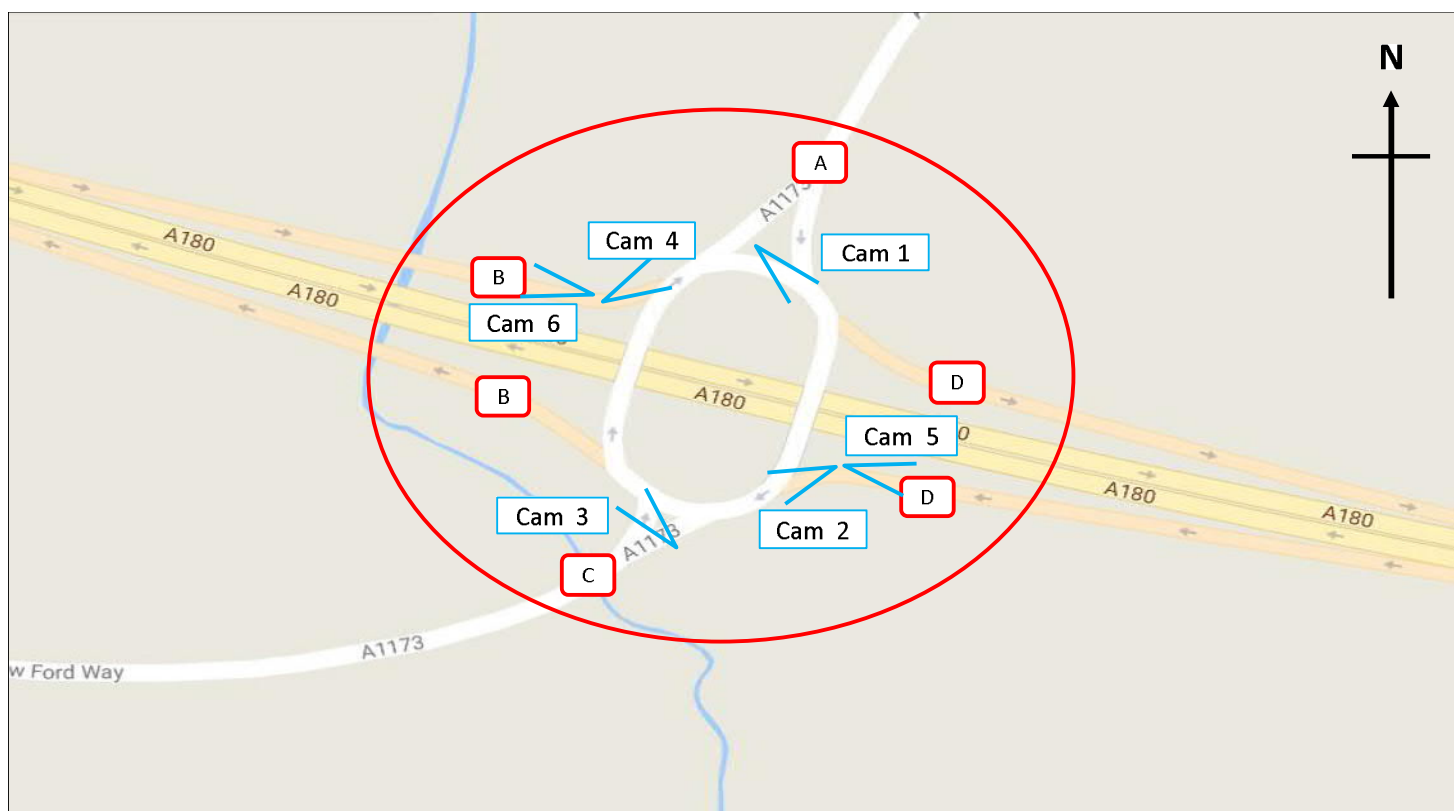
09:00 10:00	889
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Time	Whole Junction									TOTAL	TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY			
16:00	373	90	13	48	0	2	3	2		531	598.5
16:15	240	62	25	36	3	1	3	0		370	431.5
16:30	366	63	12	48	0	2	11	4		506	566.6
16:45	283	51	18	37	0	2	3	1		395	451.5
H/Total	1262	266	68	169	3	7	20	7		1802	2048.1
17:00	407	37	18	38	0	0	8	2		510	562
17:15	288	26	22	46	1	0	4	1		388	456.6
17:30	266	43	19	43	0	1	3	2		377	440
17:45	253	27	14	29	0	1	6	1		331	372.3
H/Total	1214	133	73	156	1	2	21	6		1606	1830.9
18:00	251	39	7	22	0	3	10	0		332	361.1
18:15	198	18	11	26	0	2	4	1		260	298.1
18:30	186	14	8	13	0	1	1	0		223	244.3
18:45	129	11	6	17	0	1	1	0		165	190.5
H/Total	764	82	32	78	0	7	16	1		980	1094
Total	3240	481	173	403	4	16	57	14		4388	4973

Peak Hours	Totals
16:00 17:00	1802
16:15 17:15	1781
16:30 17:30	1799
16:45 17:45	1670

17:00 18:00	1606
17:15 18:15	1428
17:30 18:30	1300
17:45 18:45	1146

18:00 19:00	980
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	Site / Location:	Site 5, A180 / A1173 / Matthew Ford Way	Project No:	7614	Drawing No:	7614-05	Drawn By:	EA
	Survey Date:	Wednesday 5th July 2017	Project Name:	Stallingborough				
	Survey Times:	07:00 to 10:00 & 16:00 to 19:00	Drawing Title:	Site Layout and Observed Movements				



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	33	5	1	6	0	1	0	46	4	1	4	0	0	0	0	9
07:15	29	2	1	2	0	0	0	34	1	0	1	3	0	0	0	5
07:30	32	6	4	1	0	0	0	43	1	0	1	2	0	0	0	4
07:45	48	3	4	4	1	0	0	60	5	1	0	3	0	0	0	9
H/TOT	142	16	10	13	1	1	0	183	11	2	6	8	0	0	0	27
08:00	48	7	8	11	0	0	0	74	4	2	2	4	0	0	0	12
08:15	46	11	6	6	0	0	0	69	1	0	0	1	0	0	0	2
08:30	34	10	5	6	0	0	0	55	3	3	4	4	0	0	0	14
08:45	42	14	3	5	0	0	0	64	2	0	1	5	0	0	0	8
H/TOT	170	42	22	28	0	0	0	262	10	5	7	14	0	0	0	36
09:00	41	18	4	6	2	0	0	71	2	0	0	1	0	0	0	3
09:15	24	9	10	2	0	0	0	45	2	2	0	2	0	0	0	6
09:30	32	18	7	3	0	0	0	60	4	0	1	3	0	0	0	8
09:45	35	15	12	5	0	0	0	67	0	0	0	1	0	0	0	1
H/TOT	132	60	33	16	2	0	0	243	8	2	1	7	0	0	0	18
P/TOT	444	118	65	57	3	1	0	688	29	9	14	29	0	0	0	81

TIME	A to D							TOT	A to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	206	27	11	5	1	2	0	252	19	2	0	1	0	0	0	22
16:15	136	40	4	3	2	0	1	186	21	2	0	3	0	0	0	26
16:30	239	25	7	3	0	6	0	280	22	3	0	2	0	0	0	27
16:45	179	27	4	1	0	4	0	215	27	3	0	4	0	0	0	34
H/TOT	760	119	26	12	3	12	1	933	89	10	0	10	0	0	0	109
17:00	215	25	3	6	0	1	0	250	36	3	3	3	0	1	1	47
17:15	122	7	1	5	0	2	0	137	30	2	1	1	0	0	0	34
17:30	136	19	2	3	0	2	0	162	23	6	1	4	0	0	0	34
17:45	100	16	6	2	0	2	0	126	14	2	0	1	0	0	0	17
H/TOT	573	67	12	16	0	7	0	675	103	13	5	9	0	1	1	132
18:00	141	18	1	2	2	0	0	164	13	4	1	1	0	0	0	19
18:15	70	8	5	3	0	1	0	87	10	0	0	0	0	0	0	10
18:30	84	10	0	1	0	1	0	96	4	1	0	2	0	0	0	7
18:45	69	7	1	2	0	1	0	80	1	1	0	0	0	1	0	3
H/TOT	364	43	7	8	2	3	0	427	28	6	1	3	0	1	0	39
P/TOT	1697	229	45	36	5	22	1	2035	220	29	6	22	0	2	1	280



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	A to B							TOT	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	2	2	3	13	0	0	0	20	0	0	0	0	0	0	0	0
07:15	11	0	3	11	0	0	0	25	0	0	0	0	0	0	0	0
07:30	2	1	3	17	0	0	0	23	0	0	0	0	0	0	0	0
07:45	5	1	5	15	0	0	0	26	0	0	0	0	0	0	0	0
H/TOT	20	4	14	56	0	0	0	94	0	0	0	0	0	0	0	0
08:00	3	2	0	15	0	0	0	20	0	0	0	0	0	0	0	0
08:15	6	2	3	12	0	0	0	23	1	0	0	0	0	0	0	1
08:30	13	1	2	11	0	0	0	27	0	0	1	0	0	0	0	1
08:45	3	9	4	16	0	0	0	32	1	0	0	0	0	0	0	1
H/TOT	25	14	9	54	0	0	0	102	2	0	1	0	0	0	0	3
09:00	5	2	1	15	0	0	0	23	0	0	0	0	0	0	0	0
09:15	4	3	2	17	0	0	0	26	0	0	0	0	0	0	0	0
09:30	4	3	0	13	0	0	0	20	0	0	0	0	0	0	0	0
09:45	3	3	5	20	0	0	0	31	0	0	0	0	0	0	0	0
H/TOT	16	11	8	65	0	0	0	100	0	0	0	0	0	0	0	0
P/TOT	61	29	31	175	0	0	0	296	2	0	1	0	0	0	0	3

TIME	A to B							TOT	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	34	11	2	17	0	0	0	64	0	0	0	0	0	0	0	0
16:15	27	11	3	9	0	2	0	52	0	0	0	0	0	0	0	0
16:30	50	6	0	8	0	0	0	64	0	0	0	0	0	0	0	0
16:45	33	5	3	9	0	0	0	50	0	0	0	0	0	0	0	0
H/TOT	144	33	8	43	0	2	0	230	0	0	0	0	0	0	0	0
17:00	25	5	2	5	0	0	0	37	0	0	0	0	0	0	0	0
17:15	30	5	2	11	0	1	0	49	0	0	0	0	0	0	0	0
17:30	23	5	1	11	0	0	0	40	0	0	0	0	0	0	0	0
17:45	34	2	0	5	1	2	0	44	0	0	0	0	0	0	0	0
H/TOT	112	17	5	32	1	3	0	170	0	0	0	0	0	0	0	0
18:00	25	2	1	3	0	0	0	31	0	0	0	0	0	0	0	0
18:15	13	0	0	7	0	0	0	20	0	0	0	0	0	0	0	0
18:30	6	1	2	5	0	0	0	14	0	0	0	0	0	0	0	0
18:45	3	2	0	11	0	0	0	16	0	0	0	0	0	0	0	0
H/TOT	47	5	3	26	0	0	0	81	0	0	0	0	0	0	0	0
P/TOT	303	55	16	101	1	5	0	481	0	0	0	0	0	0	0	0



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	31	7	2	11	0	0	0	51	0	0	0	0	0	0	0	0
07:15	38	12	2	15	0	1	0	68	0	0	0	0	0	0	0	0
07:30	39	12	1	14	0	0	0	66	1	0	0	0	0	0	0	1
07:45	50	10	1	13	0	0	0	74	0	0	0	0	0	0	0	0
H/TOT	158	41	6	53	0	1	0	259	1	0	0	0	0	0	0	1
08:00	28	8	3	9	0	0	0	48	1	0	0	0	0	0	0	1
08:15	27	7	2	6	0	1	0	43	0	0	0	0	0	0	0	0
08:30	28	7	1	11	0	0	0	47	0	0	0	0	0	0	0	0
08:45	26	2	2	15	0	0	0	45	0	0	0	0	0	0	0	0
H/TOT	109	24	8	41	0	1	0	183	1	0	0	0	0	0	0	1
09:00	13	8	2	13	1	0	0	37	0	0	0	0	0	0	0	0
09:15	11	7	3	17	2	0	0	40	0	0	0	0	0	0	0	0
09:30	8	4	1	14	0	0	0	27	0	0	0	0	0	0	0	0
09:45	10	12	2	27	0	0	0	51	0	0	0	0	0	0	0	0
H/TOT	42	31	8	71	3	0	0	155	0	0	0	0	0	0	0	0
P/TOT	309	96	22	165	3	2	0	597	2	0	0	0	0	0	0	2

TIME	B to A							TOT	B to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	3	3	2	12	0	0	0	20	0	0	0	0	0	0	0	0
16:15	1	0	1	22	0	0	0	24	0	0	0	0	0	0	0	0
16:30	8	0	2	9	0	0	0	19	0	0	0	0	0	0	0	0
16:45	5	2	0	11	0	0	0	18	0	0	0	0	0	0	0	0
H/TOT	17	5	5	54	0	0	0	81	0	0	0	0	0	0	0	0
17:00	6	2	2	9	0	0	0	19	1	0	0	0	0	0	0	1
17:15	10	1	1	12	0	0	0	24	1	0	0	0	0	0	0	1
17:30	10	0	3	3	0	0	0	16	0	0	0	0	0	0	0	0
17:45	7	0	1	6	0	0	0	14	0	0	0	1	0	0	0	1
H/TOT	33	3	7	30	0	0	0	73	2	0	0	1	0	0	0	3
18:00	7	0	0	13	0	0	0	20	0	0	0	0	0	0	0	0
18:15	8	2	0	7	0	0	0	17	0	0	0	0	0	0	0	0
18:30	9	0	1	6	0	0	0	16	0	0	0	0	0	0	0	0
18:45	3	1	2	2	0	0	0	8	0	0	0	0	0	0	0	0
H/TOT	27	3	3	28	0	0	0	61	0	0	0	0	0	0	0	0
P/TOT	77	11	15	112	0	0	0	215	2	0	0	1	0	0	0	3



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
07:15	2	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0
07:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
07:45	2	1	1	1	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	7	1	1	3	0	0	0	12	0	0	0	0	0	0	0	0
08:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:15	2	1	0	2	0	0	0	5	0	0	0	0	0	0	0	0
08:30	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	2
08:45	2	0	0	0	0	1	0	3	1	0	1	0	0	0	0	2
H/TOT	6	1	1	2	0	1	0	11	3	0	1	0	0	0	0	4
09:00	1	0	0	0	0	1	0	2	0	0	1	0	0	0	0	1
09:15	2	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0
09:30	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	1
09:45	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	6
H/TOT	3	2	1	0	0	1	0	7	1	3	4	0	0	0	0	8
P/TOT	16	4	3	5	0	2	0	30	4	3	5	0	0	0	0	12

TIME	B to C							TOT	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	9	4	1	0	0	1	0	15	0	0	0	0	0	0	0	0
16:15	9	4	1	0	0	0	0	14	0	0	0	0	0	0	0	0
16:30	10	3	0	0	0	0	0	13	0	0	0	0	0	0	0	0
16:45	15	2	0	0	0	0	0	17	0	1	0	0	0	0	0	1
H/TOT	43	13	2	0	0	1	0	59	0	1	0	0	0	0	0	1
17:00	16	2	0	1	0	0	0	19	0	0	0	0	0	0	0	0
17:15	14	0	0	2	0	0	0	16	1	0	0	2	0	0	0	3
17:30	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0
17:45	12	0	1	0	0	0	0	13	0	0	0	2	0	0	0	2
H/TOT	54	3	1	3	0	0	0	61	1	0	0	4	0	0	0	5
18:00	6	2	0	1	0	0	0	9	0	0	0	0	0	0	0	0
18:15	9	0	0	0	0	0	0	9	2	0	0	0	0	0	0	2
18:30	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
18:45	6	0	0	0	0	1	0	7	0	0	0	0	0	0	0	0
H/TOT	29	2	0	1	0	1	0	33	2	0	0	0	0	0	0	2
P/TOT	126	18	3	4	0	2	0	153	3	1	0	4	0	0	0	8



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	13	4	0	0	0	0	0	17	17	3	1	1	0	0	0	22
07:15	12	3	0	0	0	0	0	15	13	4	0	2	0	2	0	21
07:30	16	2	0	1	0	0	0	19	27	7	1	4	0	0	0	39
07:45	19	3	1	0	0	0	0	23	28	4	0	0	0	0	0	32
H/TOT	60	12	1	1	0	0	0	74	85	18	2	7	0	2	0	114
08:00	14	3	0	0	0	1	0	18	21	1	0	5	0	0	0	27
08:15	9	3	1	0	0	0	0	13	33	2	1	1	0	1	1	39
08:30	7	1	0	0	0	0	0	8	23	1	1	2	0	0	0	27
08:45	7	0	0	0	0	0	0	7	21	2	2	3	0	0	0	28
H/TOT	37	7	1	0	0	1	0	46	98	6	4	11	0	1	1	121
09:00	6	0	0	0	0	0	0	6	4	0	1	2	1	0	0	8
09:15	4	0	0	0	0	0	0	4	5	0	0	3	0	0	0	8
09:30	4	1	1	1	0	0	0	7	6	2	1	2	0	0	0	11
09:45	5	2	1	1	0	0	0	9	7	1	1	4	0	0	0	13
H/TOT	19	3	2	2	0	0	0	26	22	3	3	11	1	0	0	40
P/TOT	116	22	4	3	0	1	0	146	205	27	9	29	1	3	1	275

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	3	1	0	0	0	0	0	4	4	0	1	3	0	1	0	9
16:15	2	0	0	0	0	0	0	2	7	0	0	5	0	0	0	12
16:30	2	0	0	0	0	0	0	2	6	1	4	4	0	0	0	15
16:45	2	1	0	0	0	0	0	3	4	1	1	1	0	0	0	7
H/TOT	9	2	0	0	0	0	0	11	21	2	6	13	0	1	0	43
17:00	5	0	0	0	0	0	0	5	1	0	1	2	0	0	0	4
17:15	8	1	0	0	0	1	0	10	2	1	1	0	0	0	0	4
17:30	5	1	0	0	0	0	0	6	4	0	0	0	0	0	0	4
17:45	5	0	0	0	0	1	0	6	4	0	1	2	0	0	0	7
H/TOT	23	2	0	0	0	2	0	27	11	1	3	4	0	0	0	19
18:00	4	1	0	0	0	0	0	5	2	1	0	2	0	1	0	6
18:15	4	0	0	0	0	0	0	4	7	2	1	1	0	0	0	11
18:30	5	1	1	0	0	0	0	7	3	1	0	1	0	0	0	5
18:45	0	0	0	0	0	0	0	0	4	0	0	2	0	0	0	6
H/TOT	13	2	1	0	0	0	0	16	16	4	1	6	0	1	0	28
P/TOT	45	6	1	0	0	2	0	54	48	7	10	23	0	2	0	90



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	C to D							TOT	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	18	4	1	0	0	0	0	23	0	0	0	0	0	0	0	0
07:15	26	2	0	0	0	0	0	28	0	0	0	0	0	0	0	0
07:30	31	8	2	0	0	1	0	42	0	0	0	0	0	0	0	0
07:45	49	8	2	0	0	1	0	60	0	0	0	0	0	0	0	0
H/TOT	124	22	5	0	0	2	0	153	0	0	0	0	0	0	0	0
08:00	52	4	0	0	0	0	0	56	0	0	0	0	0	0	0	0
08:15	46	5	2	0	0	0	0	53	0	0	0	0	0	0	0	0
08:30	41	4	0	0	0	0	0	45	0	0	0	0	0	0	0	0
08:45	30	4	0	0	0	0	0	34	0	0	0	0	0	0	0	0
H/TOT	169	17	2	0	0	0	0	188	0	0	0	0	0	0	0	0
09:00	32	1	1	1	0	0	0	35	0	0	0	0	0	0	0	0
09:15	32	1	0	0	0	0	0	33	0	0	0	0	0	0	0	0
09:30	15	5	1	0	1	1	0	23	0	0	0	0	0	0	0	0
09:45	18	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0
H/TOT	97	8	2	1	1	1	0	110	0	0	0	0	0	0	0	0
P/TOT	390	47	9	1	1	3	0	451	0	0	0	0	0	0	0	0

TIME	C to D							TOT	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	13	7	2	0	1	0	0	23	1	0	0	0	0	0	0	1
16:15	17	1	0	0	1	0	0	19	0	0	0	0	0	0	0	0
16:30	24	2	0	0	0	0	0	26	1	0	0	0	0	0	0	1
16:45	20	2	1	0	0	0	0	23	0	0	0	0	0	0	0	0
H/TOT	74	12	3	0	2	0	0	91	2	0	0	0	0	0	0	2
17:00	20	3	1	0	0	0	0	24	0	0	0	0	0	0	0	0
17:15	16	2	0	0	0	0	0	18	0	0	0	0	0	0	0	0
17:30	26	3	2	0	0	0	0	31	0	0	0	0	0	0	0	0
17:45	27	1	0	0	0	0	0	28	0	0	0	0	0	0	0	0
H/TOT	89	9	3	0	0	0	0	101	0	0	0	0	0	0	0	0
18:00	21	2	0	0	1	0	0	24	0	0	0	0	0	0	0	0
18:15	16	3	0	1	0	1	0	21	0	0	0	0	0	0	0	0
18:30	19	0	0	0	1	1	0	21	0	0	0	0	0	0	0	0
18:45	14	2	1	0	0	0	0	17	0	0	0	0	0	0	0	0
H/TOT	70	7	1	1	2	2	0	83	0	0	0	0	0	0	0	0
P/TOT	233	28	7	1	4	2	0	275	2	0	0	0	0	0	0	2



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	10	1	1	0	0	0	0	12	0	0	0	0	0	0	0	0
07:15	9	4	2	0	1	2	0	18	0	0	0	0	0	0	0	0
07:30	13	1	2	0	1	0	0	17	0	0	0	0	0	0	0	0
07:45	16	2	1	0	2	0	0	21	0	0	0	0	0	0	0	0
H/TOT	48	8	6	0	4	2	0	68	0	0	0	0	0	0	0	0
08:00	18	0	0	0	1	0	0	19	0	0	0	0	0	0	0	0
08:15	18	1	1	0	0	0	0	20	0	0	0	0	0	0	0	0
08:30	17	3	1	0	0	0	0	21	1	0	0	0	0	0	0	1
08:45	8	5	0	0	1	0	0	14	0	0	0	0	0	0	0	0
H/TOT	61	9	2	0	2	0	0	74	1	0	0	0	0	0	0	1
09:00	15	4	0	0	0	0	0	19	0	0	0	0	0	0	0	0
09:15	11	4	0	0	0	1	0	16	0	0	0	0	0	0	0	0
09:30	5	5	2	0	0	0	0	12	0	0	0	0	0	0	0	0
09:45	13	1	0	1	0	0	0	15	0	0	0	0	0	0	0	0
H/TOT	44	14	2	1	0	1	0	62	0	0	0	0	0	0	0	0
P/TOT	153	31	10	1	6	3	0	204	1	0	0	0	0	0	0	1

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	33	4	1	0	0	0	0	38	0	0	0	0	0	0	0	0
16:15	39	8	0	0	0	0	0	47	0	0	1	0	0	0	0	1
16:30	37	9	2	1	0	0	0	49	0	0	0	0	0	0	0	0
16:45	39	5	1	0	0	1	0	46	0	0	0	0	0	0	0	0
H/TOT	148	26	4	1	0	1	0	180	0	0	1	0	0	0	0	1
17:00	75	7	0	0	0	1	0	83	0	0	0	0	0	0	0	0
17:15	67	2	0	0	0	2	0	71	0	0	0	0	0	0	0	0
17:30	32	2	0	0	0	1	0	35	2	0	0	1	0	0	0	3
17:45	40	2	1	0	0	0	0	43	0	0	0	0	0	0	0	0
H/TOT	214	13	1	0	0	4	0	232	2	0	0	1	0	0	0	3
18:00	34	3	0	0	0	1	0	38	0	0	0	0	0	0	0	0
18:15	26	1	0	0	0	1	0	28	1	0	0	0	0	0	0	1
18:30	31	1	1	0	0	0	0	33	0	0	0	0	0	0	0	0
18:45	27	3	0	0	0	0	0	30	1	0	0	0	0	0	0	1
H/TOT	118	8	1	0	0	2	0	129	2	0	0	0	0	0	0	2
P/TOT	480	47	6	1	0	7	0	541	4	0	1	1	0	0	0	6



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	183	30	5	1	0	3	0	222	0	0	0	0	0	0	0	0
07:15	224	38	4	4	2	5	0	277	0	0	0	0	0	0	0	0
07:30	225	27	1	2	0	4	0	259	0	0	0	0	0	0	0	0
07:45	164	30	5	6	2	3	0	210	0	0	0	0	0	0	0	0
H/TOT	796	125	15	13	4	15	0	968	0	0	0	0	0	0	0	0
08:00	114	31	8	7	1	1	0	162	0	0	0	0	0	0	0	0
08:15	117	24	8	5	1	0	0	155	0	1	0	0	0	0	0	1
08:30	94	14	6	7	2	0	0	123	0	0	0	0	0	0	0	0
08:45	90	12	6	6	1	0	0	115	1	0	0	0	0	0	0	1
H/TOT	415	81	28	25	5	1	0	555	1	1	0	0	0	0	0	2
09:00	46	10	2	4	1	1	0	64	0	0	0	0	0	0	0	0
09:15	38	14	8	6	0	1	0	67	1	0	0	0	0	0	0	1
09:30	40	20	4	2	0	1	0	67	0	0	0	0	0	0	0	0
09:45	33	17	7	3	0	1	0	61	0	0	0	0	0	0	0	0
H/TOT	157	61	21	15	1	4	0	259	1	0	0	0	0	0	0	1
P/TOT	1368	267	64	53	10	20	0	1782	2	1	0	0	0	0	0	3

TIME	D to A							TOT	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	52	10	4	9	0	0	0	75	0	0	0	0	0	0	0	0
16:15	49	4	3	1	0	2	0	59	0	0	0	0	0	0	0	0
16:30	56	8	1	7	1	0	0	73	0	0	0	0	0	0	0	0
16:45	38	8	5	4	0	0	0	55	1	0	0	0	0	0	0	1
H/TOT	195	30	13	21	1	2	0	262	1	0	0	0	0	0	0	1
17:00	68	10	1	4	0	1	0	84	0	0	1	0	0	0	0	1
17:15	61	4	6	2	0	1	0	74	0	0	0	0	0	0	0	0
17:30	43	3	0	4	0	1	0	51	1	0	0	0	0	0	0	1
17:45	48	1	3	2	0	1	0	55	0	0	0	0	0	0	0	0
H/TOT	220	18	10	12	0	4	0	264	1	0	1	0	0	0	0	2
18:00	61	10	1	1	0	1	0	74	0	0	0	0	0	0	0	0
18:15	52	4	0	1	0	2	0	59	0	0	1	0	0	0	0	1
18:30	43	1	4	0	0	1	0	49	0	0	0	0	0	0	0	0
18:45	21	5	1	3	1	1	0	32	0	0	0	0	0	0	0	0
H/TOT	177	20	6	5	1	5	0	214	0	0	1	0	0	0	0	1
P/TOT	592	68	29	38	2	11	0	740	2	0	2	0	0	0	0	4



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	231	40	8	13	0	3	0	295	39	8	8	19	0	1	0	75
07:15	275	54	6	21	2	8	0	366	41	2	5	16	0	0	0	64
07:30	291	46	3	20	0	4	0	364	35	7	8	20	0	0	0	70
07:45	242	44	6	19	2	3	0	316	58	5	9	22	1	0	0	95
H/TOT	1039	184	23	73	4	18	0	1341	173	22	30	77	1	1	0	304
08:00	163	40	11	21	1	1	0	237	55	11	10	30	0	0	0	106
08:15	178	33	11	12	1	2	1	238	54	13	9	19	0	0	0	95
08:30	145	22	9	20	2	0	0	198	50	14	12	21	0	0	0	97
08:45	138	16	10	24	1	0	0	189	48	23	8	26	0	0	0	105
H/TOT	624	111	41	77	5	3	1	862	207	61	39	96	0	0	0	403
09:00	63	18	5	19	3	1	0	109	48	20	5	22	2	0	0	97
09:15	54	21	11	26	2	1	0	115	30	14	12	21	0	0	0	77
09:30	54	26	6	18	0	1	0	105	40	21	8	19	0	0	0	88
09:45	50	30	10	34	0	1	0	125	38	18	17	26	0	0	0	99
H/TOT	221	95	32	97	5	4	0	454	156	73	42	88	2	0	0	361
P/TOT	1884	390	96	247	14	25	1	2657	536	156	111	261	3	1	0	1068

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	59	13	7	24	0	1	0	104	259	40	13	23	1	2	0	338
16:15	57	4	4	28	0	2	0	95	184	53	7	15	2	2	1	264
16:30	70	9	7	20	1	0	0	107	311	34	7	13	0	6	0	371
16:45	47	11	6	16	0	0	0	80	239	35	7	14	0	4	0	299
H/TOT	233	37	24	88	1	3	0	386	993	162	34	65	3	14	1	1272
17:00	75	12	4	15	0	1	0	107	276	33	8	14	0	2	1	334
17:15	73	6	8	14	0	1	0	102	182	14	4	17	0	3	0	220
17:30	57	3	3	7	0	1	0	71	182	30	4	18	0	2	0	236
17:45	59	1	5	10	0	1	0	76	148	20	6	8	1	4	0	187
H/TOT	264	22	20	46	0	4	0	356	788	97	22	57	1	11	1	977
18:00	70	11	1	16	0	2	0	100	179	24	3	6	2	0	0	214
18:15	67	8	1	9	0	2	0	87	93	8	5	10	0	1	0	117
18:30	55	2	5	7	0	1	0	70	94	12	2	8	0	1	0	117
18:45	28	6	3	7	1	1	0	46	73	10	1	13	0	2	0	99
H/TOT	220	27	10	39	1	6	0	303	439	54	11	37	2	4	0	547
P/TOT	717	86	54	173	2	13	0	1045	2220	313	67	159	6	29	2	2796



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	15	6	3	13	0	0	0	37	31	7	2	12	0	0	0	52
07:15	23	3	3	11	0	0	0	40	40	12	2	16	0	1	0	71
07:30	18	3	3	18	0	0	0	42	43	12	1	14	0	0	0	70
07:45	24	4	6	15	0	0	0	49	52	11	2	14	0	0	0	79
H/TOT	80	16	15	57	0	0	0	168	166	42	7	56	0	1	0	272
08:00	17	5	0	15	0	1	0	38	31	8	3	9	0	0	0	51
08:15	15	5	4	12	0	0	0	36	29	8	2	8	0	1	0	48
08:30	23	2	2	11	0	0	0	38	30	7	2	11	0	0	0	50
08:45	11	9	5	16	0	0	0	41	29	2	3	15	0	1	0	50
H/TOT	66	21	11	54	0	1	0	153	119	25	10	43	0	2	0	199
09:00	11	2	2	15	0	0	0	30	14	8	3	13	1	1	0	40
09:15	8	3	2	17	0	0	0	30	13	9	3	17	2	0	0	44
09:30	8	5	1	14	0	0	0	28	8	5	2	14	0	0	0	29
09:45	9	7	9	21	0	0	0	46	11	14	5	27	0	0	0	57
H/TOT	36	17	14	67	0	0	0	134	46	36	13	71	3	1	0	170
P/TOT	182	54	40	178	0	1	0	455	331	103	30	170	3	4	0	641

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	37	12	2	17	0	0	0	68	12	7	3	12	0	1	0	35
16:15	29	11	4	9	0	2	0	55	10	4	2	22	0	0	0	38
16:30	52	6	0	8	0	0	0	66	18	3	2	9	0	0	0	32
16:45	35	7	3	9	0	0	0	54	20	5	0	11	0	0	0	36
H/TOT	153	36	9	43	0	2	0	243	60	19	7	54	0	1	0	141
17:00	30	5	2	5	0	0	0	42	23	4	2	10	0	0	0	39
17:15	39	6	2	13	0	2	0	62	26	1	1	16	0	0	0	44
17:30	30	6	1	12	0	0	0	49	22	1	3	3	0	0	0	29
17:45	39	2	0	7	1	3	0	52	19	0	2	9	0	0	0	30
H/TOT	138	19	5	37	1	5	0	205	90	6	8	38	0	0	0	142
18:00	29	3	1	3	0	0	0	36	13	2	0	14	0	0	0	29
18:15	20	0	0	7	0	0	0	27	19	2	0	7	0	0	0	28
18:30	11	2	3	5	0	0	0	21	17	0	1	6	0	0	0	24
18:45	4	2	0	11	0	0	0	17	9	1	2	2	0	1	0	15
H/TOT	64	7	4	26	0	0	0	101	58	5	3	29	0	1	0	96
P/TOT	355	62	18	106	1	7	0	549	208	30	18	121	0	2	0	379



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	14	2	5	1	0	0	0	22	48	11	2	1	0	0	0	62
07:15	12	4	3	4	1	2	0	26	51	9	0	2	0	2	0	64
07:30	17	1	3	2	1	0	0	24	74	17	3	5	0	1	0	100
07:45	23	4	2	4	2	0	0	35	96	15	3	0	0	1	0	115
H/TOT	66	11	13	11	4	2	0	107	269	52	8	8	0	4	0	341
08:00	24	2	2	4	1	0	0	33	87	8	0	5	0	1	0	101
08:15	21	2	1	3	0	0	0	27	88	10	4	1	0	1	1	105
08:30	20	6	6	4	0	0	0	36	71	6	1	2	0	0	0	80
08:45	12	5	1	5	1	1	0	25	58	6	2	3	0	0	0	69
H/TOT	77	15	10	16	2	1	0	121	304	30	7	11	0	2	1	355
09:00	18	4	0	1	0	1	0	24	42	1	2	3	1	0	0	49
09:15	15	8	0	2	0	1	0	26	41	1	0	3	0	0	0	45
09:30	9	5	4	3	0	0	0	21	25	8	3	3	1	1	0	41
09:45	13	1	0	2	0	0	0	16	30	4	2	5	0	0	0	41
H/TOT	55	18	4	8	0	2	0	87	138	14	7	14	2	1	0	176
P/TOT	198	44	27	35	6	5	0	315	711	96	22	33	2	7	1	872

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	62	10	2	1	0	1	0	76	21	8	3	3	1	1	0	37
16:15	69	14	1	3	0	0	0	87	26	1	0	5	1	0	0	33
16:30	70	15	2	3	0	0	0	90	33	3	4	4	0	0	0	44
16:45	81	10	1	4	0	1	0	97	26	4	2	1	0	0	0	33
H/TOT	282	49	6	11	0	2	0	350	106	16	9	13	2	1	0	147
17:00	127	12	3	4	0	2	1	149	26	3	2	2	0	0	0	33
17:15	111	4	1	3	0	2	0	121	26	4	1	0	0	1	0	32
17:30	67	9	1	4	0	1	0	82	35	4	2	0	0	0	0	41
17:45	66	4	2	1	0	0	0	73	36	1	1	2	0	1	0	41
H/TOT	371	29	7	12	0	5	1	425	123	12	6	4	0	2	0	147
18:00	53	9	1	2	0	1	0	66	27	4	0	2	1	1	0	35
18:15	45	1	0	0	0	1	0	47	27	5	1	2	0	1	0	36
18:30	43	2	1	2	0	0	0	48	27	2	1	1	1	1	0	33
18:45	34	4	0	0	0	2	0	40	18	2	1	2	0	0	0	23
H/TOT	175	16	2	4	0	4	0	201	99	13	3	7	2	3	0	127
P/TOT	828	94	15	27	0	11	1	976	328	41	18	24	4	6	0	421



SITE: 5

DATE: 05/07/2017

LOCATION: A180 / A1173 / Matthew Ford Way

DAY: Wednesday

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	51	9	2	6	0	1	0	69	193	31	6	1	0	3	0	234
07:15	55	4	1	2	0	0	0	62	233	42	6	4	3	7	0	295
07:30	64	14	6	1	0	1	0	86	238	28	3	2	1	4	0	276
07:45	97	11	6	4	1	1	0	120	180	32	6	6	4	3	0	231
H/TOT	267	38	15	13	1	3	0	337	844	133	21	13	8	17	0	1036
08:00	101	11	8	11	0	0	0	131	132	31	8	7	2	1	0	181
08:15	92	17	8	6	0	0	0	123	135	26	9	5	1	0	0	176
08:30	75	14	5	6	0	0	0	100	112	17	7	7	2	0	0	145
08:45	73	18	3	5	0	0	0	99	99	17	6	6	2	0	0	130
H/TOT	341	60	24	28	0	0	0	453	478	91	30	25	7	1	0	632
09:00	73	19	5	7	2	0	0	106	61	14	2	4	1	1	0	83
09:15	57	10	10	2	0	0	0	79	50	18	8	6	0	2	0	84
09:30	47	23	8	3	1	1	0	83	45	25	6	2	0	1	0	79
09:45	53	16	12	5	0	0	0	86	46	18	7	4	0	1	0	76
H/TOT	230	68	35	17	3	1	0	354	202	75	23	16	1	5	0	322
P/TOT	838	166	74	58	4	4	0	1144	1524	299	74	54	16	23	0	1990

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	219	34	13	5	2	2	0	275	85	14	5	9	0	0	0	113
16:15	153	41	4	3	3	0	1	205	88	12	4	1	0	2	0	107
16:30	263	27	7	3	0	6	0	306	93	17	3	8	1	0	0	122
16:45	200	29	5	1	0	4	0	239	78	13	6	4	0	1	0	102
H/TOT	835	131	29	12	5	12	1	1025	344	56	18	22	1	3	0	444
17:00	236	28	5	6	0	1	0	276	143	17	2	4	0	2	0	168
17:15	139	9	1	5	0	2	0	156	128	6	6	2	0	3	0	145
17:30	163	22	4	3	0	2	0	194	78	5	0	5	0	2	0	90
17:45	127	17	6	3	0	2	0	155	88	3	4	2	0	1	0	98
H/TOT	665	76	16	17	0	7	0	781	437	31	12	13	0	8	0	501
18:00	162	20	1	2	3	0	0	188	95	13	1	1	0	2	0	112
18:15	86	11	6	4	0	2	0	109	79	5	1	1	0	3	0	89
18:30	103	10	0	1	1	2	0	117	74	2	5	0	0	1	0	82
18:45	83	9	2	2	0	1	0	97	49	8	1	3	1	1	0	63
H/TOT	434	50	9	9	4	5	0	511	297	28	8	5	1	7	0	346
P/TOT	1934	257	54	38	9	24	1	2317	1078	115	38	40	2	18	0	1291



SITE: 5
LOCATION: A180 / A1173 / Matthew Ford Way

DATE: 05/07/2017
DAY: Wednesday

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	311	57	18	33	0	4	0	423
07:15	365	65	13	38	3	10	0	494
07:30	390	64	15	41	1	5	0	516
07:45	386	63	20	42	5	4	0	520
H/TOT	1452	249	66	154	9	23	0	1953
08:00	305	58	21	51	2	2	0	439
08:15	306	57	24	33	1	2	1	424
08:30	263	44	22	41	2	0	0	372
08:45	234	48	19	50	2	1	0	354
H/TOT	1108	207	86	175	7	5	1	1589
09:00	165	43	12	42	5	2	0	269
09:15	134	42	23	47	2	2	0	250
09:30	118	59	19	38	1	2	0	237
09:45	125	54	31	62	0	1	0	273
H/TOT	542	198	85	189	8	7	0	1029
P/TOT	3102	654	237	518	24	35	1	4571

PEAK HOUR	
CALCULATION	TOT
07:00 to 08:00	1953
07:15 to 08:15	1969
07:30 to 08:30	1899
07:45 to 08:45	1755
08:00 to 09:00	1589
08:15 to 09:15	1419
08:30 to 09:30	1245
08:45 to 09:45	1110
09:00 to 10:00	1029
PEAK VALUE	1969

TIME	JUNCTION TOTAL							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	377	69	24	47	2	4	0	523
16:15	308	70	13	43	3	4	1	442
16:30	455	57	16	34	1	6	0	569
16:45	363	57	15	30	0	5	0	470
H/TOT	1503	253	68	154	6	19	1	2004
17:00	468	57	14	30	0	4	1	574
17:15	362	25	12	35	0	7	0	441
17:30	317	40	9	26	0	4	0	396
17:45	291	24	13	21	1	6	0	356
H/TOT	1438	146	48	112	1	21	1	1767
18:00	314	43	4	23	3	3	0	390
18:15	218	20	7	20	0	5	0	270
18:30	212	16	9	15	1	3	0	256
18:45	149	21	5	20	1	4	0	200
H/TOT	893	100	25	78	5	15	0	1116
P/TOT	3834	499	141	344	12	55	2	4887

PEAK HOUR	
CALCULATION	TOT
16:00 to 17:00	2004
16:15 to 17:15	2055
16:30 to 17:30	2054
16:45 to 17:45	1881
17:00 to 18:00	1767
17:15 to 18:15	1583
17:30 to 18:30	1412
17:45 to 18:45	1272
18:00 to 19:00	1116
PEAK VALUE	2055

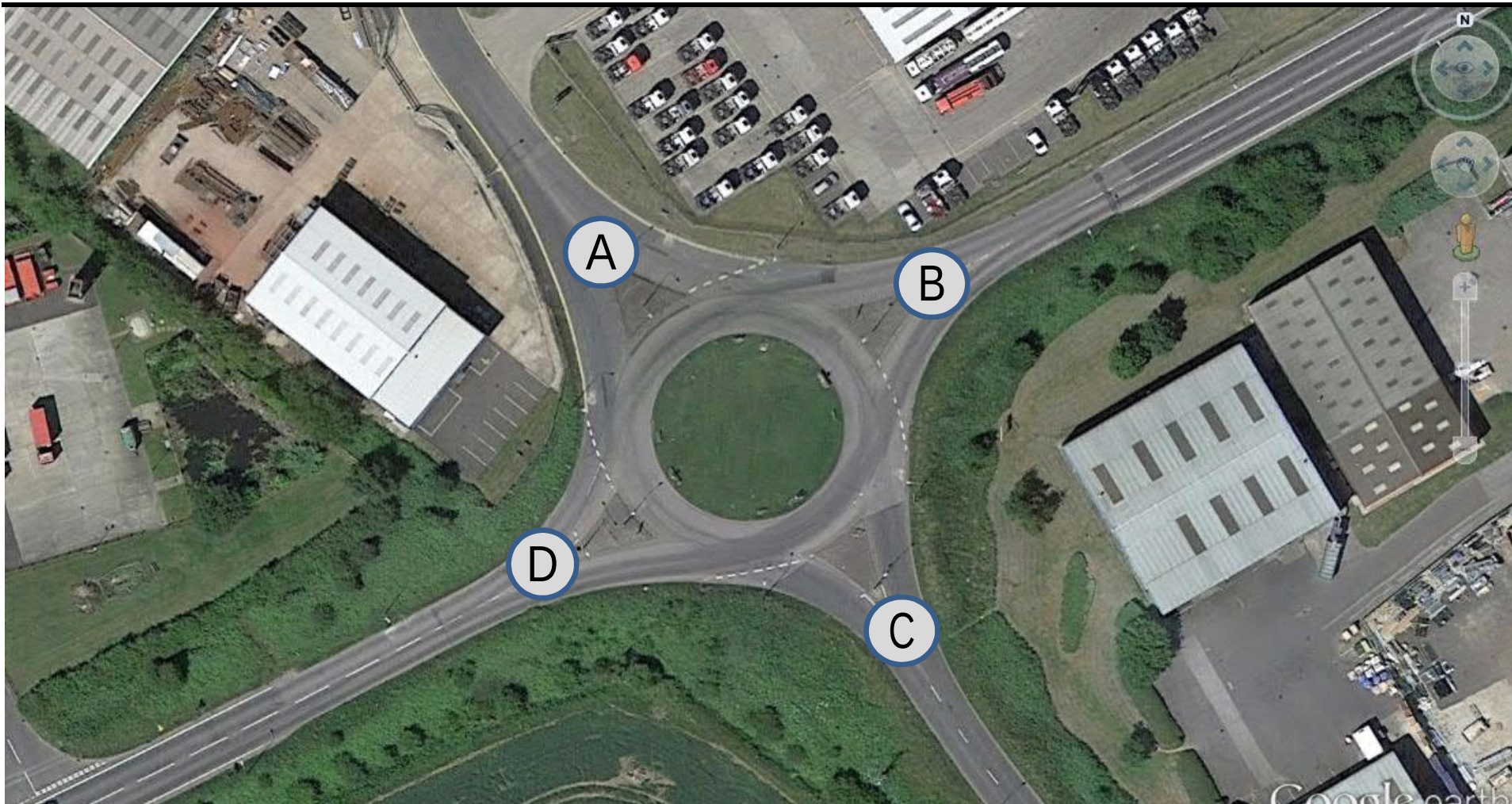
Project Number: **TSP13999**

Project Name: **Immingham, North East Lincolnshire**

Survey Type: **Manual Classified Turning Count**

Site No: **1**

Location: **Trondheim Way /Kiln Lane/N Moss Lane**



Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **1**
 Location: **Trondheim Way /Klin Lane/N Moss Lane**
 Date: **18 October 2018, Thursday**



Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0									5	8.9
07:15		1							1	1	2			3					0	0
07:30									0	0									0	0
07:45									0	0	1								1	1
H/Total	0	1	0	0	0	0	0	0	1	1	3	0	0	3	0	0	0	0	6	9.9
08:00									0	0				3					3	6.9
08:15									0	0				2					2	4.6
08:30									0	0			3	1					4	6.8
08:45				1					1	2.3		1	1	2					4	7.1
H/Total	0	0	0	1	0	0	0	0	1	2.3	0	1	4	8	0	0	0	0	13	25.4
09:00									0	0				3					3	6.9
09:15									0	0	1	1	2	1					5	7.3
09:30									0	0	1		1	1					3	4.8
09:45									0	0		1		1					2	3.3
H/Total	0	0	0	0	0	0	0	0	0	0	2	2	3	6	0	0	0	0	13	22.3
Total	0	1	0	1	0	0	0	0	2	3.3	5	3	7	17	0	0	0	0	32	57.6

Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0			1						1	1.5
16:15									0	0	1								1	1
16:30									0	0		1		1					2	3.3
16:45									0	0			1						1	1.5
H/Total	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	0	0	5	7.3
17:00									0	0									0	0
17:15									0	0	2								2	2
17:30									0	0				2					2	4.6
17:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	4	6.6
18:00									0	0				1					1	2.3
18:15									0	0	1								1	1
18:30									0	0	1								1	1
18:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	3	4.3
Total	0	0	0	0	0	0	0	0	0	0	5	1	2	4	0	0	0	0	12	18.2

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **1**
 Location: **Trondheim Way /Kiln Lane/N Moss Lane**
 Date: **18 October 2018, Thursday**



Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0									6	12.5
07:15									0	0		1							6	10.1
07:30	3								3	3	1		3	2					3	4.8
07:45									3	3			1	1					1	1.5
H/Total	3	0	0	0	0	0	0	0	3	3	1	2	5	8	0	0	0	0	16	28.9
08:00									0	0		1	1	2					4	7.1
08:15									0	0		1	1	1					3	4.8
08:30									0	0	1		3	1		2			7	11.8
08:45									0	0	1		1	2					4	7.1
H/Total	0	0	0	0	0	0	0	0	0	0	2	2	6	6	0	2	0	0	18	30.8
09:00									0	0		2	4	3					9	14.9
09:15	2								2	2		1		1					2	3.3
09:30									0	0	1		1						3	3.5
09:45									0	0	2			1					3	4.3
H/Total	2	0	0	0	0	0	0	0	2	2	3	4	5	5	0	0	0	0	17	26
Total	5	0	0	0	0	0	0	0	5	5	6	8	16	19	0	2	0	0	51	85.7

Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	2		1						3	3.5	4	2	5	3					14	20.4
16:15	1		1						2	2.5	15		1				1		17	16.9
16:30	3	1						1	5	4.2	5	2	1	1					9	10.8
16:45	5								5	5	9	2	1	1			1		13	13.7
H/Total	11	1	2	0	0	0	0	1	15	15.2	33	6	7	5	0	0	2	0	53	61.8
17:00	2								2	2	10	1		1					12	13.3
17:15	4	1							5	5	11		1	3				1	16	19.6
17:30	1								1	1	18								18	19
17:45	4	2	1						7	7.5	10			1					11	12.3
H/Total	11	3	1	0	0	0	0	0	15	15.5	49	1	1	5	0	0	0	1	57	63.2
18:00	1								1	1	6	1	1						8	8.5
18:15									0	0	4			1					5	6.3
18:30									0	0	5	1		1					7	8.3
18:45	1								1	1	8	1	1	2					12	15.1
H/Total	2	0	0	0	0	0	0	0	2	2	23	3	2	4	0	0	0	0	32	38.2
Total	24	4	3	0	0	0	0	1	32	32.7	105	10	10	14	0	0	2	1	142	163.2



Time	B - A										B - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0									0	0
07:15				1					1	2.3									0	0
07:30									0	0									0	0
07:45									0	0									0	0
H/Total	0	0	0	1	0	0	0	0	1	2.3	0	0	0	0	0	0	0	0	0	0
08:00									0	0									0	0
08:15									0	0				1					1	2.3
08:30									0	0									0	0
08:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2.3
09:00		1	1						2	2.5		1							1	1
09:15			1						1	1.5									0	0
09:30			1	1					2	3.8									0	0
09:45	1	2							3	3									0	0
H/Total	1	3	3	1	0	0	0	0	8	10.8	0	1	0	0	0	0	0	0	1	1
Total	1	3	3	2	0	0	0	0	9	13.1	0	1	0	1	0	0	0	0	2	3.3

[illegible]

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **1**
 Location: **Trondheim Way /Klin Lane/N Moss Lane**
 Date: **18 October 2018, Thursday**



Time	B - C										B - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00			1	2					3	6.1	14	2	5	10					31	46.5
07:15	2								2	2	6	6	3	7					22	32.6
07:30	3			2					5	7.6	5	3	6	10					24	40
07:45	3								3	3	7	6	5	6			2		26	35.1
H/Total	8	0	1	4	0	0	0	0	13	18.7	32	17	19	33	0	0	2	0	103	154.2
08:00	2	1		1					4	5.3	10	13	10	12					45	65.6
08:15									0	0	8	10	4	14					36	56.2
08:30	2	1							3	3	5	7	4	9					25	38.7
08:45	6	4		1					11	12.3	7	8	7	11					33	50.8
H/Total	10	6	0	2	0	0	0	0	18	20.6	30	38	25	46	0	0	0	0	139	211.3
09:00	1		1						2	2.5	7	13	6	7					33	45.1
09:15	4	1							5	5	4	11	4	6					25	34.8
09:30	3	2							5	5	6	8	5	15		1			35	58
09:45	6	2		1					9	10.3	11	11	8	5					35	45.5
H/Total	14	5	1	1	0	0	0	0	21	22.8	28	43	23	33	0	1	0	0	128	183.4
Total	32	11	2	7	0	0	0	0	52	62.1	90	98	67	112	0	1	2	0	370	548.9

Time	B - C										B - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	38	7							45	45	79	12	3	9					103	116.2
16:15	11	1		3					15	18.9	64	12	3	7			1		87	97
16:30	37	9				1			47	48	131	9	4	5			2		151	158.3
16:45	17	3		1			1		22	22.7	55	10	4	7			1	1	78	87.7
H/Total	103	20	0	4	0	1	1	0	129	134.6	329	43	14	28	0	0	4	1	419	459.2
17:00	21	3						1	25	24.2	88	13	4	11				1	117	132.5
17:15	9	3					1		13	12.4	44	14	2	9			1		70	82.1
17:30	8	4	1						13	13.5	67	7	2	5					81	88.5
17:45	5								5	5	45	3	5	5					58	67
H/Total	43	10	1	0	0	0	1	1	56	55.1	244	37	13	30	0	0	1	1	326	370.1
18:00	5								5	5	54	3	4	6					67	76.8
18:15	3	1	1						5	5.5	31	2	2	3			1		39	43.3
18:30	2								2	2	36	5		4					45	50.2
18:45	2								2	2	21	3	1	2			1		28	30.5
H/Total	12	1	1	0	0	0	0	0	14	14.5	142	13	7	15	0	0	2	0	179	200.8
Total	158	31	2	4	0	1	2	1	199	204.2	715	93	34	73	0	0	7	2	924	1030.1

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **1**
Location: **Trondheim Way /Klin Lane/N Moss Lane**
Date: **18 October 2018, Thursday**



Time	C - A										C - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	1								1	1	5		1						6	6.5
07:15		1	1						2	2.5	16		2				1		19	19.4
07:30	2								2	2	12	1					1	1	15	13.6
07:45	6	1					1		8	7.4	14	3		1					18	19.3
H/Total	9	2	1	0	0	0	1	0	13	12.9	47	4	3	1	0	0	2	1	58	58.8
08:00	2								2	2	7	2							9	9
08:15	3								3	3	7	4	3						14	15.5
08:30	2								2	2	13	1	1						15	15.5
08:45									0	0	10								10	10
H/Total	7	0	0	0	0	0	0	0	7	7	37	7	4	0	0	0	0	0	48	50
09:00		1							1	1	5		1						6	6.5
09:15									0	0	2	2							4	4
09:30	2								2	2	4	2		1					7	8.3
09:45									0	0	1	2							3	3
H/Total	2	1	0	0	0	0	0	0	3	3	12	6	1	1	0	0	0	0	20	21.8
Total	18	3	1	0	0	0	1	0	23	22.9	96	17	8	2	0	0	2	1	126	130.6

Time	C - A										C - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	1								1	1	1	2	1	1					5	6.5
16:15	1								1	1	1								2	2.5
16:30	2		1						3	3.5			2						2	3
16:45									0	0			1						1	1.5
H/Total	4	0	1	0	0	0	0	0	5	5.5	2	2	5	1	0	0	0	0	10	13.8
17:00									0	0									0	0
17:15									0	0				1					1	2.3
17:30									0	0		1							1	1
17:45									0	0	1								1	1
H/Total	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	3	4.3
18:00									0	0	1								1	1
18:15									0	0	1								1	1
18:30									0	0									0	0
18:45									0	0									0	0
H/Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
Total	4	0	1	0	0	0	0	0	5	5.5	5	3	5	2	0	0	0	0	15	20.1

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **1**
 Location: **Trondheim Way /Klin Lane/N Moss Lane**
 Date: **18 October 2018, Thursday**



Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0	3		1	1					5	6.8
07:15									0	0	10	1		3					14	17.9
07:30									0	0	12			1					13	14.3
07:45									0	0	17	2		2			1		22	24
H/Total	0	0	0	0	0	0	0	0	0	0	42	3	1	7	0	0	1	0	54	63
08:00									0	0	10	1	1	2					14	17.1
08:15									0	0	15	1	2	1					19	21.3
08:30									0	0	14	2	1	1					18	19.8
08:45									0	0	12	2							14	14
H/Total	0	0	0	0	0	0	0	0	0	0	51	6	4	4	0	0	0	0	65	72.2
09:00									0	0	5	1		1					7	8.3
09:15									0	0	4	1		1					6	7.3
09:30									0	0	11	2		3					16	19.9
09:45									0	0	2	3	1						6	6.5
H/Total	0	0	0	0	0	0	0	0	0	0	22	7	1	5	0	0	0	0	35	42
Total	0	0	0	0	0	0	0	0	0	0	115	16	6	16	0	0	1	0	154	177.2

Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	1	2							3	3	12	2	1	1					16	17.8
16:15									0	0	10		1	3					14	18.4
16:30									0	0	9	1	1	3					14	18.4
16:45									0	0	9	2	2	1					14	16.3
H/Total	1	2	0	0	0	0	0	0	3	3	40	5	5	8	0	0	0	0	58	70.9
17:00									0	0	13	1							14	14
17:15									0	0	9	1	1	3					14	18.4
17:30									0	0	5	1	2						8	9
17:45									0	0	16			2			1		19	21
H/Total	0	0	0	0	0	0	0	0	0	0	43	3	3	5	0	0	1	0	55	62.4
18:00									0	0	8			2					10	12.6
18:15									0	0	4	1							5	5
18:30									0	0	5			1					6	7.3
18:45									0	0	7	1		1					9	10.3
H/Total	0	0	0	0	0	0	0	0	0	0	24	2	0	4	0	0	0	0	30	35.2
Total	1	2	0	0	0	0	0	0	3	3	107	10	8	17	0	0	1	0	143	168.5

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **1**
 Location: **Trondheim Way /Klin Lane/N Moss Lane**
 Date: **18 October 2018, Thursday**



Time	D - A										D - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	13		1	2					16	19.1	65	13	3	6					87	96.3
07:15	7						1		8	7.4	69	16		7	1		2		95	103.9
07:30	7		1					1	9	8.7	92	4	4	10			1		111	125.4
07:45	6	1	1	1					9	10.8	103	19	4	9	1		1	1	138	151.3
H/Total	33	1	3	3	0	0	1	1	42	46	329	52	11	32	2	0	4	1	431	476.9
08:00	6	1	3	3					13	18.4	78	13	5	14			1		111	131.1
08:15	9	1	1	2	1			1	15	18.3	72	17	3	4		1			97	104.7
08:30	10	1		3					14	17.9	61	20	7	10					98	114.5
08:45	3	1		2					6	8.6	56	13	4	8					81	93.4
H/Total	28	4	4	10	1	0	0	1	48	63.2	267	63	19	36	0	1	1	0	387	443.7
09:00	2	1		2					5	7.6	25	9	4	5					44	53.5
09:15	1	3	1						5	5.5	28	13	3	9		1			53	66.2
09:30	4	2		1					7	8.3	21	18	4	5			1		50	58.7
09:45	9	1	1	3					14	18.4	16	15	7	6					44	55.3
H/Total	16	7	2	6	0	0	0	0	31	39.8	90	55	18	25	0	2	0	1	191	233.7
Total	77	12	9	19	1	0	1	2	121	149	686	170	48	93	2	3	5	2	1009	1154.3

Time	D - A										D - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00			1	4					5	10.7	20	10	6	11			3		50	65.5
16:15	2		2	3					7	11.9	13	11	5	11	1				41	58.8
16:30	2		2	3					7	11.9	10	5	2	6			1		24	32.2
16:45			2	4					6	12.2	15	7	4	13				1	40	58.1
H/Total	4	0	7	14	0	0	0	0	25	46.7	58	33	17	41	1	0	4	1	155	214.6
17:00	1	1	2	4					8	14.2	10	3	5	11					29	45.8
17:15	1		2	3					6	10.9	9			4	1				14	20.2
17:30	2	1		1					4	5.3	12	4	2	10					28	42
17:45			1	4					5	10.7	21	2	3	11			1		38	53.2
H/Total	4	2	5	12	0	0	0	0	23	41.1	52	9	10	36	1	0	1	0	109	161.2
18:00	3	2	2	3					10	14.9	28	2	3	8					41	52.9
18:15		1	1	1					3	4.8	19	1	3	9					32	45.2
18:30	2	1		1					4	5.3	4	2	2	4					12	18.2
18:45	2		1						3	3.5	10		3	5					18	26
H/Total	7	4	4	5	0	0	0	0	20	28.5	61	5	11	26	0	0	0	0	103	142.3
Total	15	6	16	31	0	0	0	0	68	116.3	171	47	38	103	2	0	5	1	367	518.1

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **1**
 Location: **Trondheim Way /Klin Lane/N Moss Lane**
 Date: **18 October 2018, Thursday**



Time	D - C										D - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	5	1	1						7	7.5									0	0
07:15	8	1							9	9									0	0
07:30	10	1		1					12	13.3	5	1							6	6
07:45	14	3		1					18	19.3	2								2	2
H/Total	37	6	1	2	0	0	0	0	46	49.1	7	1	0	0	0	0	0	0	8	8
08:00	13	1	2	1	1				18	21.3	1								1	1
08:15	11	3		1	1				16	18.3									0	0
08:30	12	3	1	2					18	21.1	1								1	1
08:45	6	1	1	2					9	12.1									0	0
H/Total	42	7	4	6	2	0	0	0	61	72.8	2	0	0	0	0	0	0	0	2	2
09:00	3			1					4	5.3	1								1	1
09:15	7		1	1					9	10.8									0	0
09:30	5	1		1					7	8.3	1								1	1
09:45	6	1	1	1					9	10.8									0	0
H/Total	21	2	2	4	0	0	0	0	29	35.2	2	0	0	0	0	0	0	0	2	2
Total	100	15	7	12	2	0	0	0	136	157.1	11	1	0	0	0	0	0	0	12	12

Time	D - C										D - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	32	1	1	3			4	1	42	43.2	31	2							33	33
16:15	11		2	2					15	18.6	9						1		10	9.4
16:30	15	3	2	2				1	23	25.8	5			1					6	7.3
16:45	13	1		2			1		17	19									0	0
H/Total	71	5	5	9	0	0	5	2	97	106.6	45	2	0	1	0	0	1	0	49	49.7
17:00	18	1	1	1					21	22.8	1								1	1
17:15	8	3	1	2				1	15	17.3									0	0
17:30	13	1	1	1					16	17.8									0	0
17:45	13	2	1						16	16.5									0	0
H/Total	52	7	4	4	0	0	0	1	68	74.4	1	0	0	0	0	0	0	0	1	1
18:00	8	1		2				1	12	13.8									0	0
18:15	2			1					3	4.3									0	0
18:30	5	2	1	1					9	10.8	1								1	1
18:45	2								2	2									0	0
H/Total	17	3	1	4	0	0	0	1	26	30.9	1	0	0	0	0	0	0	0	1	1
Total	140	15	10	17	0	0	5	4	191	211.9	47	2	0	1	0	0	1	0	51	51.7

Project Number: **TSP13999**
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 Date: **18 October 2018, Thursday**



Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	2	1	0	8	0	0	0	0	11	21.4	14	0	1	2	0	0	0	0	17	20.1
07:15	0	2	3	2	0	0	0	0	7	11.1	7	2	1	1	0	0	1	0	12	13.2
07:30	4	0	1	1	0	0	0	0	6	7.8	9	0	1	0	0	0	0	1	11	10.7
07:45	1	0	1	0	0	0	0	0	2	2.5	12	2	1	1	0	0	1	0	17	18.2
H/Total	7	3	5	11	0	0	0	0	26	42.8	42	4	4	4	0	0	2	1	57	62.2
08:00	0	1	1	5	0	0	0	0	7	14	8	1	3	3	0	0	0	0	15	20.4
08:15	0	1	1	3	0	0	0	0	5	9.4	12	1	1	2	1	0	0	1	18	21.3
08:30	1	0	6	2	0	2	0	0	11	18.6	12	1	0	3	0	0	0	0	16	19.9
08:45	1	1	2	5	0	0	0	0	9	16.5	3	1	0	3	0	0	0	0	7	10.9
H/Total	2	3	10	15	0	2	0	0	32	58.5	35	4	4	11	1	0	0	1	56	72.5
09:00	0	2	4	6	0	0	0	0	12	21.8	2	3	1	2	0	0	0	0	8	11.1
09:15	3	2	2	2	0	0	0	0	9	12.6	1	3	2	0	0	0	0	0	6	7
09:30	2	1	2	1	0	0	0	0	6	8.3	6	2	1	2	0	0	0	0	11	14.1
09:45	2	1	0	2	0	0	0	0	5	7.6	10	3	1	3	0	0	0	0	17	21.4
H/Total	7	6	8	11	0	0	0	0	32	50.3	19	11	5	7	0	0	0	0	42	53.6
Total	16	12	23	37	0	2	0	0	90	151.6	96	19	13	22	1	0	2	2	155	188.3

Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	6	2	7	3	0	0	0	0	18	25.4	1	0	2	5	0	0	0	0	8	15.5
16:15	17	0	2	0	0	0	1	0	20	20.4	6	2	2	3	0	0	0	0	13	17.9
16:30	8	4	1	2	0	0	0	1	16	18.3	6	1	4	3	0	0	0	0	14	19.9
16:45	14	2	1	1	0	0	1	0	19	20.2	0	0	2	4	0	0	0	0	6	12.2
H/Total	45	8	11	6	0	0	2	1	73	84.3	13	3	10	15	0	0	0	0	41	65.5
17:00	12	1	0	1	0	0	0	0	14	15.3	2	3	2	6	0	0	0	0	13	21.8
17:15	17	1	1	3	0	0	0	1	23	26.6	2	0	2	3	0	0	0	0	7	11.9
17:30	19	0	0	2	0	0	0	0	21	23.6	2	2	0	2	0	0	0	0	6	8.6
17:45	14	2	1	1	0	0	0	0	18	19.8	0	0	1	4	0	0	0	0	5	10.7
H/Total	62	4	2	7	0	0	0	1	76	85.3	6	5	5	15	0	0	0	0	31	53
18:00	7	1	1	1	0	0	0	0	10	11.8	4	2	2	4	0	0	0	0	12	18.2
18:15	5	0	0	1	0	0	0	0	6	7.3	0	1	1	1	0	0	0	0	3	4.8
18:30	6	1	0	1	0	0	0	0	8	9.3	3	1	1	1	0	0	0	0	6	7.8
18:45	9	1	1	2	0	0	0	0	13	16.1	2	1	1	0	0	0	0	0	4	4.5
H/Total	27	3	2	5	0	0	0	0	37	44.5	9	5	5	6	0	0	0	0	25	35.3
Total	134	15	15	18	0	0	2	2	186	214.1	28	13	20	36	0	0	0	0	97	153.8

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **1**
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Date: **18 October 2018, Thursday**



Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	14	2	6	12	0	0	0	0	34	52.6	72	13	4	9	0	0	0	0	98	111.7
07:15	8	6	3	8	0	0	0	0	25	36.9	85	16	2	7	1	0	3	0	114	123.3
07:30	8	3	6	12	0	0	0	0	29	47.6	104	5	4	10	0	0	2	1	126	139
07:45	10	6	5	6	0	0	2	0	29	38.1	118	22	4	10	1	0	1	1	157	171.6
H/Total	40	17	20	38	0	0	2	0	117	175.2	379	56	14	36	2	0	6	2	495	545.6
08:00	12	14	10	13	0	0	0	0	49	70.9	85	15	5	17	0	0	1	0	123	147
08:15	8	10	4	15	0	0	0	0	37	58.5	79	21	6	7	0	1	0	0	114	127.1
08:30	7	8	4	9	0	0	0	0	28	41.7	74	21	11	11	0	0	0	0	117	136.8
08:45	13	12	7	12	0	0	0	0	44	63.1	66	14	5	10	0	0	0	0	95	110.5
H/Total	40	44	25	49	0	0	0	0	158	234.2	304	71	27	45	0	1	1	0	449	521.4
09:00	8	15	8	7	0	0	0	0	38	51.1	30	10	5	8	0	1	0	0	54	67.9
09:15	8	12	5	6	0	0	0	0	31	41.3	31	16	5	10	0	0	0	0	62	77.5
09:30	9	10	6	16	0	1	0	0	42	66.8	26	20	5	7	0	1	0	1	60	71.8
09:45	18	15	8	6	0	0	0	0	47	58.8	17	18	7	7	0	0	0	0	49	61.6
H/Total	43	52	27	35	0	1	0	0	158	218	104	64	22	32	0	2	0	1	225	278.8
Total	123	113	72	122	0	1	2	0	433	627.4	787	191	63	113	2	3	7	3	1169	1345.8

Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	117	19	4	10	0	0	0	0	150	165	21	12	8	12	0	0	3	0	56	73.8
16:15	78	15	3	10	0	0	1	0	107	120.9	15	11	6	11	1	0	0	0	44	62.3
16:30	170	19	5	5	0	1	2	0	202	210.8	10	6	4	7	0	0	1	0	28	38.5
16:45	72	13	4	8	0	0	2	1	100	110.4	15	7	6	13	0	0	0	1	42	61.1
H/Total	437	66	16	33	0	1	5	1	559	607.1	61	36	24	43	1	0	4	1	170	235.7
17:00	110	18	4	13	0	0	0	2	147	164.3	10	3	5	11	0	0	0	0	29	45.8
17:15	54	17	2	9	0	0	2	0	84	95.5	11	0	0	5	1	0	0	0	17	24.5
17:30	75	12	3	6	0	0	0	0	96	105.3	12	5	2	12	0	0	0	0	31	47.6
17:45	50	3	5	5	0	0	0	0	63	72	22	2	3	11	0	0	1	0	39	54.2
H/Total	289	50	14	33	0	0	2	2	390	437.1	55	10	10	39	1	0	1	0	116	172.1
18:00	60	3	4	7	0	0	0	0	74	85.1	29	2	3	9	0	0	0	0	43	56.2
18:15	34	3	3	3	0	0	1	0	44	48.8	21	1	3	9	0	0	0	0	34	47.2
18:30	39	5	1	4	0	0	0	0	49	54.7	5	2	2	4	0	0	0	0	13	19.2
18:45	23	4	1	2	0	0	1	0	31	33.5	10	0	3	5	0	0	0	0	18	26
H/Total	156	15	9	16	0	0	2	0	198	222.1	65	5	11	27	0	0	0	0	108	148.6
Total	882	131	39	82	0	1	9	3	1147	1266.3	181	51	45	109	2	0	5	1	394	556.4

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **1**
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 Date: **18 October 2018, Thursday**



Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	9	0	2	1	0	0	0	0	12	14.3	5	1	2	2	0	0	0	0	10	13.6
07:15	26	2	3	3	0	0	1	0	35	39.8	10	1	0	0	0	0	0	0	11	11
07:30	26	1	0	1	0	0	1	1	30	29.9	16	1	0	3	0	0	0	0	20	23.9
07:45	37	6	0	3	0	0	2	0	48	50.7	17	3	0	1	0	0	0	0	21	22.3
H/Total	98	9	5	8	0	0	4	1	125	134.7	48	6	2	6	0	0	0	0	62	70.8
08:00	19	3	1	2	0	0	0	0	25	28.1	15	2	2	2	1	0	0	0	22	26.6
08:15	25	5	5	1	0	0	0	0	36	39.8	11	3	0	1	1	0	0	0	16	18.3
08:30	29	3	2	1	0	0	0	0	35	37.3	14	4	1	2	0	0	0	0	21	24.1
08:45	22	2	0	0	0	0	0	0	24	24	12	4	1	3	0	0	0	0	20	24.4
H/Total	95	13	8	4	0	0	0	0	120	129.2	52	13	4	8	2	0	0	0	79	93.4
09:00	10	2	1	1	0	0	0	0	14	15.8	4	0	1	1	0	0	0	0	6	7.8
09:15	6	3	0	1	0	0	0	0	10	11.3	13	1	1	1	0	0	0	0	16	17.8
09:30	17	4	0	4	0	0	0	0	25	30.2	8	3	0	1	0	0	0	0	12	13.3
09:45	3	5	1	0	0	0	0	0	9	9.5	12	3	1	2	0	0	0	0	18	21.1
H/Total	36	14	2	6	0	0	0	0	58	66.8	37	7	3	5	0	0	0	0	52	60
Total	229	36	15	18	0	0	4	1	303	330.7	137	26	9	19	2	0	0	0	193	224.2

Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	15	6	2	2	0	0	0	0	25	28.6	73	10	2	3	0	0	4	1	93	94.7
16:15	12	0	2	3	0	0	0	0	17	21.9	23	1	3	5	0	0	0	0	32	40
16:30	11	1	4	3	0	0	0	0	19	24.9	55	13	2	2	0	1	0	2	75	78
16:45	9	2	3	1	0	0	0	0	15	17.8	35	4	0	3	0	0	2	0	44	46.7
H/Total	47	9	11	9	0	0	0	0	76	93.2	186	28	7	13	0	1	6	3	244	259.4
17:00	13	1	0	0	0	0	0	0	14	14	41	4	1	1	0	0	0	1	48	49
17:15	9	1	1	4	0	0	0	0	15	20.7	21	7	1	2	0	0	1	1	33	34.7
17:30	5	2	2	0	0	0	0	0	9	10	22	5	2	1	0	0	0	0	30	32.3
17:45	17	0	0	2	0	0	1	0	20	22	22	4	2	0	0	0	0	0	28	29
H/Total	44	4	3	6	0	0	1	0	58	66.7	106	20	6	4	0	0	1	2	139	145
18:00	9	0	0	2	0	0	0	0	11	13.6	14	1	0	2	0	0	0	1	18	19.8
18:15	5	1	0	0	0	0	0	0	6	6	5	1	1	1	0	0	0	0	8	9.8
18:30	5	0	0	1	0	0	0	0	6	7.3	7	2	1	1	0	0	0	0	11	12.8
18:45	7	1	0	1	0	0	0	0	9	10.3	5	0	0	0	0	0	0	0	5	5
H/Total	26	2	0	4	0	0	0	0	32	37.2	31	4	2	4	0	0	0	1	42	47.4
Total	117	15	14	19	0	0	1	0	166	197.1	323	52	15	21	0	1	7	6	425	451.8

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **1**
 Location: **Trondheim Way /Kiln Lane/N Moss Lane**
 Date: **18 October 2018, Thursday**



Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	83	14	5	8	0	0	0	0	110	122.9	17	3	6	16	0	0	0	0	42	65.8
07:15	84	17	0	7	1	0	3	0	112	120.3	16	8	6	12	0	0	0	0	42	60.6
07:30	114	6	5	11	0	0	1	1	138	153.4	23	4	7	12	0	0	0	0	46	65.1
07:45	125	23	5	11	1	0	1	1	167	183.4	26	8	6	8	0	0	3	0	51	62.6
H/Total	406	60	15	37	2	0	5	2	527	580	82	23	25	48	0	0	3	0	181	254.1
08:00	98	15	10	18	1	0	1	0	143	171.8	21	15	12	16	0	0	0	0	64	90.8
08:15	92	21	4	7	2	1	0	1	128	141.3	23	12	7	16	0	0	0	0	58	82.3
08:30	84	24	8	15	0	0	0	0	131	154.5	21	9	8	11	0	2	0	0	51	71.3
08:45	65	14	5	12	0	0	0	0	96	114.1	20	10	8	13	0	0	0	0	51	71.9
H/Total	339	74	27	52	3	1	1	1	498	581.7	85	46	35	56	0	2	0	0	224	316.3
09:00	31	10	4	8	0	1	0	0	54	67.4	13	16	10	11	0	0	0	0	50	69.3
09:15	36	16	5	10	0	0	0	0	67	82.5	8	13	4	8	0	0	0	0	33	45.4
09:30	31	21	4	7	0	1	0	1	65	76.3	19	11	6	18	0	1	0	0	55	82.4
09:45	31	17	9	10	0	0	0	0	67	84.5	15	14	9	6	0	0	0	0	44	56.3
H/Total	129	64	22	35	0	2	0	1	253	310.7	55	54	29	43	0	1	0	0	182	253.4
Total	874	198	64	124	5	3	6	4	1278	1472.4	222	123	89	147	0	3	3	0	587	823.8

Time	From D										To D										
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	
16:00	83	13	8	18	0	0	7	1	130	152.4	126	18	9	13	0	0	0	0	166	187.4	
16:15	35	11	9	16	1	0	1	0	73	98.7	98	12	5	10	0	0	3	0	128	141.7	
16:30	32	8	6	12	0	0	1	1	60	77.2	150	12	6	10	0	0	2	0	180	194.8	
16:45	28	8	6	19	0	0	1	1	63	89.3	73	14	6	9	0	0	2	1	105	117.7	
H/Total	178	40	29	65	1	0	10	3	326	417.6	447	56	26	42	0	0	7	1	579	641.6	
17:00	30	5	8	16	0	0	0	0	59	83.8	112	15	4	12	0	0	0	1	144	160.8	
17:15	18	3	3	9	1	0	0	1	35	48.4	64	15	4	15	0	0	1	1	100	120.1	
17:30	27	6	3	12	0	0	0	0	48	65.1	90	8	4	5	0	0	0	0	107	115.5	
17:45	34	4	5	15	0	0	1	0	59	80.4	71	3	5	8	0	0	1	0	88	100.3	
H/Total	109	18	19	52	1	0	1	1	201	277.7	337	41	17	40	0	0	2	2	439	496.7	
18:00	39	5	5	13	0	0	0	1	63	81.6	68	4	5	8	0	0	0	0	85	97.9	
18:15	21	2	4	11	0	0	0	0	38	54.3	39	3	2	4	0	0	1	0	49	54.6	
18:30	12	5	3	6	0	0	0	0	26	35.3	47	6	0	6	0	0	0	0	59	66.8	
18:45	14	0	4	5	0	0	0	0	23	31.5	36	5	2	5	0	0	1	0	49	55.9	
H/Total	86	12	16	35	0	0	0	1	150	202.7	190	18	9	23	0	0	2	0	242	275.2	
Total	373	70	64	152	2	0	11	5	677	898	974	115	52	105	0	0	11	3	1262	1413.5	

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **1**
Location: **Trondheim Way /Kiln Lane/N Moss Lane**
Date: **18 October 2018, Thursday**



Time	Whole Junction									TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	
07:00	108	17	13	29	0	0	0	0	167	211.2
07:15	118	27	9	20	1	0	4	0	179	208.1
07:30	152	10	12	25	0	0	2	2	203	238.7
07:45	173	35	11	20	1	0	5	1	246	274.7
H/Total	551	89	45	94	2	0	11	3	795	932.7
08:00	129	33	22	38	1	0	1	0	224	284.8
08:15	125	37	14	26	2	1	0	1	206	249
08:30	121	35	20	27	0	2	0	0	205	252.1
08:45	101	29	14	29	0	0	0	0	173	217.7
H/Total	476	134	70	120	3	3	1	1	808	1003.6
09:00	49	29	17	22	0	1	0	0	118	156.1
09:15	53	33	12	19	0	0	0	0	117	147.7
09:30	59	36	12	28	0	2	0	1	138	181.6
09:45	54	38	18	18	0	0	0	0	128	160.4
H/Total	215	136	59	87	0	3	0	1	501	645.8
Total	1242	359	174	301	5	6	12	5	2104	2582.1

Peak Hours	Totals
07:00 08:00	795
07:15 08:15	852
07:30 08:30	879
07:45 08:45	881

Peak Hours	Totals
08:00 09:00	808
08:15 09:15	702
08:30 09:30	613
08:45 09:45	546

Peak Hours	Totals
09:00 10:00	501

Time	Whole Junction									TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	
16:00	221	40	21	33	0	0	7	1	323	371.4
16:15	142	26	16	29	1	0	3	0	217	261.9
16:30	221	32	16	22	0	1	3	2	297	331.2
16:45	123	25	14	29	0	0	4	2	197	237.7
H/Total	707	123	67	113	1	1	17	5	1034	1202.2
17:00	165	25	12	30	0	0	0	2	234	277.4
17:15	98	22	7	25	1	0	2	2	157	191.2
17:30	126	20	8	20	0	0	0	0	174	204
17:45	115	9	11	23	0	0	2	0	160	194.2
H/Total	504	76	38	98	1	0	4	4	725	866.8
18:00	115	9	10	23	0	0	0	1	158	192.1
18:15	65	6	7	15	0	0	1	0	94	116.4
18:30	62	11	4	12	0	0	0	0	89	106.6
18:45	53	6	6	10	0	0	1	0	76	91.4
H/Total	295	32	27	60	0	0	2	1	417	506.5
Total	1506	231	132	271	2	1	23	10	2176	2575.5

Peak Hours	Totals
16:00 17:00	1034
16:15 17:15	945
16:30 17:30	885
16:45 17:45	762

Peak Hours	Totals
17:00 18:00	725
17:15 18:15	649
17:30 18:30	596
17:45 18:45	501

Peak Hours	Totals
18:00 19:00	417

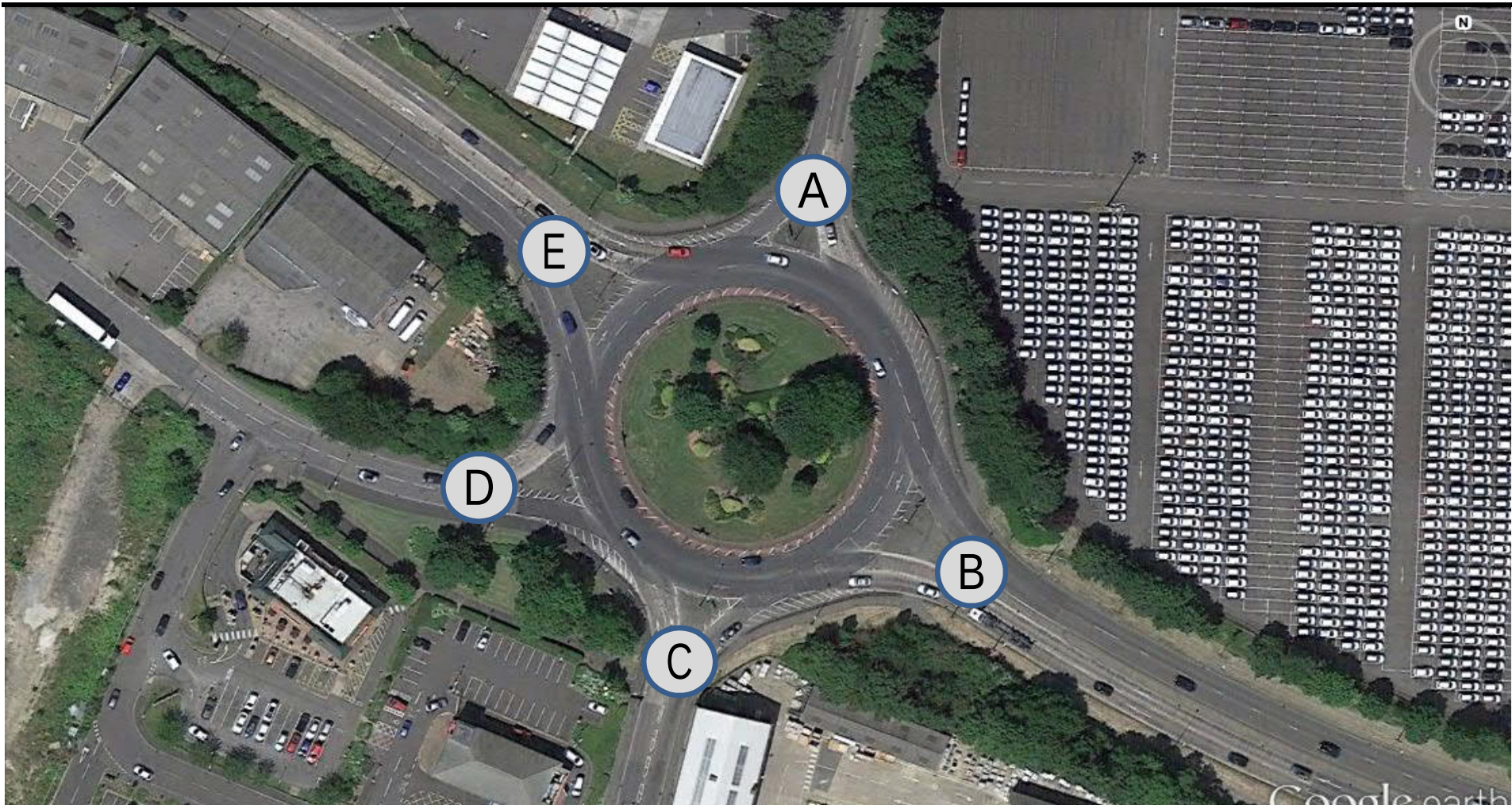
Project Number: **TSP13999**

Project Name: **Immingham, North East Lincolnshire**

Survey Type: **Manual Classified Turning Count**

Site No: **2**

Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**



Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**
Date: **18 October 2018, Thursday**



Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	1								1	1	31	3	3			1			38	40.5
07:15									0	0	8	2	4	2		1			17	22.6
07:30	1								1	1	9			2					11	13.6
07:45									0	0	7	3							10	10
H/Total	2	0	0	0	0	0	0	0	2	2	55	8	7	4	0	2	0	0	76	86.7
08:00									0	0	6	1	2	1			2		12	13.1
08:15									0	0	6	11	3				1		21	21.9
08:30									0	0	13	3	1	2		1			20	24.1
08:45	1								1	1	10	4	3	2					19	23.1
H/Total	1	0	0	0	0	0	0	0	1	1	35	19	9	5	0	1	3	0	72	82.2
09:00									0	0	16	7	3	2					28	32.1
09:15									0	0	12	10	3	2					27	31.1
09:30				1					1	2.3	11	7	4						22	24
09:45									0	0	12	8	2	1		1			24	27.3
H/Total	0	0	0	1	0	0	0	0	1	2.3	51	32	12	5	0	1	0	0	101	114.5
Total	3	0	0	1	0	0	0	0	4	5.3	141	59	28	14	0	4	3	0	249	283.4

Time	A - A										A - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0	24	5	1						30	30.5
16:15									0	0	42	7					3	1	53	50.4
16:30									0	0	40	5					3		48	46.2
16:45									0	0	48	4		1					53	54.3
H/Total	0	0	0	0	0	0	0	0	0	0	154	21	1	1	0	0	6	1	184	181.4
17:00									0	0	52	7		1			1	3	64	62.3
17:15									0	0	38	3	1						42	42.5
17:30									0	0	39	3					1		43	42.4
17:45									0	0	21	1						2	24	22.4
H/Total	0	0	0	0	0	0	0	0	0	0	150	14	1	1	0	0	2	5	173	169.6
18:00									0	0	26							2	28	26.4
18:15									0	0	21								21	21
18:30									0	0	17	1					1	19	18.2	
18:45									0	0	24							2	26	24.4
H/Total	0	0	0	0	0	0	0	0	0	0	88	1	0	0	0	0	0	5	94	90
Total	0	0	0	0	0	0	0	0	0	0	392	36	2	2	0	0	8	11	451	441

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**
 Date: **18 October 2018, Thursday**



Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	16		1						17	17.5	2								2	2
07:15	1	1		1					3	4.3	1								1	1
07:30			1	1			1		3	4.2			1						1	1.5
07:45	1	1							2	2	2	1							3	3
H/Total	18	2	2	2	0	0	1	0	25	28	5	1	1	0	0	0	0	0	7	7.5
08:00	4	2							6	6									0	0
08:15	1	3							4	4		1							1	1
08:30	4								4	4	1	2							3	3
08:45	5	2	2	1					10	12.3	1	1	1						3	3.5
H/Total	14	7	2	1	0	0	0	0	24	26.3	2	4	1	0	0	0	0	0	7	7.5
09:00	5	1	1						7	7.5	1		1	1					3	4.8
09:15	5		2						7	8	2								2	2
09:30	4	1		1					6	7.3	2	2							4	4
09:45	7	1	1	1					10	11.8		3	1						4	4.5
H/Total	21	3	4	2	0	0	0	0	30	34.6	5	5	2	1	0	0	0	0	13	15.3
Total	53	12	8	5	0	0	1	0	79	88.9	12	10	4	1	0	0	0	0	27	30.3

Time	A - C										A - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	15	4							19	19									0	0
16:15	12	2	1						15	15.5									0	0
16:30	16	1							17	17		1							1	1
16:45	7	2				1			10	11		1		2					3	5.6
H/Total	50	9	1	0	0	1	0	0	61	62.5	0	2	0	2	0	0	0	0	4	6.6
17:00	15			1					16	17.3	2								2	2
17:15	10	2							12	12	1								1	1
17:30	14					1			15	16		1					1		2	1.4
17:45	13								13	13									0	0
H/Total	52	2	0	1	0	1	0	0	56	58.3	3	1	0	0	0	0	1	0	5	4.4
18:00	7	1							8	8		2							2	2
18:15	12	2							14	14									0	0
18:30	9	2							11	11				2					2	4.6
18:45	10	1							11	11			1						1	2.3
H/Total	38	6	0	0	0	0	0	0	44	44	0	2	0	3	0	0	0	0	5	8.9
Total	140	17	1	1	0	2	0	0	161	164.8	3	5	0	5	0	0	1	0	14	19.9

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Moody Lane /Westgate/Pyewipe Road/Birchln Way/A180**
Date: **18 October 2018, Thursday**



Time	A - E										B - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	4	3	1	1					9	10.8	33	4		1					39	39.7
07:15	3	1	1	5					10	17	36	4		1			3		44	43.5
07:30	12	3		4					19	24.2	49	6	1	1			2		59	59.6
07:45	7	1		4					12	17.2	66	5	1				1		73	72.9
H/Total	26	8	2	14	0	0	0	0	50	69.2	184	19	2	3	0	0	7	0	215	215.7
08:00	11	2	1	3					17	21.4	53	15	2				1		71	71.4
08:15	7	3		3					13	16.9	39	7		2					48	50.6
08:30	7	4		7					18	27.1	13	7	2	1					23	25.3
08:45	8	2	1	3					14	18.4	12	7	5						24	26.5
H/Total	33	11	2	16	0	0	0	0	62	83.8	117	36	9	3	0	0	1	0	166	173.8
09:00	8	2		7					17	26.1	11	3	2						16	17
09:15	5	1		2					8	10.6	15	6	1	2					24	27.1
09:30	10	2							12	12	15	6	3			1			25	27.5
09:45	9	3		2					14	16.6	10	8	3	1					22	24.8
H/Total	32	8	0	11	0	0	0	0	51	65.3	51	23	9	3	0	1	0	0	87	96.4
Total	91	27	4	41	0	0	0	0	163	218.3	352	78	20	9	0	1	8	0	468	485.9

Time	A - E										B - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	9	1		3					13	16.9	12	1							13	13
16:15	8	2	1	1			1		13	14.2	15	3		2					20	22.6
16:30	6	1		1					8	9.3	6	1							7	7
16:45	3	1	1	1					6	7.8	5	1	1						7	7.5
H/Total	26	5	2	6	0	0	1	0	40	48.2	38	6	1	2	0	0	0	0	47	50.1
17:00	3			1					4	5.3	5								5	5
17:15	3			4					7	12.2	8	1					1		10	9.4
17:30	5			1					6	7.3	6								6	6
17:45	6			7					13	22.1	8	4							12	12
H/Total	17	0	0	13	0	0	0	0	30	46.9	27	5	0	0	0	0	1	0	33	32.4
18:00	5	2		3					10	13.9	15	1	1						17	17.5
18:15	7	1	1	5					14	21	12	2							14	14
18:30	3			2					5	7.6	25								25	25
18:45	5			4					9	14.2	3								3	3
H/Total	20	3	1	14	0	0	0	0	38	56.7	55	3	1	0	0	0	0	0	59	59.5
Total	63	8	3	33	0	0	1	0	108	151.8	120	14	2	2	0	0	1	0	139	142

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**
 Date: **18 October 2018, Thursday**



Time	B - B										B - C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	1								1	1	7	3	1						12	11.7
07:15	1								1	1	13	3						1	16	16
07:30									0	0	7	3							10	10
07:45									0	0	3	1							4	4
H/Total	2	0	0	0	0	0	0	0	2	2	30	10	1	0	0	0	0	1	42	41.7
08:00									0	0	14	3	2						19	20
08:15	1								1	1	24	5							29	29
08:30									0	0	13	7							20	20
08:45	2								2	2	29	6	1	1			1		38	39.2
H/Total	3	0	0	0	0	0	0	0	3	3	80	21	3	1	0	0	1	0	106	108.2
09:00									0	0	28	7	1						39	40.9
09:15									0	0	23	6	1				2	1	30	30.5
09:30	1								1	1	37	6	1				1		45	44.9
09:45							1		1	0.4	31	4	1						36	36.5
H/Total	1	0	0	0	0	0	1	0	2	1.4	119	23	4	0	0	2	2	0	150	152.8
Total	6	0	0	0	0	0	1	0	7	6.4	229	54	8	1	0	2	3	1	298	302.7

Time	B - B										B - C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	1								1	1	47	1	1						49	49.5
16:15									0	0	41	3	1						45	45.5
16:30									0	0	47	3	1						51	51.5
16:45	1								1	1	34	1							35	35
H/Total	2	0	0	0	0	0	0	0	2	2	169	8	3	0	0	0	0	0	180	181.5
17:00									0	0	47	3				1			51	52
17:15									0	0	32	3		1			1		37	37.7
17:30	2								2	2	35	1							36	36
17:45	1								1	1	42	5					1		48	47.4
H/Total	3	0	0	0	0	0	0	0	3	3	156	12	0	1	0	1	2	0	172	173.1
18:00	1								1	1	50	9							59	59
18:15									0	0	30	3							33	33
18:30									0	0	44	5					1		50	49.4
18:45	3								3	3	47	1							48	48
H/Total	4	0	0	0	0	0	0	0	4	4	171	18	0	0	0	0	1	0	190	189.4
Total	9	0	0	0	0	0	0	0	9	9	496	38	3	1	0	1	3	0	542	544

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
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Date: **18 October 2018, Thursday**



Time	B - D										B - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	5	4		1					10	11.3	260	45	4	4	1	1	2		317	325
07:15	15	6	1						22	22.5	274	37	6	7			2		326	336.9
07:30	16	7							23	23	388	58	13	8			2		469	484.7
07:45	18	5	2						25	26	278	62	10	8		2	4		364	379
H/Total	54	22	3	1	0	0	0	0	80	82.8	1200	202	33	27	1	3	10	0	1476	1525.6
08:00	12	8	2						22	23	263	45	4	7		1	1		321	332.5
08:15	11	3	2						16	17	232	45	16	5	1	1	2	1	303	317.5
08:30	9	7	2	1					19	21.3	158	38	11	10		1			218	237.5
08:45	13	7	4						24	26	145	36	15	7			1		204	220
H/Total	45	25	10	1	0	0	0	0	81	87.3	798	164	46	29	1	3	4	1	1046	1107.5
09:00	12	6	1	2					21	24.1	105	43	10	9		3	1		171	190.1
09:15	11	10							21	21	110	36	12	9		2			169	188.7
09:30	15	9	1	2					27	30.1	96	30	10	9		2			147	165.7
09:45	12	6		1					19	20.3	99	32	11	6					148	161.3
H/Total	50	31	2	5	0	0	0	0	88	95.5	410	141	43	33	0	7	1	0	635	705.8
Total	149	78	15	7	0	0	0	0	249	265.6	2408	507	122	89	2	13	15	1	3157	3338.9

Time	B - D										B - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	7	5							12	12	165	33	9	5		1			213	225
16:15	10	6							16	16	179	34	2	10		1	2		228	241.8
16:30	20	3		1					24	25.3	196	33	11	11		4	4		259	280.4
16:45	23	3					2		28	26.8	192	32	4	4		4	1		237	247.6
H/Total	60	17	0	1	0	0	2	0	80	80.1	732	132	26	30	0	10	7	0	937	994.8
17:00	7								7	7	199	23	2	8		1			233	245.4
17:15	5								5	5	170	14	1	1		2			188	191.8
17:30	21	1		1					23	24.3	221	32	3	3			1		260	264.8
17:45	7	2							9	9	176	20	1	10		1	4		212	224.1
H/Total	40	3	0	1	0	0	0	0	44	45.3	766	89	7	22	0	4	5	0	893	926.1
18:00	20	2							22	22	146	14	5	2			1		168	172.5
18:15	10								10	10	137	13	2	2		1	1		156	160
18:30	19	1							20	20	111	11		3			1		126	129.3
18:45	14								14	14	90	9	2	2			3		106	107.8
H/Total	63	3	0	0	0	0	0	0	66	66	484	47	9	9	0	1	6	0	556	569.6
Total	163	23	0	2	0	0	2	0	190	191.4	1982	268	42	61	0	15	18	0	2386	2490.5

Project Number: **TSP13999**
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Date: **18 October 2018, Thursday**



Time	C - A										C - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	19	3							22	22	3	3							6	6
07:15	16	2					1		19	18.4	9	1							10	10
07:30	32	5					1		38	37.4	14	3							17	17
07:45	17	4							21	21	12	2	1						15	15.5
H/Total	84	14	0	0	0	0	2	0	100	98.8	38	9	1	0	0	0	0	0	48	48.5
08:00	27	7		1					35	36.3	14	3							17	17
08:15	30	2	1						33	33.5	32	4							36	36
08:30	15	3							18	18	38	2	1	1	1				43	45.8
08:45	15	4	1						20	20.5	45	6				1			52	53
H/Total	87	16	2	1	0	0	0	0	106	108.3	129	15	1	1	1	1	0	0	148	151.8
09:00	13	4	1			1			19	20.5	50	10							60	60
09:15	9		1	1					11	12.8	28	5				1			34	35
09:30	10	4	1	1					16	17.8	36	8	1	1	1		1		48	50.2
09:45	11	1	2						14	15	31	4							35	35
H/Total	43	9	5	2	0	1	0	0	60	66.1	145	27	1	1	1	1	1	0	177	180.2
Total	214	39	7	3	0	1	2	0	266	273.2	312	51	3	2	2	2	1	0	373	380.5

Time	C - A										C - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	6		1						7	7.5	24	2					1		27	26.4
16:15	5		2						7	8	36	2							38	38
16:30	7	1				1			9	10	36	5	1						42	42.5
16:45	3								3	3	30	5							35	35
H/Total	21	1	3	0	0	1	0	0	26	28.5	126	14	1	0	0	0	1	0	142	141.9
17:00	6	1							7	7	28	2							30	30
17:15	2								2	2	25	3							28	28
17:30	3	1					1		5	4.4	29	4							33	33
17:45	3								3	3	39	2							41	41
H/Total	14	2	0	0	0	0	1	0	17	16.4	121	11	0	0	0	0	0	0	132	132
18:00	7						1		8	7.4	33	4	1						38	38.5
18:15	5	1					1		7	6.4	23	2							25	25
18:30	12								12	12	32	2	1				1		36	35.9
18:45	7								7	7	43	3							46	46
H/Total	31	1	0	0	0	0	2	0	34	32.8	131	11	2	0	0	0	1	0	145	145.4
Total	66	4	3	0	0	1	3	0	77	77.7	378	36	3	0	0	0	2	0	419	419.3

Project Number: **TSP13999**
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 Date: **18 October 2018, Thursday**



Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0	8	4							12	12
07:15									0	0	12	5							17	17
07:30									0	0	11	4	1						16	16.5
07:45									0	0	10	7							17	17
H/Total	0	0	0	0	0	0	0	0	0	0	41	20	1	0	0	0	0	0	62	62.5
08:00									0	0	20	8							28	28
08:15									0	0	20	2							22	22
08:30									0	0	10	8	1						19	19.5
08:45									0	0	13	6					1		20	19.4
H/Total	0	0	0	0	0	0	0	0	0	0	63	24	1	0	0	0	1	0	89	88.9
09:00									0	0	22	3							25	25
09:15		1							1	1	20	3	1						24	24.5
09:30									0	0	14	4	1	1					20	21.8
09:45									0	0	22	3	1						26	26.5
H/Total	0	1	0	0	0	0	0	0	1	1	78	13	3	1	0	0	0	0	95	97.8
Total	0	1	0	0	0	0	0	0	1	1	182	57	5	1	0	0	1	0	246	249.2

Time	C - C										C - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0	20	2							22	22
16:15	1								1	1	16	4	2						22	23
16:30									0	0	25	4							29	29
16:45									0	0	20	3							23	23
H/Total	1	0	0	0	0	0	0	0	1	1	81	13	2	0	0	0	0	0	96	97
17:00									0	0	20	5							25	25
17:15									0	0	13	5							18	18
17:30									0	0	17	2							19	19
17:45	1								1	1	22	1							23	23
H/Total	1	0	0	0	0	0	0	0	1	1	72	13	0	0	0	0	0	0	85	85
18:00									0	0	20	1							21	21
18:15									0	0	23	1							24	24
18:30									0	0	23	2							25	25
18:45									0	0	23	1							25	24.4
H/Total	0	0	0	0	0	0	0	0	0	0	89	5	0	0	0	0	1	0	95	94.4
Total	2	0	0	0	0	0	0	0	2	2	242	31	2	0	0	0	1	0	276	276.4



Time	C - E										D - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	92	25	2				4		123	121.6	2								2	2
07:15	87	12	1		1		1		102	102.9		1							1	1
07:30	73	17	3						93	94.5	2	1							3	3
07:45	83	22	1	1	1	1	3		112	114	1								1	1
H/Total	335	76	7	1	2	1	8	0	430	433	5	2	0	0	0	0	0	0	7	7
08:00	89	21		1	2	1			114	118.3	1								1	1
08:15	93	21		1		1			116	118.3	1	1							2	2
08:30	55	19	5			1			80	83.5									0	0
08:45	60	15	1	1	1	1			79	82.8	1		1	1					3	4.8
H/Total	297	76	6	3	3	4	0	0	389	402.9	3	1	1	1	0	0	0	0	6	7.8
09:00	54	24	7	1				1	87	91	1								1	1
09:15	40	9	3		1	1			54	57.5	2	1	2						5	6
09:30	51	20	1			2	2		76	77.3	4	2		2					8	10.6
09:45	42	23	5	1		1			72	76.8	3								3	3
H/Total	187	76	16	2	1	4	2	1	289	302.6	10	3	2	2	0	0	0	0	17	20.6
Total	819	228	29	6	6	9	10	1	1108	1138.5	18	6	3	3	0	0	0	0	30	35.4

Time	C - E										D - A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	58	12	3			2	3		78	79.7	2	2							2	2
16:15	73	12		1	1	2			90	93.7	1								1	1
16:30	78	9	2			1	1		90	92	1	1							2	2
16:45	74	8	2		1	3			88	93									0	0
H/Total	293	41	7	1	2	8	4	0	346	358.4	4	1	0	0	0	0	0	0	5	5
17:00	111	10	1			1			123	124.5	1	1							2	2
17:15	104	14			1	1			120	122	1								1	1
17:30	93	8	2		1				104	106	1								1	1
17:45	89	3	1						93	93.5	4								4	4
H/Total	397	35	4	0	2	2	0	0	440	446	7	1	0	0	0	0	0	0	8	8
18:00	76	5	1	1		1			84	86.8	1								1	1
18:15	50	5		2		2			59	63.6									0	0
18:30	53	2						1	56	55.2									0	0
18:45	46	3				1			50	51									0	0
H/Total	225	15	1	3	0	4	0	1	249	256.6	1	0	0	0	0	0	0	0	1	1
Total	905	91	12	4	4	14	4	1	1035	1061	12	2	0	0	0	0	0	0	14	14

Project Number: **TSP13999**
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 Survey Type: **Manual Classified Turning Count**
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 Date: **18 October 2018, Thursday**



Time	D - B										D - C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	4								4	4									0	0
07:15	2	2	2	1					7	9.3	6	4							10	10
07:30	3	2							5	5	3	2							5	5
07:45	8	4		1					13	14.3	6	9	1						16	16.5
H/Total	17	8	2	2	0	0	0	0	29	32.6	15	15	1	0	0	0	0	0	31	31.5
08:00	2	8	2						12	13	4	6							10	10
08:15	6	3	1	1					11	12.8	4	1	1						6	6.5
08:30	5	6	2						13	14	12	5							17	17
08:45	6	12	2	1					21	23.3	7	6							13	13
H/Total	19	29	7	2	0	0	0	0	57	63.1	27	18	1	0	0	0	0	0	46	46.5
09:00	5	4	3						12	13.5	16	7							24	25
09:15	8	9	1	1					19	20.8	10	6				1			16	16
09:30	15	7	1	1					24	25.8	8	6							14	14
09:45	11	8	2						21	22	20	4	1						25	25.5
H/Total	39	28	7	2	0	0	0	0	76	82.1	54	23	1	0	0	1	0	0	79	80.5
Total	75	65	16	6	0	0	0	0	162	177.8	96	56	3	0	0	1	0	0	156	158.5

Time	D - B										D - C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	17	6							23	23	24	4							28	28
16:15	15	3	1				1		20	19.9	16	3							19	19
16:30	23	4					1		28	27.4	14	2					1		17	16.4
16:45	16	4							20	20	19	7							26	26
H/Total	71	17	1	0	0	0	2	0	91	90.3	73	16	0	0	0	0	1	0	90	89.4
17:00	25	3	2						30	31	23	4							27	27
17:15	15	4							19	19	14	1							15	15
17:30	17	2					1		20	19.4	12	1		1					14	15.3
17:45	11	5							16	16	19	1							20	20
H/Total	68	14	2	0	0	0	1	0	85	85.4	68	7	0	1	0	0	0	0	76	77.3
18:00	9	2							11	11	23	2		1					26	27.3
18:15	13	3							16	16	20	1							21	21
18:30	12								12	12	18	1							19	19
18:45	18	1							19	19	22								22	22
H/Total	52	6	0	0	0	0	0	0	58	58	83	4	0	1	0	0	0	0	88	89.3
Total	191	37	3	0	0	0	3	0	234	233.7	224	27	0	2	0	0	1	0	254	256

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Time	D - D										D - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00									0	0	13	3		3					19	22.9
07:15									0	0	14	7							21	21
07:30									0	0	13	3							16	16
07:45									0	0	6	3	2	1					12	14.3
H/Total	0	0	0	0	0	0	0	0	0	0	46	16	2	4	0	0	0	0	68	74.2
08:00									0	0	13	8	2						23	24
08:15									0	0	13	11	4	1					29	32.3
08:30									0	0	13	12	3						28	29.5
08:45									0	0	13	11	3	2					29	33.1
H/Total	0	0	0	0	0	0	0	0	0	0	52	42	12	3	0	0	0	0	109	118.9
09:00									0	0	14	4	1	2					21	24.1
09:15									0	0	13	8	2	1					24	26.3
09:30									0	0	14	9	1	2					26	29.1
09:45									0	0	10	7	3	1					21	23.8
H/Total	0	0	0	0	0	0	0	0	0	0	51	28	7	6	0	0	0	0	92	103.3
Total	0	0	0	0	0	0	0	0	0	0	149	86	21	13	0	0	0	0	269	296.4

Time	D - D										D - E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00									0	0	19	8	2						29	30
16:15									0	0	14	7	1						23	24.8
16:30									0	0	19	5		1					25	26.3
16:45									0	0	18	7		1			1		27	27.7
H/Total	0	0	0	0	0	0	0	0	0	0	70	27	3	3	0	0	1	0	104	108.8
17:00									0	0	15	4							19	19
17:15									0	0	24	1	1						26	26.5
17:30									0	0	7	5					1		13	12.4
17:45									0	0	16								16	16
H/Total	0	0	0	0	0	0	0	0	0	0	62	10	1	0	0	0	1	0	74	73.9
18:00									0	0	19	3	1						23	23.5
18:15									0	0	12	1		1					14	15.3
18:30									0	0	11	1							12	12
18:45									0	0	14	3							17	17
H/Total	0	0	0	0	0	0	0	0	0	0	56	8	1	1	0	0	0	0	66	67.8
Total	0	0	0	0	0	0	0	0	0	0	188	45	5	4	0	0	2	0	244	250.5

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**
 Date: **18 October 2018, Thursday**



Time	E - A										E - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	1		1	5					7	14	76	27	21	8		2			134	156.9
07:15	1			8					9	19.4	91	36	12	13		3	1		156	181.3
07:30	4			5			1		10	15.9	120	40	13	10		3	1		187	208.9
07:45	2		1	5					8	15	176	36	16	15		1	2		246	273.3
H/Total	8	0	2	23	0	0	1	0	34	64.3	463	139	62	46	0	9	4	0	723	820.4
08:00	1			1					2	3.3	200	39	10	4		1			254	265.2
08:15									0	0	193	43	9	10	1	1	1		258	276.9
08:30				1					1	2.3	232	49	11	7	1	2	1		303	320
08:45	4	1		2					7	9.6	174	51	21	4		3			253	271.7
H/Total	5	1	0	4	0	0	0	0	10	15.2	799	182	51	25	2	7	2	0	1068	1133.8
09:00	5		1	1					7	8.8	169	33	5	9					217	230.6
09:15				6					6	13.8	109	35	18	3			1		166	178.3
09:30				1					1	2.3	110	33	15	8					166	183.9
09:45	1	2		2					5	7.6	123	29	10	8		1	3		174	188.6
H/Total	6	2	1	10	0	0	0	0	19	32.5	511	130	48	28	0	1	5	0	723	781.4
Total	19	3	3	37	0	0	1	0	63	112	1773	451	161	99	2	17	11	0	2514	2735.6

Time	E - A										E - B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00		1		3					4	7.9	287	42	2	9	1	3	4		348	362.3
16:15				5					5	11.5	301	52	2	2		1	3	1	362	364
16:30	1								1	1	321	57	6	12		3	2		401	421.4
16:45	1	1		1					3	4.3	332	64	4	4			1		405	411.6
H/Total	2	2	0	9	0	0	0	0	13	24.7	1241	215	14	27	1	7	10	1	1516	1559.3
17:00	1								1	1	352	61	4	3	1		4	2	427	429.9
17:15									0	0	329	42	3	6	1	1	3		385	394.5
17:30				1					1	2.3	339	48	6	7	1		2		403	414.9
17:45									0	0	245	35	2	1				1	284	285.5
H/Total	1	0	0	1	0	0	0	0	2	3.3	1265	186	15	17	3	1	9	3	1499	1524.8
18:00				4					4	9.2	274	28	2	2			4	1	311	311.4
18:15	3								3	3	170	22	2	5		2	1		202	210.9
18:30		1							1	1	196	13	2	3	1		1		216	221.3
18:45				1					1	2.3	158	20	1	2			2		183	184.9
H/Total	3	1	0	5	0	0	0	0	9	15.5	798	83	7	12	1	2	8	1	912	928.5
Total	6	3	0	15	0	0	0	0	24	43.5	3304	484	36	56	5	10	27	5	3927	4012.6

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**
 Date: **18 October 2018, Thursday**



Time	E - C										E - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	23	10	8	1		2			44	51.3	8	10							18	18
07:15	39	9	2	1		2			53	57.3	8	12		1					21	22.3
07:30	41	20	1		1	2			65	68.5	14	9	1						24	24.5
07:45	70	13	1			1			85	86.5	8	11	3	2			1		25	28.5
H/Total	173	52	12	2	1	7	0	0	247	263.6	38	42	4	3	0	0	1	0	88	93.3
08:00	97	19	1			1			118	119.5	5	8	3	1					17	19.8
08:15	90	14	5	2		3			114	122.1	9	12	2	4					27	33.2
08:30	86	20	5	1		1			113	117.8	12	7		3					22	25.9
08:45	80	15	5	1					101	104.8	8	10	3						21	22.5
H/Total	353	68	16	4	0	5	0	0	446	464.2	34	37	8	8	0	0	0	0	87	101.4
09:00	73	12	1	2	1	1			90	95.1	9	6	3	1					19	21.8
09:15	38	15	6	1			1		61	64.7	9	3	1						13	13.5
09:30	41	9	2	2					52	53	6	4	2	1					13	15.3
09:45	54	7	2	2	1	1	1		68	73	5	3	1	1					10	11.8
H/Total	206	43	11	5	2	2	2	0	271	285.8	29	16	7	3	0	0	0	0	55	62.4
Total	732	163	39	11	3	14	2	0	964	1013.6	101	95	19	14	0	0	1	0	230	257.1

Time	E - C										E - D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	96	28	1	2	1	3	2		133	138.9	7	1	1				1		10	9.9
16:15	111	17	2			1	1		132	133.4	7	2	2				1		12	12.4
16:30	87	6		1	1	1	5		101	101.3	8	7		1					16	17.3
16:45	99	16	1	1		1			118	120.8	10	4							14	14
H/Total	393	67	4	4	2	6	8	0	484	494.4	32	14	3	1	0	0	2	0	52	53.6
17:00	105	12							117	117	5	2							7	7
17:15	89	22			1	1			113	115	6			2					8	10.6
17:30	103	15			1				119	120	7	1	1	1					10	11.8
17:45	76	9		1		1	1		88	89.7	8	2		2					12	14.6
H/Total	373	58	0	1	2	2	1	0	437	441.7	26	5	1	5	0	0	0	0	37	44
18:00	79	6							85	85	5	2							7	7
18:15	68	5			1				74	75	9	1		1					11	12.3
18:30	60	9					1		70	69.4	10	1		1					12	13.3
18:45	72	5	1						78	78.5	8	1				1			10	11
H/Total	279	25	1	0	1	0	1	0	307	307.9	32	5	0	2	0	1	0	0	40	43.6
Total	1045	150	5	5	5	8	10	0	1228	1244	90	24	4	8	0	1	2	0	129	141.2

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**
 Date: **18 October 2018, Thursday**



Time	E - E									TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	
07:00	3								3	3
07:15	1								1	1
07:30									0	0
07:45									0	0
H/Total	4	0	0	0	0	0	0	0	4	4
08:00									0	0
08:15									0	0
08:30		1							1	1
08:45		1							1	1
H/Total	0	2	0	0	0	0	0	0	2	2
09:00									0	0
09:15									0	0
09:30									0	0
09:45									0	0
H/Total	0	0	0	0	0	0	0	0	0	0
Total	4	2	0	0	0	0	0	0	6	6

Time	E - E									TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	
16:00	2								2	2
16:15	1								1	1
16:30									0	0
16:45									0	0
H/Total	3	0	0	0	0	0	0	0	3	3
17:00		1	1						2	2.5
17:15									0	0
17:30									0	0
17:45									0	0
H/Total	0	1	1	0	0	0	0	0	2	2.5
18:00	1								1	1
18:15									0	0
18:30									0	0
18:45									0	0
H/Total	1	0	0	0	0	0	0	0	1	1
Total	4	1	1	0	0	0	0	0	6	6.5

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**
Date: **18 October 2018, Thursday**



Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	54	6	5	1	0	1	0	0	67	71.8	56	7	1	6	0	0	1	0	71	78.7
07:15	13	4	5	8	0	1	0	0	31	44.9	53	7	0	9	0	0	4	0	73	82.3
07:30	22	3	2	7	0	0	1	0	35	44.5	88	12	1	6	0	0	4	0	111	116.9
07:45	17	6	0	4	0	0	0	0	27	32.2	86	9	2	5	0	0	1	0	103	109.9
H/Total	106	19	12	20	0	2	1	0	160	193.4	283	35	4	26	0	0	10	0	358	387.8
08:00	21	5	3	4	0	0	2	0	35	40.5	82	22	2	2	0	0	1	0	109	112
08:15	14	18	3	3	0	0	1	0	39	43.8	70	10	1	2	0	0	0	0	83	86.1
08:30	25	9	1	9	0	1	0	0	45	58.2	28	10	2	2	0	0	0	0	42	45.6
08:45	25	9	7	6	0	0	0	0	47	58.3	33	12	7	3	0	0	0	0	55	62.4
H/Total	85	41	14	22	0	1	3	0	166	200.8	213	54	12	9	0	0	1	0	289	306.1
09:00	30	10	5	10	0	0	0	0	55	70.5	30	7	4	1	0	1	0	0	43	47.3
09:15	24	11	5	4	0	0	0	0	44	51.7	26	7	4	9	0	0	0	0	46	59.7
09:30	27	12	4	2	0	0	0	0	45	49.6	29	12	4	5	0	1	0	0	51	60.5
09:45	28	15	4	4	0	1	0	0	52	60.2	25	11	5	3	0	0	0	0	44	50.4
H/Total	109	48	18	20	0	1	0	0	196	232	110	37	17	18	0	2	0	0	184	217.9
Total	300	108	44	62	0	4	4	0	522	626.2	606	126	33	53	0	2	11	0	831	911.8

Time	From A										To A									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	48	10	1	3	0	0	0	0	62	66.4	20	2	1	3	0	0	0	0	26	30.4
16:15	62	11	2	1	0	0	4	1	81	80.1	21	3	2	7	0	0	0	0	33	43.1
16:30	62	8	0	1	0	0	3	0	74	73.5	15	3	0	0	0	1	0	0	19	20
16:45	58	8	1	4	0	1	0	0	72	78.7	9	2	1	1	0	0	0	0	13	14.8
H/Total	230	37	4	9	0	1	7	1	299	298.7	65	10	4	11	0	1	0	0	91	108.3
17:00	72	7	0	3	0	0	1	3	86	86.9	13	2	0	0	0	0	0	0	15	15
17:15	52	5	1	4	0	0	0	0	62	67.7	11	1	0	0	0	0	1	0	13	12.4
17:30	58	4	0	1	0	1	2	0	66	67.1	10	1	0	1	0	0	1	0	13	13.7
17:45	40	1	0	7	0	0	0	2	50	57.5	15	4	0	0	0	0	0	0	19	19
H/Total	222	17	1	15	0	1	3	5	264	279.2	49	8	0	1	0	0	2	0	60	60.1
18:00	38	5	0	3	0	0	0	2	48	50.3	23	1	1	4	0	0	1	0	30	35.1
18:15	40	3	1	5	0	0	0	0	49	56	20	3	0	0	0	0	1	0	24	23.4
18:30	29	3	0	4	0	0	0	1	37	41.4	37	1	0	0	0	0	0	0	38	38
18:45	39	1	0	5	0	0	0	2	47	51.9	10	0	0	1	0	0	0	0	11	12.3
H/Total	146	12	1	17	0	0	0	5	181	199.6	90	5	1	5	0	0	2	0	103	108.8
Total	598	66	6	41	0	2	10	11	734	777.5	204	23	5	17	0	1	4	0	254	277.2

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**
Date: **18 October 2018, Thursday**



Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	306	56	5	6	1	1	3	1	379	388.7	115	33	24	8	0	3	0	0	183	208.4
07:15	339	50	7	8	0	0	5	0	409	419.9	111	41	18	16	0	4	1	0	191	224.2
07:30	460	74	14	9	0	0	4	0	561	577.3	146	45	13	12	0	3	1	0	220	244.5
07:45	365	73	13	8	0	2	5	0	466	481.9	203	45	17	16	0	1	2	0	284	313.1
H/Total	1470	253	39	31	1	3	17	1	1815	1867.8	575	164	72	52	0	11	4	0	878	990.2
08:00	342	71	10	7	0	1	2	0	433	446.9	222	51	14	5	0	1	2	0	295	308.3
08:15	307	60	18	7	1	1	2	1	397	415.1	238	61	13	11	1	1	2	0	327	348.6
08:30	193	59	15	12	0	1	0	0	280	304.1	288	60	15	10	2	3	1	0	379	403.9
08:45	201	56	25	8	0	0	2	0	292	313.7	237	73	26	7	0	4	0	0	347	373.1
H/Total	1043	246	68	34	1	3	6	1	1402	1479.8	985	245	68	33	3	9	5	0	1348	1433.9
09:00	156	59	14	11	0	5	2	0	247	272.1	240	54	11	11	0	0	1	0	317	336.2
09:15	159	58	14	11	0	2	0	0	244	267.3	157	59	22	6	0	1	1	0	246	265.2
09:30	164	51	15	11	0	3	1	0	245	269.2	173	55	21	10	1	0	1	0	261	284.9
09:45	152	50	15	8	0	0	1	0	226	243.3	177	49	14	9	0	2	4	0	255	273.3
H/Total	631	218	58	41	0	10	4	0	962	1051.9	747	217	68	36	1	3	7	0	1079	1159.6
Total	3144	717	165	106	2	16	27	2	4179	4399.5	2307	626	208	121	4	23	16	0	3305	3583.7

Time	From B										To B									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	232	40	10	5	0	1	0	0	288	300.5	353	55	3	9	1	3	5	0	429	443.2
16:15	245	46	3	12	0	1	2	0	309	325.9	394	64	3	2	0	1	7	2	473	472.3
16:30	269	40	12	12	0	4	4	0	341	364.2	420	71	7	12	0	3	6	0	519	537.5
16:45	255	37	5	4	0	4	3	0	308	317.9	427	77	4	5	0	0	1	0	514	521.9
H/Total	1001	163	30	33	0	10	9	0	1246	1308.5	1594	267	17	28	1	7	19	2	1935	1974.9
17:00	258	26	2	8	0	2	0	0	296	309.4	457	73	6	4	1	0	5	5	551	553.2
17:15	215	18	1	2	0	2	2	0	240	243.9	407	52	4	6	1	1	3	0	474	484
17:30	285	34	3	4	0	0	1	0	327	333.1	426	57	6	7	1	0	4	0	501	511.7
17:45	234	31	1	10	0	1	5	0	282	293.5	317	43	2	1	0	0	0	3	366	365.9
H/Total	992	109	7	24	0	5	8	0	1145	1179.9	1607	225	18	18	3	1	12	8	1892	1914.8
18:00	232	26	6	2	0	0	1	0	267	272	343	34	3	2	0	0	4	3	389	388.3
18:15	189	18	2	2	0	1	1	0	213	217	227	27	2	5	0	2	1	0	264	272.9
18:30	199	17	0	3	0	0	2	0	221	223.7	257	16	3	3	1	0	2	1	283	287.4
18:45	157	10	2	2	0	0	3	0	174	175.8	246	24	1	2	0	0	2	2	277	277.3
H/Total	777	71	10	9	0	1	7	0	875	888.5	1073	101	9	12	1	2	9	6	1213	1225.9
Total	2770	343	47	66	0	16	24	0	3266	3376.9	4274	593	44	58	5	10	40	16	5040	5115.6

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Moody Lane /Westgate/Pyewipe Road/Birchln Way/A180**
Date: **18 October 2018, Thursday**



Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	122	35	2	0	0	0	4	0	163	161.6	46	13	10	1	0	2	0	1	73	80.5
07:15	124	20	1	0	1	0	2	0	148	148.3	59	17	2	2	0	2	0	0	82	87.6
07:30	130	29	4	0	0	0	1	0	164	165.4	51	25	2	1	1	2	1	0	83	87.7
07:45	122	35	2	1	1	1	3	0	165	167.5	80	24	2	0	0	1	0	0	107	109
H/Total	498	119	9	1	2	1	10	0	640	642.8	236	79	16	4	1	7	1	1	345	364.8
08:00	150	39	0	2	2	1	0	0	194	199.6	119	30	3	0	0	1	0	0	153	155.5
08:15	175	29	1	1	0	1	0	0	207	209.8	119	23	6	2	0	3	0	0	153	161.6
08:30	118	32	7	1	1	1	0	0	160	166.8	115	32	5	1	0	1	0	0	154	158.8
08:45	133	31	2	1	1	2	1	0	171	175.7	121	29	8	3	0	0	1	0	162	169.3
H/Total	576	131	10	5	4	5	1	0	732	751.9	474	114	22	6	0	5	1	0	622	645.2
09:00	139	41	8	1	0	1	0	1	191	196.5	122	27	3	2	1	4	1	0	160	168.5
09:15	97	18	5	1	1	2	0	0	124	130.8	76	28	9	1	0	0	1	0	115	120.2
09:30	111	36	4	3	1	2	3	0	160	167.1	90	22	3	1	0	0	1	0	117	119.2
09:45	106	31	8	1	0	1	0	0	147	153.3	112	16	5	3	1	1	1	0	139	146.8
H/Total	453	126	25	6	2	6	3	1	622	647.7	400	93	20	7	2	5	4	0	531	554.7
Total	1527	376	44	12	8	12	14	1	1994	2042.4	1110	286	58	17	3	17	6	1	1498	1564.7

Time	From C										To C									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	108	16	4	0	0	2	4	0	134	135.6	182	37	2	2	1	3	2	0	229	235.4
16:15	131	18	4	1	1	2	1	0	158	163.7	181	25	4	0	0	1	1	0	212	214.4
16:30	146	19	3	0	0	2	0	0	170	173.5	164	12	1	1	1	1	6	0	186	186.2
16:45	127	16	2	0	1	3	0	0	149	154	159	26	1	1	0	2	0	0	189	192.8
H/Total	512	69	13	1	2	9	5	0	611	626.8	686	100	8	4	2	7	9	0	816	828.8
17:00	165	18	1	0	0	1	0	0	185	186.5	190	19	0	1	0	1	0	0	211	213.3
17:15	144	22	0	0	1	1	0	0	168	170	145	28	0	1	1	1	1	0	177	179.7
17:30	142	15	2	0	1	0	1	0	161	162.4	164	17	0	1	1	1	0	0	184	187.3
17:45	154	6	1	0	0	0	0	0	161	161.5	151	15	0	1	0	1	2	0	170	171.1
H/Total	605	61	4	0	2	2	1	0	675	680.4	650	79	0	4	2	4	3	0	742	751.4
18:00	136	10	2	1	0	1	1	0	151	153.7	159	18	0	1	0	0	0	0	178	179.3
18:15	101	9	0	2	0	2	1	0	115	119	130	11	0	0	1	0	0	0	142	143
18:30	120	6	1	0	0	0	1	1	129	128.1	131	17	0	0	0	0	2	0	150	148.8
18:45	119	7	0	0	0	1	1	0	128	128.4	151	7	1	0	0	0	0	0	159	159.5
H/Total	476	32	3	3	0	4	4	1	523	529.2	571	53	1	1	1	0	2	0	629	630.6
Total	1593	162	20	4	4	15	10	1	1809	1836.4	1907	232	9	9	5	11	14	0	2187	2210.8

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Moody Lane /Westgate/Pyewipe Road/Birchln Way/A180**
Date: **18 October 2018, Thursday**



Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	19	3	0	3	0	0	0	0	25	28.9	23	18	0	1	0	0	0	0	42	43.3
07:15	22	14	2	1	0	0	0	0	39	41.3	36	23	1	1	0	0	0	0	61	62.8
07:30	21	8	0	0	0	0	0	0	29	29	41	20	3	0	0	0	0	0	64	65.5
07:45	21	16	3	2	0	0	0	0	42	46.1	38	24	5	2	0	0	1	0	70	74.5
H/Total	83	41	5	6	0	0	0	0	135	145.3	138	85	9	4	0	0	1	0	237	246.1
08:00	20	22	4	0	0	0	0	0	46	48	37	24	5	1	0	0	0	0	67	70.8
08:15	24	16	6	2	0	0	0	0	48	53.6	40	18	4	4	0	0	0	0	66	73.2
08:30	30	23	5	0	0	0	0	0	58	60.5	32	24	3	4	0	0	0	0	63	69.7
08:45	27	29	6	4	0	0	0	0	66	74.2	35	24	8	0	0	0	1	0	68	71.4
H/Total	101	90	21	6	0	0	0	0	218	236.3	144	90	20	9	0	0	1	0	264	285.1
09:00	36	15	4	2	0	1	0	0	58	63.6	44	15	5	4	0	0	0	0	68	75.7
09:15	33	24	5	2	0	0	0	0	64	69.1	42	16	2	0	0	0	0	0	60	61
09:30	41	24	2	5	0	0	0	0	72	79.5	37	19	4	4	0	0	0	0	64	71.2
09:45	44	19	6	1	0	0	0	0	70	74.3	39	15	3	2	0	0	0	0	59	63.1
H/Total	154	82	17	10	0	1	0	0	264	286.5	162	65	14	10	0	0	0	0	251	271
Total	338	213	43	22	0	1	0	0	617	668.1	444	240	43	23	0	0	2	0	752	802.2

Time	From D										To D									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	62	18	2	0	0	0	0	0	82	83	34	8	1	0	0	0	1	0	44	43.9
16:15	46	13	2	1	0	0	1	0	63	64.7	33	12	4	0	0	0	1	0	50	51.4
16:30	57	12	0	1	0	0	2	0	72	72.1	53	15	0	2	0	0	0	0	70	72.6
16:45	53	18	0	1	0	0	1	0	73	73.7	53	11	0	2	0	0	2	0	68	69.4
H/Total	218	61	4	3	0	0	4	0	290	293.5	173	46	5	4	0	0	4	0	232	237.3
17:00	64	12	2	0	0	0	0	0	78	79	34	7	0	0	0	0	0	0	41	41
17:15	54	6	1	0	0	0	0	0	61	61.5	25	5	0	2	0	0	0	0	32	34.6
17:30	37	8	0	1	0	0	2	0	48	48.1	45	5	1	2	0	0	1	0	54	56.5
17:45	50	6	0	0	0	0	0	0	56	56	37	5	0	2	0	0	0	0	44	46.6
H/Total	205	32	3	1	0	0	2	0	243	244.6	141	22	1	6	0	0	1	0	171	176.7
18:00	52	7	1	1	0	0	0	0	61	62.8	45	7	0	0	0	0	0	0	52	52
18:15	45	5	0	1	0	0	0	0	51	52.3	42	2	0	1	0	0	0	0	45	46.3
18:30	41	2	0	0	0	0	0	0	43	43	52	4	0	3	0	0	0	0	59	62.9
18:45	54	4	0	0	0	0	0	0	58	58	45	2	0	1	0	1	1	0	50	51.7
H/Total	192	18	1	2	0	0	0	0	213	216.1	184	15	0	5	0	1	1	0	206	212.9
Total	615	111	8	6	0	0	6	0	746	754.2	498	83	6	15	0	1	6	0	609	628.9

Project Number: **TSP13999**
Project Name: **Immingham, North East Lincolnshire**
Survey Type: **Manual Classified Turning Count**
Site No: **2**
Location: **Moody Lane /Westgate/Pyewipe Road/Birchln Way/A180**
Date: **18 October 2018, Thursday**



Time	From E										To E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
07:00	111	47	30	14	0	4	0	0	206	243.2	372	76	7	8	1	1	6	0	471	483.3
07:15	140	57	14	23	0	5	1	0	240	281.3	379	57	8	12	1	0	3	0	460	478.8
07:30	179	69	15	15	1	5	2	0	286	317.8	486	81	16	12	0	0	2	0	597	619.4
07:45	256	60	21	22	0	2	3	0	364	403.3	374	88	13	14	1	3	7	0	500	524.5
H/Total	686	233	80	74	1	16	6	0	1096	1245.6	1611	302	44	46	3	4	18	0	2028	2106
08:00	303	66	14	6	0	2	0	0	391	407.8	376	76	7	11	2	2	1	0	475	496.2
08:15	292	69	16	16	1	4	1	0	399	432.2	345	80	20	10	1	2	2	1	461	485
08:30	330	77	16	12	1	3	1	0	440	467	233	74	19	17	0	2	0	0	345	378.6
08:45	266	78	29	7	0	3	0	0	383	409.6	226	65	20	13	1	1	1	0	327	355.3
H/Total	1191	290	75	41	2	12	2	0	1613	1716.6	1180	295	66	51	4	7	4	1	1608	1715.1
09:00	256	51	10	13	1	1	1	0	333	356.3	181	73	18	19	0	3	1	1	296	331.3
09:15	156	53	25	10	0	0	2	0	246	270.3	168	54	17	12	1	3	0	0	255	283.1
09:30	157	46	19	10	0	0	0	0	232	254.5	171	61	12	11	0	4	2	0	261	284.1
09:45	183	41	13	13	1	2	4	0	257	281	160	65	19	10	0	1	0	0	255	278.5
H/Total	752	191	67	46	2	3	7	0	1068	1162.1	680	253	66	52	1	11	3	1	1067	1177
Total	2629	714	222	161	5	31	15	0	3777	4124.3	3471	850	176	149	8	22	25	2	4703	4998.1

Time	From E										To E									
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCY	PCY	TOTAL	TOTAL (PCU)
16:00	392	72	4	14	2	6	7	0	497	521	253	54	14	8	0	3	3	0	335	353.6
16:15	420	71	6	7	0	2	5	1	512	522.3	275	55	4	13	1	3	4	0	355	375.5
16:30	417	70	6	14	1	4	7	0	519	541	299	48	13	13	0	5	4	0	382	408
16:45	442	85	5	6	0	1	1	0	540	550.7	287	48	7	6	1	7	2	0	358	376.1
H/Total	1671	298	21	41	3	13	20	1	2068	2135	1114	205	38	40	2	18	13	0	1430	1513.2
17:00	463	76	5	3	1	0	4	2	554	557.4	328	38	4	9	0	2	0	0	381	396.7
17:15	424	64	3	8	2	2	3	0	506	520.1	301	29	2	5	1	3	0	0	341	352.5
17:30	449	64	7	9	2	0	2	0	533	549	326	45	5	4	1	0	2	0	383	390.5
17:45	329	46	2	4	0	1	1	1	384	389.8	287	23	2	17	0	1	4	0	334	355.7
H/Total	1665	250	17	24	5	3	10	3	1977	2016.3	1242	135	13	35	2	6	6	0	1439	1495.4
18:00	359	36	2	6	0	0	4	1	408	413.6	247	24	7	6	0	1	1	0	286	297.7
18:15	250	28	2	6	1	2	1	0	290	301.2	206	20	3	10	0	3	1	0	243	259.9
18:30	266	24	2	4	1	0	2	0	299	305	178	14	0	5	0	0	1	1	199	204.1
18:45	238	26	2	3	0	1	2	0	272	276.7	155	15	2	6	0	1	3	0	182	190
H/Total	1113	114	8	19	2	3	9	1	1269	1296.5	786	73	12	27	0	5	6	1	910	951.7
Total	4449	662	46	84	10	19	39	5	5314	5447.8	3142	413	63	102	4	29	25	1	3779	3960.3

Project Number: **TSP13999**
 Project Name: **Immingham, North East Lincolnshire**
 Survey Type: **Manual Classified Turning Count**
 Site No: **2**
 Location: **Moody Lane /Westgate/Pyewipe Road/Birchin Way/A180**
 Date: **18 October 2018, Thursday**



Time	Whole Junction									TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCV	PCV	TOTAL	
07:00	612	147	42	24	1	6	7	1	840	894.2
07:15	638	145	29	40	1	6	8	0	867	935.7
07:30	812	183	35	31	1	5	8	0	1075	1134
07:45	781	190	39	37	1	5	11	0	1064	1131
H/Total	2843	665	145	132	4	22	34	1	3846	4094.9
08:00	836	203	31	19	2	4	4	0	1099	1142.8
08:15	812	192	44	29	2	6	4	1	1090	1154.5
08:30	696	200	44	34	2	6	1	0	983	1056.6
08:45	652	203	69	26	1	5	3	0	959	1031.5
H/Total	2996	798	188	108	7	21	12	1	4131	4385.4
09:00	617	176	41	37	1	8	3	1	884	959
09:15	469	164	54	28	1	4	2	0	722	789.2
09:30	500	169	44	31	1	5	4	0	754	819.9
09:45	513	156	46	27	1	4	5	0	752	812.1
H/Total	2099	665	185	123	4	21	14	1	3112	3380.2
Total	7938	2128	518	363	15	64	60	3	11089	11861

Peak Hours	Totals
07:00 08:00	3846
07:15 08:15	4105
07:30 08:30	4328
07:45 08:45	4236

08:00 09:00	4131
08:15 09:15	3916
08:30 09:30	3548
08:45 09:45	3319

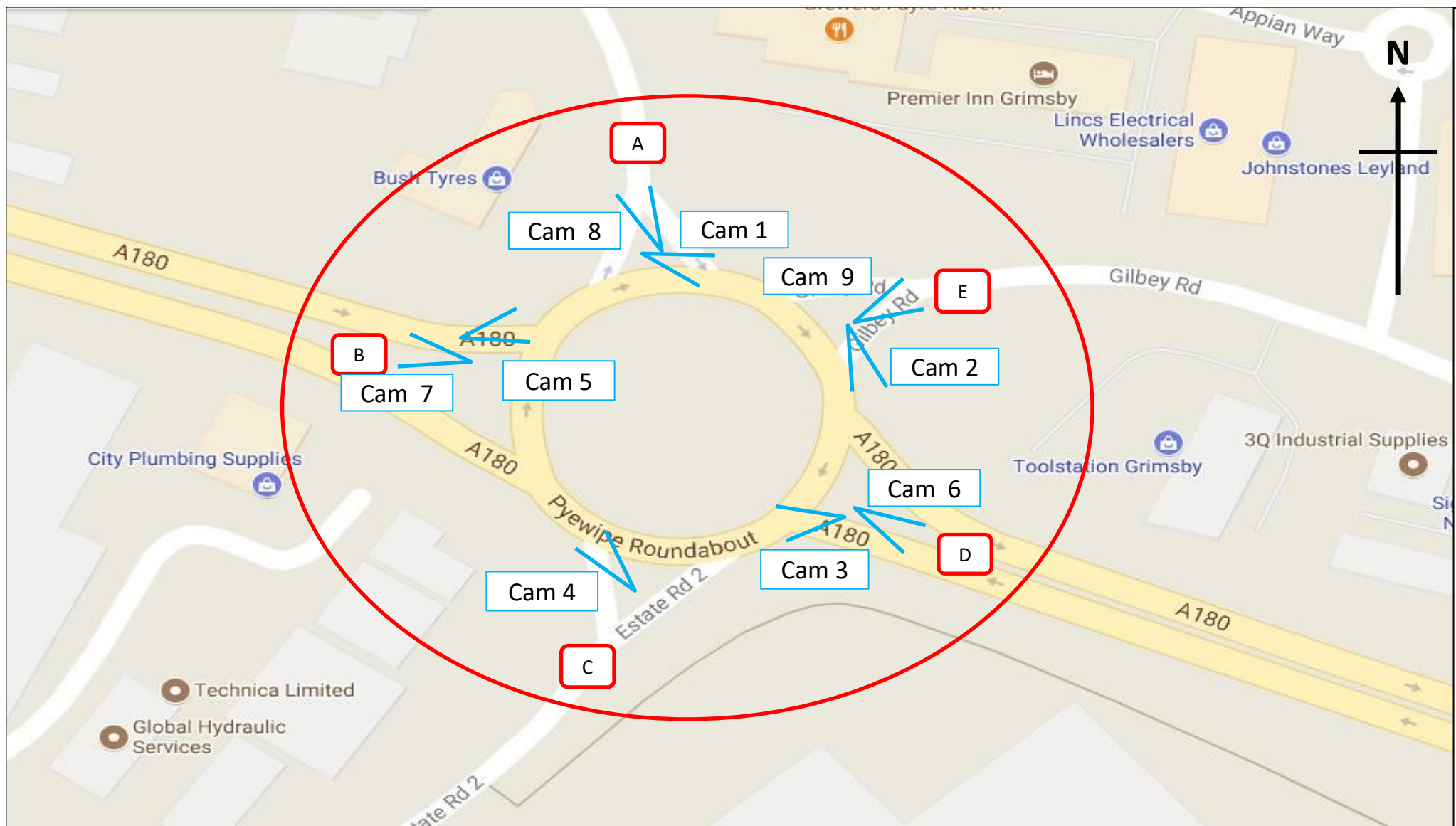
09:00 10:00	3112
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Time	Whole Junction									TOTAL (PCU)
	CAR	LGV	OGV 1	OGV 2	BUS	COACH	MCV	PCV	TOTAL	
16:00	842	156	21	22	2	9	11	0	1063	1106.5
16:15	904	159	17	22	1	5	13	2	1123	1156.7
16:30	951	149	21	28	1	10	16	0	1176	1224.3
16:45	935	164	13	15	1	9	5	0	1142	1175
H/Total	3632	628	72	87	5	33	45	2	4504	4662.5
17:00	1022	139	10	14	1	3	5	5	1199	1219.2
17:15	889	115	6	14	3	5	5	0	1037	1063.2
17:30	971	125	12	15	3	1	8	0	1135	1159.7
17:45	807	90	4	21	0	2	6	3	933	958.3
H/Total	3689	469	32	64	7	11	24	8	4304	4400.4
18:00	817	84	11	13	0	1	6	3	935	952.4
18:15	625	63	5	16	1	5	3	0	718	745.5
18:30	655	52	3	11	1	0	5	2	729	741.2
18:45	607	48	4	10	0	2	6	2	679	690.8
H/Total	2704	247	23	50	2	8	20	7	3061	3129.9
Total	10025	1344	127	201	14	52	89	17	11869	12193

Peak Hours	Totals
16:00 17:00	4504
16:15 17:15	4640
16:30 17:30	4554
16:45 17:45	4513

17:00 18:00	4304
17:15 18:15	4040
17:30 18:30	3721
17:45 18:45	3315

18:00 19:00	3061
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	Site / Location:	Site 6, A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road	Project No:	7614	Drawing No:	7614-06	Drawn By:	EA
	Survey Date:	Thursday 6th July 2017	Project Name:	Stallingborough				
	Survey Times:	07:00 to 10:00 & 16:00 to 19:00	Drawing Title:	Site Layout and Observed Movements				



SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	A to E						TOT	A to D						TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL		CAR	LGV	OGV1	OGV2	PSV	MCL	
07:00	0	1	0	0	0	0	2	3	1	1	0	0	0	2
07:15	0	1	0	0	0	0	1	2	1	0	0	3	0	4
07:30	2	1	0	0	0	0	0	3	5	1	2	0	0	8
07:45	2	3	1	0	0	0	0	6	7	2	2	0	0	11
H/TOT	4	6	1	0	0	0	3	14	14	4	4	3	0	25
08:00	1	1	0	0	0	0	0	2	3	4	5	1	0	13
08:15	3	1	0	0	0	0	0	4	6	2	0	1	0	9
08:30	4	3	1	1	0	0	0	9	6	2	0	1	0	9
08:45	2	1	2	0	0	0	0	5	7	5	0	0	0	12
H/TOT	10	6	3	1	0	0	0	20	22	13	5	3	0	43
09:00	1	1	0	0	0	0	0	2	15	3	2	0	0	20
09:15	1	1	0	0	0	0	0	2	12	3	3	0	0	18
09:30	2	6	1	0	0	0	1	10	10	8	3	0	0	21
09:45	1	0	0	0	0	0	0	1	13	3	3	1	0	21
H/TOT	5	8	1	0	0	0	1	15	50	17	11	1	0	80
P/TOT	19	20	5	1	0	0	4	49	86	34	20	7	0	148

TIME	A to E						TOT	A to D						TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL		CAR	LGV	OGV1	OGV2	PSV	MCL	
16:00	2	2	0	1	0	0	7	12	38	6	1	1	0	46
16:15	0	0	0	0	0	1	3	4	27	3	0	0	2	32
16:30	0	1	0	0	0	0	6	7	58	7	0	0	4	69
16:45	1	0	1	0	0	0	0	2	27	2	1	0	0	30
H/TOT	3	3	1	1	0	1	16	25	150	18	2	1	6	177
17:00	1	0	0	0	0	0	12	13	31	9	0	0	1	41
17:15	1	0	0	0	0	0	1	2	15	1	1	0	0	18
17:30	3	1	0	0	0	0	4	8	12	1	0	1	0	14
17:45	1	0	0	0	0	0	6	7	9	2	0	0	0	11
H/TOT	6	1	0	0	0	0	23	30	67	13	1	1	2	84
18:00	1	0	0	0	0	0	33	34	16	2	0	0	0	19
18:15	1	0	0	0	0	0	1	2	4	1	1	0	0	8
18:30	1	0	0	0	0	0	4	5	9	0	0	0	1	10
18:45	1	0	0	0	0	0	1	2	8	0	0	0	0	8
H/TOT	4	0	0	0	0	0	39	43	37	3	1	1	0	45
P/TOT	13	4	1	1	0	1	78	98	254	34	4	3	9	306



SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
07:30	0	0	0	0	0	0	0	0	3	1	3	3	0	0	0	10
07:45	1	1	0	0	0	0	0	2	1	1	1	1	0	0	0	4
H/TOT	2	1	0	0	0	0	0	3	7	2	4	4	0	0	0	17
08:00	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	2
08:15	1	1	0	0	0	0	0	2	3	2	1	0	0	0	0	6
08:30	1	0	1	0	0	0	0	2	0	6	1	2	0	0	0	9
08:45	0	0	1	0	0	0	0	1	3	3	2	1	0	0	0	9
H/TOT	3	1	2	0	0	0	0	4	7	12	4	3	0	0	0	26
09:00	1	1	0	0	0	0	0	2	6	1	0	1	0	0	0	8
09:15	0	1	0	1	0	0	0	2	2	4	3	0	0	2	0	11
09:30	0	1	1	0	0	0	0	2	0	3	2	1	0	0	0	6
09:45	0	0	0	0	0	0	0	0	5	3	1	2	0	0	0	11
H/TOT	1	3	1	1	0	0	0	4	13	11	6	4	0	2	0	36
P/TOT	6	5	3	1	0	0	0	15	27	25	14	11	0	2	0	79

TIME	A to C							TOT	A to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	1	1	1	0	0	0	0	3	16	4	1	0	0	0	0	21
16:15	1	2	0	0	0	0	0	3	7	0	1	2	0	0	0	10
16:30	0	0	0	0	0	0	0	0	9	3	0	1	0	0	0	13
16:45	1	2	0	0	0	0	0	3	10	1	3	1	0	0	0	15
H/TOT	3	5	1	0	0	0	0	9	42	8	5	4	0	0	0	59
17:00	0	0	0	0	0	0	0	0	8	2	1	1	0	0	0	12
17:15	0	0	0	0	0	0	0	0	8	2	1	0	0	0	0	11
17:30	1	0	0	0	0	0	0	1	4	1	0	1	0	0	0	6
17:45	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
H/TOT	1	0	0	0	0	0	0	1	25	5	2	2	0	0	0	34
18:00	0	0	0	0	0	0	0	0	4	2	0	1	0	0	0	7
18:15	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	5
18:30	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
18:45	1	0	0	0	0	0	0	1	6	1	0	0	0	0	0	7
H/TOT	1	0	0	0	0	0	0	1	14	3	0	2	0	2	0	21
P/TOT	5	5	1	0	0	0	0	11	81	16	7	8	0	2	0	114



SITE: 6 DATE: 06/07/2017
LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gilbey Road DAY: Thursday

TIME	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	A to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	1	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	1	0	0	0	0	0	1



SITE:

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DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	B to A							TOT	B to E							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	16	3	1	2	0	1	0	23	5	6	0	1	0	1	0	13
07:15	18	7	1	3	0	0	0	29	6	4	4	1	0	0	0	15
07:30	21	0	0	0	0	0	0	21	9	4	0	2	0	0	0	15
07:45	38	8	3	5	0	0	0	54	15	5	4	2	0	0	0	26
H/TOT	93	18	5	10	0	1	0	127	35	19	8	6	0	1	0	69
08:00	11	1	4	4	0	0	0	20	13	3	2	3	0	0	0	21
08:15	18	7	0	2	0	0	0	27	16	4	0	1	0	0	0	21
08:30	14	4	0	3	0	0	0	21	20	7	3	5	0	0	0	35
08:45	10	6	5	1	0	0	1	23	18	4	1	3	0	0	0	26
H/TOT	53	18	9	10	0	0	1	91	67	18	6	12	0	0	0	103
09:00	9	6	4	0	0	0	0	19	11	6	2	1	0	0	0	20
09:15	3	4	3	2	0	0	0	12	6	6	2	1	0	0	0	15
09:30	4	2	2	1	0	0	0	9	10	2	2	2	0	0	0	16
09:45	2	8	3	3	0	0	0	16	6	3	4	3	0	0	0	16
H/TOT	18	20	12	6	0	0	0	56	33	17	10	7	0	0	0	67
P/TOT	164	56	26	26	0	1	1	274	135	54	24	25	0	1	0	239

TIME	B to A							TOT	B to E							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	4	1	1	0	0	0	0	6	4	2	5	1	0	0	0	12
16:15	6	4	0	0	0	0	0	10	5	7	1	2	0	0	0	15
16:30	2	2	3	0	0	0	0	7	6	7	0	0	0	0	0	13
16:45	2	2	0	1	0	0	0	5	5	4	1	3	0	0	0	13
H/TOT	14	9	4	1	0	0	0	28	20	20	7	6	0	0	0	53
17:00	1	0	1	0	0	0	0	2	6	0	0	0	0	0	0	6
17:15	4	0	0	0	0	0	0	4	16	2	1	1	0	0	0	20
17:30	6	0	0	0	0	0	0	6	4	4	0	0	0	0	0	8
17:45	10	1	1	1	0	0	0	13	3	2	0	0	0	0	0	5
H/TOT	21	1	2	1	0	0	0	25	29	8	1	1	0	0	0	39
18:00	3	0	0	0	0	0	0	3	5	2	1	1	0	0	0	9
18:15	1	0	3	0	0	3	0	7	5	1	0	0	0	0	0	6
18:30	5	0	0	0	0	0	0	5	4	1	1	0	0	0	0	6
18:45	0	0	0	0	0	0	0	0	3	2	0	1	0	0	0	6
H/TOT	9	0	3	0	0	3	0	15	17	6	2	2	0	0	0	27
P/TOT	44	10	9	2	0	3	0	68	66	34	10	9	0	0	0	119



SITE:

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DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	B to D							TOT	B to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	118	47	16	22	0	2	0	205	6	3	0	6	0	1	0	16
07:15	120	32	14	14	2	0	0	182	11	3	4	1	0	0	0	19
07:30	150	36	17	17	1	4	0	225	13	6	2	2	0	1	0	24
07:45	290	52	19	19	0	1	0	381	25	7	2	3	0	0	0	37
H/TOT	678	167	66	72	3	7	0	993	55	19	8	12	0	2	0	96
08:00	300	43	10	10	3	3	0	369	7	3	1	1	0	0	0	12
08:15	314	39	16	16	2	1	0	388	22	1	2	3	1	1	0	30
08:30	259	35	18	18	1	0	0	331	13	8	8	7	0	0	0	36
08:45	205	47	14	14	0	1	0	281	10	5	2	3	2	0	0	22
H/TOT	1078	164	58	58	6	5	0	1369	52	17	13	14	3	1	0	100
09:00	189	40	13	13	2	1	0	258	7	2	3	3	1	0	0	16
09:15	182	35	15	15	3	1	0	251	7	3	3	4	0	0	0	17
09:30	166	38	12	12	1	2	0	231	11	5	1	3	0	0	0	20
09:45	164	38	16	16	3	1	0	238	15	5	4	5	0	0	0	29
H/TOT	701	151	56	56	9	5	0	978	40	15	11	15	1	0	0	82
P/TOT	2457	482	180	186	18	17	0	3340	147	51	32	41	4	3	0	278

TIME	B to D							TOT	B to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	279	75	10	11	3	3	0	381	5	6	6	2	0	0	0	19
16:15	271	50	9	7	1	4	0	342	2	3	3	2	0	0	0	10
16:30	335	51	2	7	2	3	0	400	3	3	0	1	3	0	0	10
16:45	317	53	5	7	0	3	0	385	10	1	4	3	1	0	0	19
H/TOT	1202	229	26	32	6	13	0	1508	20	13	13	8	4	0	0	58
17:00	341	52	5	2	2	2	0	404	4	2	0	2	0	0	0	8
17:15	350	46	7	10	0	4	0	417	6	5	2	2	1	1	0	17
17:30	311	28	3	9	2	3	0	356	7	3	2	3	0	0	0	15
17:45	262	38	3	4	0	3	0	310	4	3	1	1	0	0	0	9
H/TOT	1264	164	18	25	4	12	0	1487	21	13	5	8	1	1	0	49
18:00	320	32	7	8	3	2	0	372	1	0	0	0	0	0	0	1
18:15	229	30	5	1	0	2	0	267	6	0	0	0	0	0	0	6
18:30	216	23	3	5	1	0	0	248	6	1	0	1	0	0	0	8
18:45	161	10	3	5	3	1	0	183	4	2	0	1	0	0	0	7
H/TOT	926	95	18	19	7	5	0	1070	17	3	0	2	0	0	0	22
P/TOT	3392	488	62	76	17	30	0	4065	58	29	18	18	5	1	0	129



SITE: 6 DATE: 06/07/2017
LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gilbey Road DAY: Thursday

TIME	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	1	0	0	0	0	0	0	1
08:30	0	0	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	1
H/TOT	2	0	0	0	0	0	0	2
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	1	0	0	0	0	0	1
09:45	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1
P/TOT	2	1	0	0	0	0	0	3

TIME	B to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0
16:15	1	0	0	0	0	0	0	1
16:30	1	0	0	0	0	0	0	1
16:45	1	0	0	0	0	0	0	1
H/TOT	3	0	0	0	0	0	0	3
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	1	0	1
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	1	0	1
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	1	0	0	0	0	0	1
18:45	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1
P/TOT	3	1	0	0	0	1	0	5



SITE:

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DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	C to B						TOT	C to A						TOT		
	CAR	LGV	OGV1	OGV2	PSV	MCL		PCL	CAR	LGV	OGV1	OGV2	PSV		MCL	PCL
07:00	1	5	0	4	1	0	0	11	0	0	0	0	0	0	0	0
07:15	5	2	2	2	1	0	0	12	0	1	0	0	0	0	0	1
07:30	5	5	1	6	1	0	0	18	2	0	0	0	0	0	0	2
07:45	9	6	3	4	2	0	0	24	0	2	1	0	0	0	0	3
H/TOT	20	18	6	16	5	0	0	65	2	3	1	0	0	0	0	6
08:00	7	8	5	4	0	0	0	24	0	0	0	0	0	0	0	0
08:15	3	10	3	6	1	0	0	23	3	0	0	1	0	0	0	4
08:30	8	7	2	4	0	0	0	21	0	3	0	0	0	0	0	3
08:45	5	9	3	6	0	0	0	23	0	2	0	0	0	0	1	3
H/TOT	23	34	13	20	1	0	0	91	3	5	0	1	0	0	1	10
09:00	7	4	2	2	0	0	0	15	1	1	0	0	0	0	0	2
09:15	9	5	3	5	0	0	0	22	0	1	0	0	0	0	0	1
09:30	7	16	3	4	0	0	0	30	4	0	1	0	0	0	0	5
09:45	11	4	3	4	0	0	0	22	1	0	0	0	0	0	0	1
H/TOT	34	29	11	15	0	0	0	89	6	2	1	0	0	0	0	9
P/TOT	77	81	30	51	6	0	0	245	11	10	2	1	0	0	1	25

TIME	C to B							TOT	C to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	25	10	0	2	0	1	0	38	0	0	0	0	0	0	0	0
16:15	19	6	5	3	0	0	0	33	0	1	0	0	0	0	0	1
16:30	37	5	2	3	0	1	0	48	0	0	1	0	0	0	0	1
16:45	40	3	1	3	0	0	0	47	0	1	0	0	0	0	0	1
H/TOT	121	24	8	11	0	2	0	166	0	2	1	0	0	0	0	3
17:00	51	9	4	1	0	0	0	65	0	0	0	0	0	0	0	0
17:15	27	4	1	1	0	0	0	33	0	0	0	0	0	0	0	0
17:30	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
17:45	9	3	0	2	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	96	17	5	4	0	0	0	122	0	0	0	0	0	0	0	0
18:00	12	0	0	2	0	0	0	14	0	0	0	0	0	0	0	0
18:15	3	1	0	1	0	0	0	5	0	0	0	0	0	0	0	0
18:30	3	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0
18:45	2	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	20	1	0	6	0	0	0	27	0	0	0	0	0	0	0	0
P/TOT	237	42	13	21	0	2	0	315	0	2	1	0	0	0	0	3



SITE:

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DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	C to E						TOT	C to D						TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL		CAR	LGV	OGV1	OGV2	PSV	MCL	
07:00	0	0	0	0	0	0	0	10	3	2	1	3	0	19
07:15	0	0	0	0	0	0	0	8	8	0	2	6	0	24
07:30	1	0	1	0	0	0	2	12	4	2	3	4	0	25
07:45	2	1	0	0	0	0	3	21	8	2	0	1	0	32
H/TOT	3	1	1	0	0	0	5	51	23	6	6	14	0	100
08:00	0	3	1	0	0	0	4	26	19	7	6	1	0	59
08:15	0	3	0	1	0	0	4	33	14	4	1	1	0	53
08:30	0	1	2	0	0	0	3	22	10	4	1	0	0	37
08:45	0	4	1	0	0	0	5	30	8	7	1	0	0	46
H/TOT	0	11	4	1	0	0	16	111	51	22	9	2	0	195
09:00	1	3	2	0	0	0	6	26	7	4	1	0	0	38
09:15	2	4	0	0	0	0	6	30	13	5	2	0	1	51
09:30	3	1	0	0	0	0	4	35	23	7	5	0	1	71
09:45	3	2	0	1	0	0	6	27	15	2	2	0	0	46
H/TOT	9	10	2	1	0	0	22	118	58	18	10	0	2	206
P/TOT	12	22	7	2	0	0	43	280	132	46	25	16	2	501

TIME	C to E						TOT	C to D						TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL		CAR	LGV	OGV1	OGV2	PSV	MCL	
16:00	2	0	0	0	0	0	2	71	13	2	0	0	0	86
16:15	2	2	0	0	0	0	4	44	10	1	1	1	0	57
16:30	0	2	1	0	0	0	3	74	12	1	1	0	0	88
16:45	2	1	0	0	0	0	3	46	12	4	1	0	0	63
H/TOT	6	5	1	0	0	0	12	235	47	8	3	1	0	294
17:00	1	0	0	0	0	0	1	91	6	0	2	0	5	104
17:15	1	0	0	0	0	0	1	41	7	0	0	0	0	48
17:30	3	2	0	0	0	0	5	35	6	1	1	0	0	43
17:45	0	0	0	0	0	0	0	31	6	1	2	0	0	40
H/TOT	5	2	0	0	0	0	7	198	25	2	5	0	5	235
18:00	0	0	0	1	0	0	1	31	7	1	0	0	0	39
18:15	0	0	0	0	0	0	0	24	2	1	1	0	1	29
18:30	0	0	0	0	0	0	0	19	3	0	0	0	0	22
18:45	1	0	0	0	0	0	1	27	4	1	2	0	0	34
H/TOT	1	0	0	1	0	0	2	101	16	3	3	0	1	124
P/TOT	12	7	1	1	0	0	21	534	88	13	11	1	6	653



SITE: 6 DATE: 06/07/2017
LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gilbey Road DAY: Thursday

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	1	0	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	1	0	0	0	0	0	1
08:45	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1
09:00	1	0	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
P/TOT	2	1	0	0	0	0	0	3

TIME	C to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0



7614 / STALLINGBOROUGH
JULY 2017
CLASSIFIED TURNING COUNT

SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	34	5	0	2	0	0	0	41	281	72	16	10	1	2	0	382
07:15	38	11	3	1	0	1	0	54	320	63	6	10	5	4	0	408
07:30	62	10	4	2	0	0	0	78	345	66	6	11	1	2	0	431
07:45	70	18	4	4	0	1	0	97	285	56	16	9	2	4	0	372
H/TOT	204	44	11	9	0	2	0	270	1231	257	44	40	9	12	0	1593
08:00	40	20	5	2	1	1	0	69	256	65	12	13	4	1	0	351
08:15	55	19	5	0	1	1	0	81	195	39	12	9	1	0	0	256
08:30	41	11	1	2	0	0	0	55	183	34	8	14	0	1	0	240
08:45	31	15	6	1	0	0	0	53	142	33	9	14	2	3	0	203
H/TOT	167	65	17	5	2	2	0	258	776	171	41	50	7	5	0	1050
09:00	40	14	10	1	0	0	0	65	146	42	15	16	1	0	0	220
09:15	33	19	2	2	2	0	0	58	162	48	20	8	3	3	0	244
09:30	40	20	5	1	1	0	0	67	116	36	14	9	0	2	0	177
09:45	32	17	5	0	0	1	0	55	149	33	15	13	2	0	0	212
H/TOT	145	70	22	4	3	1	0	245	573	159	64	46	6	5	0	853
P/TOT	516	179	50	18	5	5	0	773	2580	587	149	136	22	22	0	3494

TIME	D to C							TOT	D to B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	35	8	3	1	3	0	0	50	229	31	12	8	0	2	1	283
16:15	29	9	3	3	2	1	0	47	231	35	8	16	3	1	0	294
16:30	30	10	1	0	1	0	0	42	249	31	6	12	2	4	0	304
16:45	25	2	2	1	3	1	0	34	256	25	4	7	2	3	0	297
H/TOT	119	29	9	5	9	2	0	173	965	122	30	43	7	10	1	1178
17:00	29	6	1	0	1	0	0	37	292	27	4	5	1	7	0	336
17:15	28	2	2	1	0	0	0	33	300	24	4	10	1	4	0	343
17:30	24	1	1	2	0	0	0	28	263	20	2	10	0	5	0	300
17:45	22	2	0	1	0	0	0	25	210	18	2	6	1	1	0	238
H/TOT	103	11	4	4	1	0	0	123	1065	89	12	31	3	17	0	1217
18:00	29	1	0	0	1	1	0	32	213	21	5	7	1	0	0	247
18:15	21	3	0	2	0	0	0	26	171	17	5	5	1	0	0	199
18:30	18	5	2	0	0	0	0	25	148	12	2	4	0	1	0	167
18:45	16	3	0	1	0	0	1	21	145	9	3	5	0	2	0	164
H/TOT	84	12	2	3	1	1	1	104	677	59	15	21	2	3	0	777
P/TOT	306	52	15	12	11	3	1	400	2707	270	57	95	12	30	1	3172



SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	D to A							TOT	D to E							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	13	8	1	0	0	0	0	22	7	6	1	0	0	0	0	14
07:15	20	7	3	1	0	0	0	31	11	7	1	1	0	0	0	20
07:30	18	3	0	0	0	0	0	21	10	4	0	0	0	0	0	14
07:45	32	7	1	0	0	1	0	41	20	5	0	0	0	0	0	25
H/TOT	83	25	5	1	0	1	0	115	48	22	2	1	0	0	0	73
08:00	20	4	3	1	0	0	0	28	12	10	0	0	0	0	0	22
08:15	11	7	1	2	0	0	0	21	29	10	1	0	0	0	0	40
08:30	12	2	2	0	0	0	0	16	15	6	2	0	0	0	0	23
08:45	17	2	1	1	0	1	0	22	16	1	0	0	0	0	0	17
H/TOT	60	15	7	4	0	1	0	87	72	27	3	0	0	0	0	102
09:00	11	3	4	0	0	0	0	18	16	7	0	1	0	0	0	24
09:15	19	5	4	1	0	2	0	31	17	12	0	0	0	0	0	29
09:30	13	3	2	3	0	0	0	21	13	7	2	0	0	0	0	22
09:45	11	6	1	4	0	1	0	23	17	5	1	0	0	0	0	23
H/TOT	54	17	11	8	0	3	0	93	63	31	3	1	0	0	0	98
P/TOT	197	57	23	13	0	5	0	295	183	80	8	2	0	0	0	273

TIME	D to A							TOT	D to E							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	5	1	0	0	0	0	0	6	9	7	0	0	0	0	0	16
16:15	7	2	0	1	0	0	0	10	10	9	0	0	0	0	0	19
16:30	4	3	1	0	0	0	0	8	11	2	2	0	0	0	0	15
16:45	2	0	1	0	0	0	0	3	8	1	0	0	0	0	0	9
H/TOT	18	6	2	1	0	0	0	27	38	19	2	0	0	0	0	59
17:00	5	3	0	0	0	0	0	8	10	2	0	0	0	0	0	12
17:15	1	1	0	0	0	0	0	2	11	1	1	0	0	0	0	13
17:30	3	0	0	0	0	0	0	3	8	0	0	0	0	0	0	8
17:45	8	0	0	0	0	0	0	8	13	2	0	0	0	0	0	15
H/TOT	17	4	0	0	0	0	0	21	42	5	1	0	0	0	0	48
18:00	6	0	0	1	0	0	0	7	8	2	0	0	0	0	0	10
18:15	8	0	0	0	0	0	0	8	12	0	0	0	0	0	0	12
18:30	1	0	0	0	0	0	0	1	13	0	0	0	0	0	0	13
18:45	1	0	0	0	0	0	0	1	7	1	0	1	0	0	0	9
H/TOT	16	0	0	1	0	0	0	17	40	3	0	1	0	0	0	44
P/TOT	51	10	2	2	0	0	0	65	120	27	3	1	0	0	0	151



SITE: 6 DATE: 06/07/2017
LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gilbey Road DAY: Thursday

TIME	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	2	1	0	0	0	0	0	3
07:30	1	0	0	0	0	0	0	1
07:45	3	1	0	0	0	0	0	4
H/TOT	6	2	0	0	0	0	0	8
08:00	0	0	0	0	0	0	0	0
08:15	2	0	0	0	0	0	0	2
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	8	2	0	0	0	0	0	10

TIME	D to D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	1	0	0	0	0	0	0	1
16:15	2	0	0	0	0	0	0	2
16:30	1	0	0	0	0	0	0	1
16:45	1	0	0	0	0	0	0	1
H/TOT	5	0	0	0	0	0	0	5
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
18:00	1	2	0	0	0	0	0	3
18:15	1	1	0	0	0	0	0	2
18:30	2	0	0	0	0	0	0	2
18:45	1	0	0	0	0	0	0	1
H/TOT	5	3	0	0	0	0	0	8
P/TOT	11	3	0	0	0	0	0	14



SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	E to D							TOT	E to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	2	3	21	0	0	0	0	26	0	1	0	0	0	0	0	1
07:15	4	5	2	0	0	0	0	11	0	1	0	0	0	0	0	1
07:30	0	3	1	0	0	0	0	4	0	1	0	0	0	0	0	1
07:45	8	8	1	1	0	0	0	18	1	1	0	0	0	0	0	2
H/TOT	14	19	25	1	0	0	0	59	1	4	0	0	0	0	0	5
08:00	9	7	1	0	0	0	0	17	3	4	1	0	0	0	0	8
08:15	5	3	1	0	0	0	0	9	3	2	0	0	0	0	1	6
08:30	11	6	1	1	0	0	0	19	5	4	0	0	0	0	0	9
08:45	8	6	1	0	0	0	0	15	2	2	0	0	0	0	0	4
H/TOT	33	22	4	1	0	0	0	60	13	12	1	0	0	0	1	27
09:00	13	6	2	0	0	0	0	21	6	4	0	0	0	0	0	10
09:15	13	7	0	1	0	0	0	21	6	0	0	0	0	0	0	6
09:30	22	15	4	0	0	0	0	41	5	2	0	0	0	0	0	7
09:45	28	4	3	0	0	0	0	35	2	3	0	0	0	0	0	5
H/TOT	76	32	9	1	0	0	0	118	19	9	0	0	0	0	0	28
P/TOT	123	73	38	3	0	0	0	237	33	25	1	0	0	0	1	60

TIME	E to D							TOT	E to C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	18	5	0	0	0	0	0	23	4	1	0	0	0	0	0	5
16:15	14	6	1	0	0	0	0	21	3	2	0	0	0	0	0	5
16:30	26	13	0	0	0	0	0	39	3	1	0	0	0	0	0	4
16:45	25	9	3	0	0	0	0	37	2	0	0	0	0	0	0	2
H/TOT	83	33	4	0	0	0	0	120	12	4	0	0	0	0	0	16
17:00	38	4	0	0	0	0	0	42	7	0	0	0	0	0	0	7
17:15	18	3	0	0	0	0	0	21	0	0	0	0	0	0	0	0
17:30	27	4	0	0	0	0	0	31	1	0	0	0	0	0	0	1
17:45	13	2	0	0	0	0	0	15	1	0	0	0	0	0	1	2
H/TOT	96	13	0	0	0	0	0	109	9	0	0	0	0	0	1	10
18:00	9	2	0	0	0	0	2	13	2	0	0	0	0	0	0	2
18:15	10	3	0	0	0	0	0	13	0	0	0	0	0	0	0	0
18:30	10	0	0	0	0	0	0	10	2	0	0	0	0	0	0	2
18:45	6	1	0	0	0	0	0	7	1	0	0	0	0	0	0	1
H/TOT	35	6	0	0	0	0	2	43	5	0	0	0	0	0	0	5
P/TOT	214	52	4	0	0	0	2	272	26	4	0	0	0	0	1	31



SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	E to B							TOT	E to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	3	8	2	0	0	0	0	14	0	0	0	0	0	0	0	0
07:15	4	9	0	0	0	0	0	13	0	0	0	0	0	0	0	0
07:30	3	4	0	3	0	0	0	10	0	0	0	0	0	0	0	0
07:45	3	3	3	2	0	0	0	11	0	0	0	0	0	0	0	0
H/TOT	13	24	5	6	0	0	0	48	0	0	0	0	0	0	0	0
08:00	5	6	0	1	0	0	0	12	2	0	0	0	0	0	0	2
08:15	6	3	1	3	0	0	0	13	1	1	0	1	0	0	0	3
08:30	6	4	1	1	0	0	0	12	0	0	0	0	0	0	0	0
08:45	6	4	9	0	0	0	0	19	0	0	0	0	0	0	0	0
H/TOT	23	17	11	5	0	0	0	56	3	1	0	1	0	0	0	5
09:00	7	5	0	3	0	0	0	15	0	0	0	1	0	0	0	1
09:15	7	8	2	3	0	0	0	20	0	1	0	0	0	1	0	2
09:30	5	9	2	5	0	0	0	21	0	2	0	0	0	0	0	2
09:45	7	4	1	5	0	0	0	17	0	0	1	0	0	0	0	1
H/TOT	26	26	5	16	0	0	0	73	0	3	1	1	0	1	0	6
P/TOT	62	67	21	27	0	0	0	177	3	4	1	2	0	1	0	11

TIME	E to B							TOT	E to A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	4	2	0	0	0	0	0	6	1	0	0	0	0	0	0	1
16:15	7	6	1	1	0	0	0	15	1	2	0	0	0	0	0	3
16:30	8	3	1	0	0	0	0	12	0	0	0	0	0	0	0	0
16:45	20	4	0	4	0	0	0	28	0	0	0	0	0	0	0	0
H/TOT	39	15	2	5	0	0	0	61	2	2	0	0	0	0	0	4
17:00	19	2	2	1	0	1	0	25	0	0	0	0	0	0	0	0
17:15	5	0	0	2	0	0	0	7	0	0	0	0	0	0	0	0
17:30	12	3	1	2	0	0	0	18	0	0	0	0	0	0	0	0
17:45	8	0	1	1	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	44	5	4	6	0	1	0	60	0	0	0	0	0	0	0	0
18:00	4	0	0	2	0	0	0	6	0	0	0	0	0	0	0	0
18:15	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
18:30	5	0	0	2	0	0	0	7	1	0	0	0	0	0	0	1
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	14	1	0	4	0	0	0	19	1	0	0	0	0	0	0	1
P/TOT	97	21	6	15	0	1	0	140	3	2	0	0	0	0	0	5



SITE: 6 DATE: 06/07/2017
LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gilbey Road DAY: Thursday

TIME	E to E							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	1	0	0	0	0	1
H/TOT	0	0	1	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1
09:30	1	0	0	0	0	0	0	1
09:45	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2
P/TOT	2	0	1	0	0	0	0	3

TIME	E to E							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	1	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	1	0	0	0	0	0	1

SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	29	11	2	2	0	1	0	45	3	2	0	0	0	0	2	7
07:15	38	15	4	4	0	0	0	61	3	1	0	3	0	0	1	8
07:30	41	3	0	0	0	0	0	44	10	3	5	3	0	0	0	21
07:45	70	17	5	5	0	1	0	98	11	7	4	1	0	0	0	23
H/TOT	178	46	11	11	0	2	0	248	27	13	9	7	0	0	3	59
08:00	33	5	7	5	0	0	0	50	6	6	5	1	0	0	0	18
08:15	33	15	1	6	0	0	0	55	13	6	1	1	0	0	0	21
08:30	26	9	2	3	0	0	0	40	11	11	3	4	0	0	0	29
08:45	27	10	6	2	0	1	2	48	12	9	5	1	0	0	0	27
H/TOT	119	39	16	16	0	1	2	193	42	32	14	7	0	0	0	95
09:00	21	10	8	1	0	0	0	40	23	6	2	1	0	0	0	32
09:15	22	11	7	3	0	3	0	46	15	9	6	1	0	2	0	33
09:30	21	7	5	4	0	0	0	37	12	18	7	1	0	0	1	39
09:45	14	14	5	7	0	1	0	41	19	6	4	3	0	1	0	33
H/TOT	78	42	25	15	0	4	0	144	69	39	19	6	0	3	1	137
P/TOT	375	127	52	42	0	7	2	605	138	84	42	20	0	3	4	291

TIME	TO ARM A							TOT	FROM ARM A							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	10	2	1	0	0	0	0	13	57	13	3	2	0	0	7	82
16:15	14	9	0	1	0	0	0	24	35	5	1	2	0	3	3	49
16:30	6	6	5	0	0	0	0	17	67	12	0	1	0	4	6	90
16:45	4	3	1	1	0	0	0	9	39	5	5	1	0	0	0	50
H/TOT	34	20	7	2	0	0	0	63	198	35	9	6	0	7	16	271
17:00	6	3	1	0	0	0	0	10	40	11	1	1	0	1	12	64
17:15	5	1	0	0	0	0	0	6	24	3	2	0	0	1	1	31
17:30	9	0	0	0	0	0	0	9	20	3	0	2	0	0	4	29
17:45	18	1	1	1	0	0	0	21	15	2	0	0	0	0	6	23
H/TOT	38	5	2	1	0	0	0	46	99	19	3	3	0	2	23	149
18:00	9	0	0	1	0	0	0	10	21	4	0	1	0	0	34	60
18:15	9	0	3	0	0	3	0	15	8	1	1	1	0	2	2	15
18:30	7	0	0	0	0	0	0	7	11	0	0	1	0	1	4	17
18:45	1	0	0	0	0	0	0	1	16	1	0	0	0	0	1	18
H/TOT	26	0	3	1	0	3	0	33	56	6	1	3	0	3	41	110
P/TOT	98	25	12	4	0	3	0	142	353	60	13	12	0	12	80	530



SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	286	85	18	15	2	2	0	408	145	59	17	31	0	5	0	257
07:15	331	74	8	12	6	4	0	435	155	46	23	19	2	0	0	245
07:30	356	76	10	23	2	2	0	469	193	46	19	21	1	5	0	285
07:45	298	66	23	16	4	4	0	411	368	72	28	29	0	1	0	498
H/TOT	1271	301	59	66	14	12	0	1723	861	223	87	100	3	11	0	1285
08:00	269	80	17	18	4	1	0	389	331	50	17	18	3	3	0	422
08:15	208	54	17	18	2	0	0	299	371	51	18	22	3	2	0	467
08:30	197	51	12	21	0	1	0	282	306	54	29	33	1	0	0	423
08:45	157	49	23	21	2	3	0	255	244	62	22	21	2	1	1	353
H/TOT	831	234	69	78	8	5	0	1225	1252	217	86	94	9	6	1	1665
09:00	166	52	17	22	1	0	0	258	216	54	22	17	3	1	0	313
09:15	180	65	28	16	3	5	0	297	198	48	23	22	3	1	0	295
09:30	128	65	21	19	0	2	0	235	191	48	17	18	1	2	0	277
09:45	172	44	20	24	2	0	0	262	187	54	27	27	3	1	0	299
H/TOT	646	226	86	81	6	7	0	1052	792	204	89	84	10	5	0	1184
P/TOT	2748	761	214	225	28	24	0	4000	2905	644	262	278	22	22	1	4134

TIME	TO ARM B							TOT	FROM ARM B							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	274	47	13	10	0	3	1	348	292	84	22	14	3	4	0	418
16:15	265	47	15	22	3	1	0	353	285	64	13	11	1	4	0	378
16:30	304	42	9	16	2	5	0	378	347	63	5	8	5	3	0	431
16:45	327	33	8	15	2	3	0	388	335	60	10	14	1	3	0	423
H/TOT	1170	169	45	63	7	12	1	1467	1259	271	50	47	10	13	0	1650
17:00	370	40	11	8	1	8	0	438	352	54	6	4	2	2	0	420
17:15	340	30	6	13	1	4	0	394	376	53	10	13	1	5	0	458
17:30	288	25	3	13	0	6	0	335	328	35	5	12	2	4	0	386
17:45	232	21	3	9	1	1	0	267	279	44	5	6	0	3	0	337
H/TOT	1230	116	23	43	3	19	0	1434	1335	186	26	35	5	14	0	1601
18:00	233	23	5	12	1	0	0	274	329	34	8	9	3	2	0	385
18:15	182	19	5	6	1	2	0	215	241	31	8	1	0	5	0	286
18:30	157	13	2	9	0	1	0	182	231	26	4	6	1	0	0	268
18:45	153	10	3	6	0	2	0	174	168	14	3	7	3	1	0	196
H/TOT	725	65	15	33	2	5	0	845	969	105	23	23	7	8	0	1135
P/TOT	3125	350	83	139	12	36	1	3746	3563	562	99	105	22	35	0	4386



SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	TO ARM C							TOT	FROM ARM C							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	41	9	0	8	0	1	0	59	11	8	2	5	4	0	0	30
07:15	49	15	7	2	0	1	0	74	13	11	2	4	7	0	0	37
07:30	76	17	6	4	0	1	0	104	21	9	4	9	5	0	0	48
07:45	97	27	6	7	0	1	0	138	32	17	6	4	3	0	0	62
H/TOT	263	68	19	21	0	4	0	375	77	45	14	22	19	0	0	177
08:00	51	27	7	3	1	1	0	90	33	30	13	10	1	0	0	87
08:15	81	23	7	3	2	2	1	119	39	27	7	9	2	0	0	84
08:30	60	24	10	9	0	0	0	103	30	22	8	5	0	0	0	65
08:45	43	22	9	4	2	0	0	80	35	23	11	7	0	0	1	77
H/TOT	235	96	33	19	5	3	1	392	137	102	39	31	3	0	1	313
09:00	55	21	13	4	1	0	0	94	36	15	8	3	0	0	0	62
09:15	46	23	5	7	2	0	0	83	41	23	8	7	0	1	0	80
09:30	56	28	7	4	1	0	0	96	49	40	11	9	0	1	0	110
09:45	49	25	9	5	0	1	0	89	42	21	5	7	0	0	0	75
H/TOT	206	97	34	20	4	1	0	362	168	99	32	26	0	2	0	327
P/TOT	704	261	86	60	9	8	1	1129	382	246	85	79	22	2	1	817

TIME	TO ARM C						TOT	FROM ARM C						TOT		
	CAR	LGV	OGV1	OGV2	PSV	MCL		PCL	CAR	LGV	OGV1	OGV2	PSV		MCL	PCL
16:00	45	16	10	3	3	0	0	77	98	23	2	2	0	1	0	126
16:15	35	16	6	5	2	1	0	65	65	19	6	4	1	0	0	95
16:30	36	14	1	1	4	0	0	56	111	19	5	4	0	1	0	140
16:45	38	5	6	4	4	1	0	58	88	17	5	4	0	0	0	114
H/TOT	154	51	23	13	13	2	0	256	362	78	18	14	1	2	0	475
17:00	40	8	1	2	1	0	0	52	143	15	4	3	0	5	0	170
17:15	34	7	4	3	1	1	0	50	69	11	1	1	0	0	0	82
17:30	33	4	3	5	0	0	0	45	47	9	1	1	0	0	0	58
17:45	27	5	1	2	0	0	1	36	40	9	1	4	0	0	0	54
H/TOT	134	24	9	12	2	1	1	183	299	44	7	9	0	5	0	364
18:00	32	1	0	0	1	1	0	35	43	7	1	3	0	0	0	54
18:15	27	3	0	2	0	0	0	32	27	3	1	2	0	1	0	34
18:30	26	6	2	1	0	0	0	35	22	3	0	2	0	0	0	27
18:45	22	5	0	2	0	0	1	30	30	4	1	3	0	0	0	38
H/TOT	107	15	2	5	1	1	1	132	122	17	3	10	0	1	0	153
P/TOT	395	90	34	30	16	4	2	571	783	139	28	33	1	8	0	992



SITE:

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DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	131	54	39	23	3	2	0	252	335	91	18	12	1	2	0	459
07:15	135	46	16	19	8	0	0	224	391	89	13	13	5	5	0	516
07:30	168	44	22	20	5	4	0	263	436	83	10	13	1	2	0	545
07:45	329	71	24	20	1	1	0	446	410	87	21	13	2	6	0	539
H/TOT	763	215	101	82	17	7	0	1185	1572	350	62	51	9	15	0	2052
08:00	338	75	23	17	4	3	0	458	328	99	20	16	5	2	0	470
08:15	360	58	21	18	3	1	0	461	292	75	19	11	2	1	0	400
08:30	298	53	23	21	1	0	0	396	251	53	13	16	0	1	0	334
08:45	250	66	22	15	0	1	0	354	206	51	16	16	2	4	0	295
H/TOT	1246	250	89	71	8	5	0	1662	1077	278	68	59	9	8	0	1499
09:00	243	56	21	14	2	1	0	337	213	66	29	18	1	0	0	327
09:15	237	58	23	18	3	2	0	341	231	84	26	11	5	5	0	362
09:30	233	84	26	17	1	3	0	364	182	66	23	13	1	2	0	287
09:45	232	60	24	19	3	2	0	340	209	61	22	17	2	2	0	313
H/TOT	945	258	94	68	9	8	0	1382	835	277	100	59	9	9	0	1289
P/TOT	2954	723	284	221	34	20	0	4236	3484	905	230	169	27	32	0	4847

TIME	TO ARM D							TOT	FROM ARM D							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	407	99	13	12	3	3	0	537	279	47	15	9	3	2	1	356
16:15	358	69	11	8	2	6	0	454	279	55	11	20	5	2	0	372
16:30	494	83	3	8	2	7	0	597	295	46	10	12	3	4	0	370
16:45	416	76	13	8	0	3	0	516	292	28	7	8	5	4	0	344
H/TOT	1675	327	40	36	7	19	0	2104	1145	176	43	49	16	12	1	1442
17:00	501	71	5	4	2	8	0	591	336	38	5	5	2	7	0	393
17:15	424	57	8	10	0	5	0	504	340	28	7	11	1	4	0	391
17:30	386	39	4	11	2	3	0	445	299	21	3	12	0	5	0	340
17:45	315	48	4	6	0	3	0	376	253	22	2	7	1	1	0	286
H/TOT	1626	215	21	31	4	19	0	1916	1228	109	17	35	4	17	0	1410
18:00	377	45	8	8	3	2	3	446	257	26	5	8	2	1	0	299
18:15	268	37	7	3	0	3	1	319	213	21	5	7	1	0	0	247
18:30	256	26	3	5	1	1	0	292	182	17	4	4	0	1	0	208
18:45	203	15	4	7	3	1	0	233	170	13	3	7	0	2	1	196
H/TOT	1104	123	22	23	7	7	4	1290	822	77	17	26	3	4	1	950
P/TOT	4405	665	83	90	18	45	4	5310	3195	362	77	110	23	33	2	3802



SITE:

6

DATE: 06/07/2017

LOCATION: A180 / Estate Road No 2 / Estate Road No 1 / Gillbey Road

DAY: Thursday

TIME	TO ARM E							TOT	FROM ARM E							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
07:00	12	13	1	1	0	1	2	30	5	12	23	1	0	0	0	41
07:15	17	12	5	2	0	0	1	37	8	15	2	0	0	0	0	25
07:30	22	9	1	2	0	0	0	34	3	8	1	3	0	0	0	15
07:45	39	14	5	2	0	0	0	60	12	12	4	3	0	0	0	31
H/TOT	90	48	12	7	0	1	3	161	28	47	30	7	0	0	0	112
08:00	26	17	3	3	0	0	0	49	19	17	2	1	0	0	0	39
08:15	48	18	1	2	0	0	0	69	15	9	2	4	0	0	1	31
08:30	39	17	8	6	0	0	0	70	22	14	2	2	0	0	0	40
08:45	36	10	5	3	0	0	0	54	16	12	11	0	0	0	0	39
H/TOT	149	62	17	14	0	0	0	242	72	52	17	7	0	0	1	149
09:00	29	17	4	2	0	0	0	52	26	15	2	4	0	0	0	47
09:15	27	23	2	1	0	0	0	53	27	16	2	4	0	1	0	50
09:30	29	16	5	2	0	0	1	53	33	28	6	5	0	0	0	72
09:45	27	10	5	4	0	0	0	46	37	11	5	5	0	0	0	58
H/TOT	112	66	16	9	0	0	1	204	123	70	15	18	0	1	0	227
P/TOT	351	176	45	30	0	1	4	607	223	169	62	32	0	1	1	488

TIME	TO ARM E							TOT	FROM ARM E							TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL		CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	
16:00	17	11	5	2	0	0	7	42	27	8	0	0	0	0	0	35
16:15	17	18	1	2	0	1	3	42	25	16	2	1	0	0	0	44
16:30	17	13	3	0	0	0	6	39	37	18	1	0	0	0	0	56
16:45	16	6	2	3	0	0	0	27	47	13	3	4	0	0	0	67
H/TOT	67	48	11	7	0	1	16	150	136	55	6	5	0	0	0	202
17:00	18	2	0	0	0	0	12	32	64	6	2	1	0	1	0	74
17:15	29	3	2	1	0	0	1	36	23	3	0	2	0	0	0	28
17:30	18	7	0	0	0	0	4	29	40	7	1	2	0	0	0	50
17:45	17	4	0	0	0	0	6	27	22	2	1	1	0	0	1	27
H/TOT	82	16	2	1	0	0	23	124	149	18	4	6	0	1	1	179
18:00	14	4	1	2	0	0	33	54	15	2	0	2	0	0	2	21
18:15	18	1	0	0	0	0	1	20	15	4	0	0	0	0	0	19
18:30	18	1	1	0	0	0	4	24	18	0	0	2	0	0	0	20
18:45	12	3	0	2	0	0	1	18	7	1	0	0	0	0	0	8
H/TOT	62	9	2	4	0	0	39	116	55	7	0	4	0	0	2	68
P/TOT	211	73	15	12	0	1	78	390	340	80	10	15	0	1	3	449

SITE:

6

DATE: 06/07/2017

LOCATION:

A180 / Estate Road No 2 / Estate Road No 1 / Glibbey Road

DAY: Thursday

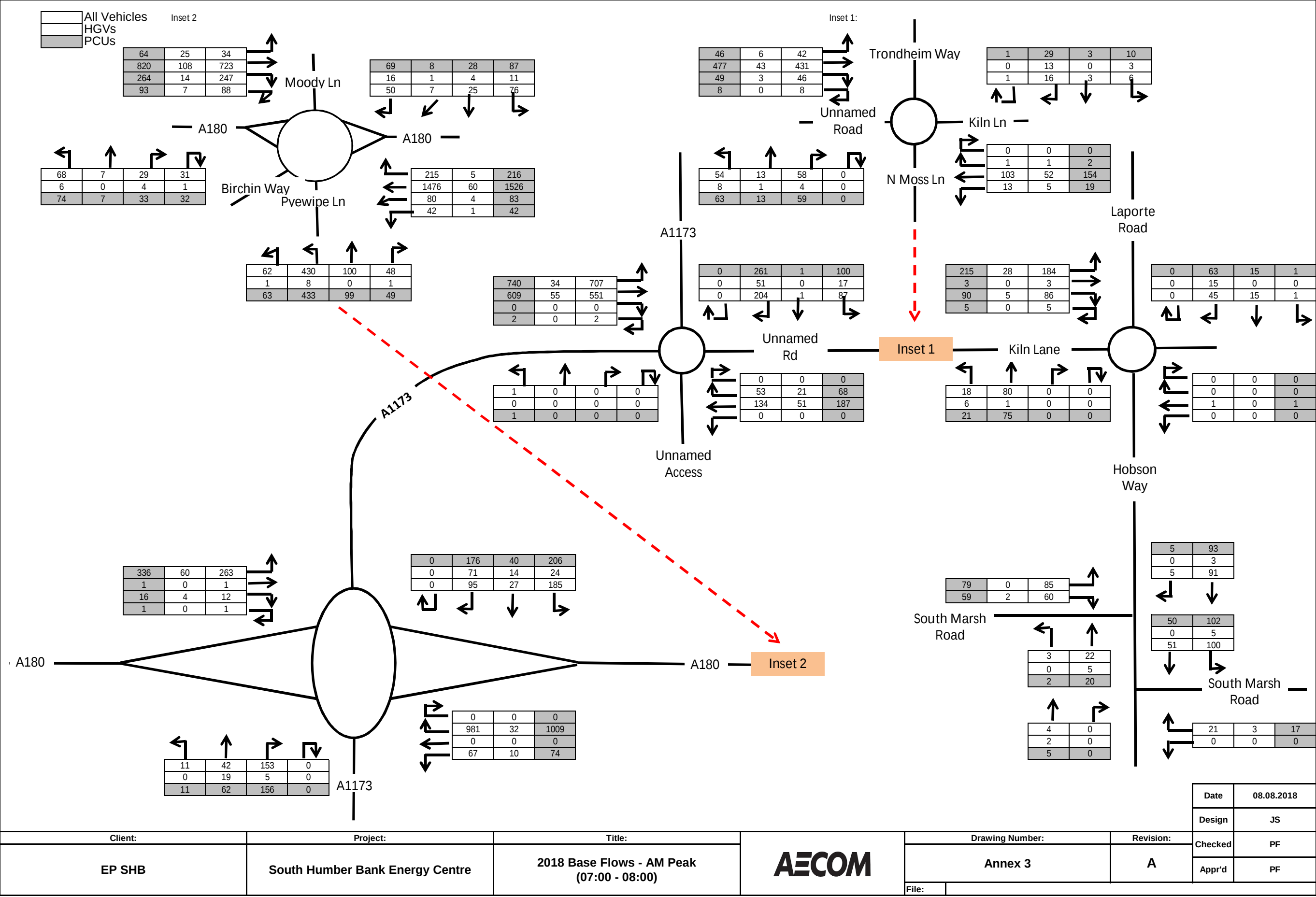
TIME	JUNCTION TOTAL						TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	
07:00	499	172	60	49	5	2	794
07:15	570	162	40	39	14	5	831
07:30	663	149	39	49	7	7	914
07:45	833	195	63	50	5	7	1153
H/TOT	2565	678	202	187	31	26	3692
08:00	717	202	57	46	9	5	1036
08:15	730	168	47	47	7	3	1003
08:30	620	154	55	60	1	1	891
08:45	513	157	65	45	4	5	791
H/TOT	2580	681	224	198	21	14	3721
09:00	514	156	63	43	4	1	781
09:15	512	180	65	45	8	10	820
09:30	467	200	64	46	2	5	785
09:45	494	153	63	59	5	4	778
H/TOT	1987	689	255	193	19	20	3164
P/TOT	7132	2048	681	578	71	60	10577

PEAK HOUR CALCULATION	
CALCULATION	TOT
07:00 to 08:00	3692
07:15 to 08:15	3934
07:30 to 08:30	4106
07:45 to 08:45	4083
08:00 to 09:00	3721
08:15 to 09:15	3466
08:30 to 09:30	3283
08:45 to 09:45	3177
09:00 to 10:00	3164
PEAK VALUE	4106

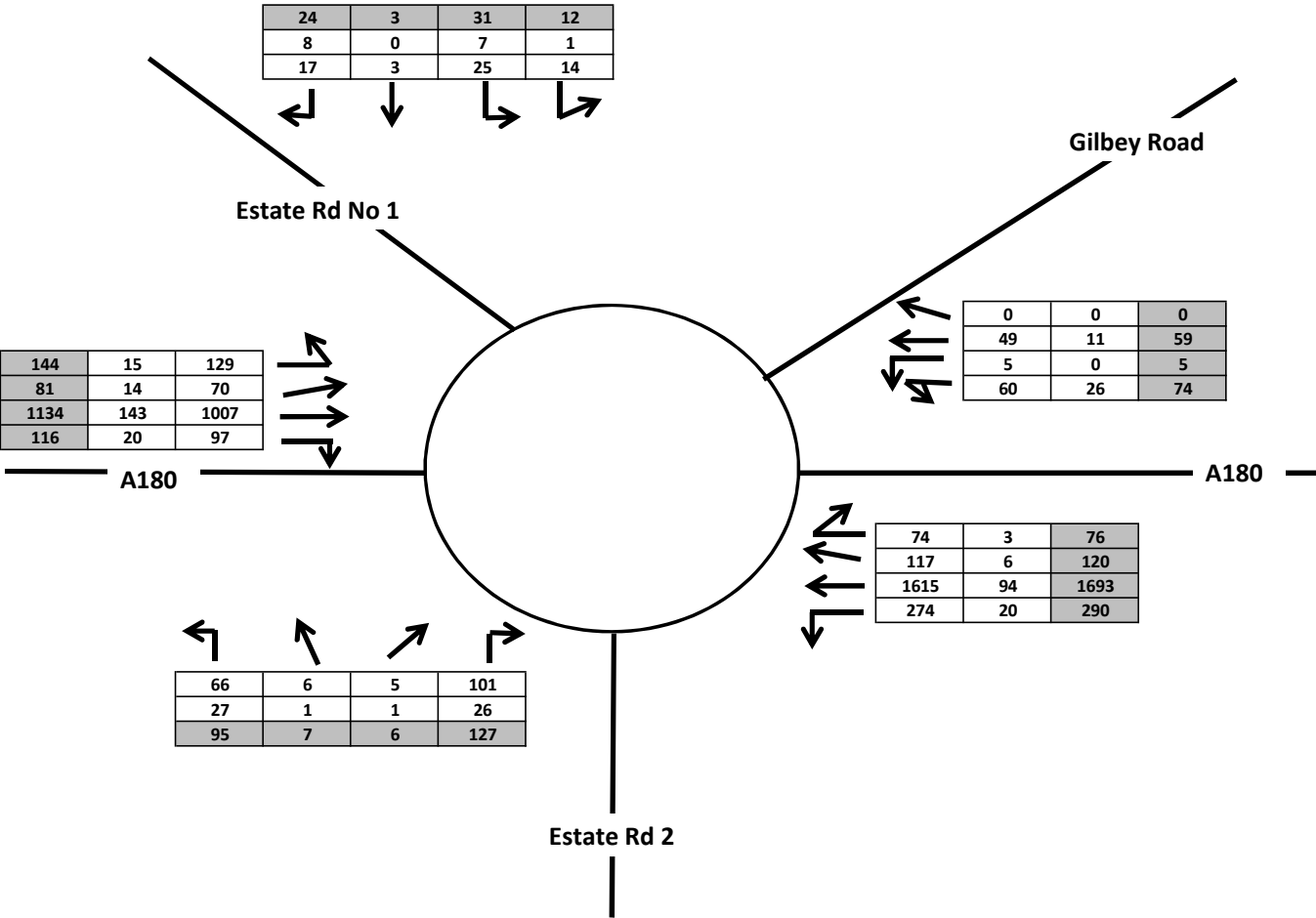
TIME	JUNCTION TOTAL						TOT
	CAR	LGV	OGV1	OGV2	PSV	MCL	
16:00	753	175	42	27	6	6	1017
16:15	689	159	33	38	7	9	938
16:30	857	158	21	25	8	12	1087
16:45	801	123	30	31	6	7	998
H/TOT	3100	615	126	121	27	34	4040
17:00	935	124	18	14	4	16	1123
17:15	832	98	20	27	2	10	990
17:30	734	75	10	29	2	9	863
17:45	609	79	9	18	1	4	727
H/TOT	3110	376	57	88	9	39	3703
18:00	665	73	14	23	5	3	819
18:15	504	60	15	11	1	8	601
18:30	464	46	8	15	1	2	540
18:45	391	33	7	17	3	3	456
H/TOT	2024	212	44	66	10	16	2416
P/TOT	8234	1203	227	275	46	89	10159

PEAK HOUR CALCULATION	
CALCULATION	TOT
16:00 to 17:00	4040
16:15 to 17:15	4146
16:30 to 17:30	4198
16:45 to 17:45	3974
17:00 to 18:00	3703
17:15 to 18:15	3399
17:30 to 18:30	3010
17:45 to 18:45	2687
18:00 to 19:00	2416
PEAK VALUE	4198

ANNEX 3: 2018 NETWORK PEAK HOUR BASE FLOWS



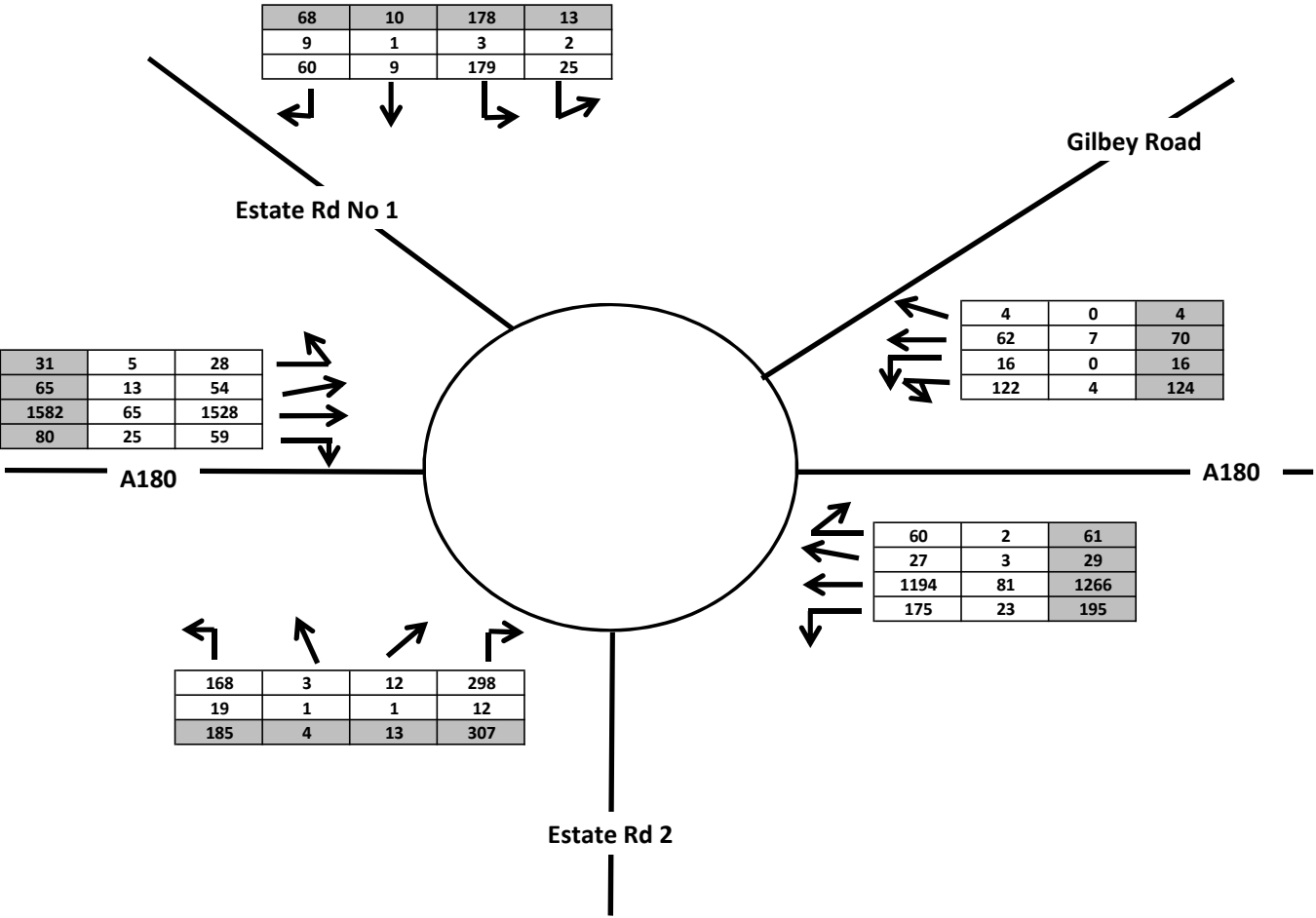
	All Vehicles
	HGVs
	PCUs



								Date	08.08.2018
								Design	JS
Client:	Project:	Title:		Drawing Number:		Revision:		Checked	PF
EP SHB	South Humber Bank Energy Centre	2018 Base Flows - AM Peak (07:00 - 08:00)		Annex 3		A		Appr'd	PF
				File:					



	All Vehicles
	HGVs
	PCUs



								Date	08.08.2018
								Design	JS
Client:	Project:	Title:		Drawing Number:		Revision:		Checked	PF
EP SHB	South Humber Bank Energy Centre	2018 Base Flows - PM Peak (16:00 - 17:00)		Annex 3		A		Appr'd	PF
				File:					



ANNEX 4: JUNCTION MODEL OUTPUTS (2018 BASE)

Junctions 9				
PICADY 9 - Priority Intersection Module				
Version: 9.0.1.4646 []				
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Filename: OPERATION - HOBSON WAY NB RT.j9

Path: K:\Transport Projects\60580855 - Project Koala\PEIR\Modelling\PICADY\1.0_Hobson Way RT

Report generation date: 16/01/2020 14:36:58

»Do Minimum - Base 2018, AM

»Do Minimum - Base 2018, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do Minimum - Base 2018								
Stream B-C	0.0	0.00	0.00	A	0.0	8.45	0.00	A
Stream B-A	0.0	5.61	0.02	A	0.1	5.24	0.08	A
Stream C-B	0.0	0.00	0.00	A	0.0	0.00	0.00	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Hobson Way / South Marsh Road (East)
Location	
Site number	
Date	20/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\CLEASBYD
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	08:45	08:15	15
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Minimum	100.000

Do Minimum - Base 2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hobson Way / South Marsh Road (East)	T-Junction	Two-way	0.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hobson Way SB		Major
B	South Marsh Lane		Minor
C	Hobson Way NB		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	10.50		✓	3.60	250.0		-

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

Minor Arm Geometry

Arm	Minor arm type	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)
B	One lane plus flare	10.00	9.90	9.80	9.75	9.00	✓	3.00	200	200

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
1	B-A	780	0.114	0.289	0.182	0.413
1	B-C	877	0.108	0.273	-	-
1	C-B	828	0.258	0.258	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	08:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	152	100.000
B		✓	17	100.000
C		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	A	B	C
From	A	0	102
	B	17	0
	C	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A	B	C
From	A	0	5
	B	14	0
	C	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.02	5.61	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0	855	0.000	0	0.0	0.000	A
B-A	13	760	0.017	13	0.0	5.493	A
C-A	4			4			
C-B	0	799	0.000	0	0.0	0.000	A
A-B	77			77			
A-C	38			38			

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0	850	0.000	0	0.0	0.000	A
B-A	15	756	0.020	15	0.0	5.540	A
C-A	4			4			
C-B	0	793	0.000	0	0.0	0.000	A
A-B	92			92			
A-C	45			45			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0	844	0.000	0	0.0	0.000	A
B-A	19	750	0.025	19	0.0	5.608	A
C-A	6			6			
C-B	0	785	0.000	0	0.0	0.000	A
A-B	112			112			
A-C	55			55			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0	844	0.000	0	0.0	0.000	A
B-A	19	750	0.025	19	0.0	5.608	A
C-A	6			6			
C-B	0	785	0.000	0	0.0	0.000	A
A-B	112			112			
A-C	55			55			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0	850	0.000	0	0.0	0.000	A
B-A	15	756	0.020	15	0.0	5.541	A
C-A	4			4			
C-B	0	793	0.000	0	0.0	0.000	A
A-B	92			92			
A-C	45			45			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	0	854	0.000	0	0.0	0.000	A
B-A	13	760	0.017	13	0.0	5.495	A
C-A	4			4			
C-B	0	799	0.000	0	0.0	0.000	A
A-B	77			77			
A-C	38			38			

Do Minimum - Base 2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hobson Way / South Marsh Road (East)	T-Junction	Two-way	3.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	24	100.000
B		✓	61	100.000
C		✓	13	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	16	8
	B	59	0	2
	C	13	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	60	0
	B	3	0	100
	C	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	8.45	0.0	A
B-A	0.08	5.24	0.1	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	2	861	0.002	1	0.0	8.374	A
B-A	44	775	0.057	44	0.1	5.071	A
C-A	10			10			
C-B	0	824	0.000	0	0.0	0.000	A
A-B	12			12			
A-C	6			6			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	2	858	0.002	2	0.0	8.407	A
B-A	53	774	0.069	53	0.1	5.140	A
C-A	12			12			
C-B	0	823	0.000	0	0.0	0.000	A
A-B	14			14			
A-C	7			7			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	2	854	0.003	2	0.0	8.453	A
B-A	65	773	0.084	65	0.1	5.236	A
C-A	14			14			
C-B	0	821	0.000	0	0.0	0.000	A
A-B	18			18			
A-C	9			9			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	2	854	0.003	2	0.0	8.454	A
B-A	65	773	0.084	65	0.1	5.236	A
C-A	14			14			
C-B	0	821	0.000	0	0.0	0.000	A
A-B	18			18			
A-C	9			9			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	2	858	0.002	2	0.0	8.408	A
B-A	53	774	0.069	53	0.1	5.141	A
C-A	12			12			
C-B	0	823	0.000	0	0.0	0.000	A
A-B	14			14			
A-C	7			7			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	2	881	0.002	2	0.0	8.375	A
B-A	44	775	0.057	44	0.1	5.073	A
C-A	10			10			
C-B	0	824	0.000	0	0.0	0.000	A
A-B	12			12			
A-C	6			6			

Junctions 9				
PICADY 9 - Priority Intersection Module				
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Filename: OPERATION - MARSH_HOBSON WAY.j9

Path: K:\Transport Projects\60580855 - Project Koala\PEIR\Modelling\PICADY\2.0_S Marsh Road_Hobson Way

Report generation date: 16/01/2020 14:42:05

»Do Minimum - Base 2018, AM

»Do Minimum - Base 2018, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do Minimum - Base 2018								
Stream B-C	0.1	5.33	0.11	A	0.0	5.06	0.00	A
Stream B-A	0.1	6.43	0.10	A	0.0	6.95	0.01	A
Stream C-B	0.0	4.45	0.01	A	0.2	5.33	0.16	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Hobson Way / South Marsh Road (West)
Location	
Site number	
Date	20/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\CLEASBYD
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	06:45	08:15	15
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Minimum	100.000

Do Minimum - Base 2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hobson Way / South Marsh Road (West)	T-Junction	Two-way	3.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hobson Way NB		Major
B	South Marsh Road EB		Minor
C	Hobson Way SB		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	11.50		✓	3.50	250.0		-

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

Minor Arm Geometry

Arm	Minor arm type	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)
B	One lane plus flare	10.00	7.50	5.00	3.50	3.50		3.50	250	140

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
1	B-A	664	0.092	0.232	0.146	0.332
1	B-C	787	0.092	0.232	-	-
1	C-B	820	0.242	0.242	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	22	100.000
B		✓	138	100.000
C		✓	98	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		A	B	C
	A	0	2	20
	B	59	0	79
	C	93	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	23
	B	3	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.11	5.33	0.1	A
B-A	0.10	6.43	0.1	A
C-A				
C-B	0.01	4.45	0.0	A
A-B				
A-C				

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	59	770	0.077	59	0.1	5.062	A
B-A	44	649	0.068	44	0.1	6.131	A
C-A	70			70			
C-B	4	816	0.005	4	0.0	4.429	A
A-B	2			2			
A-C	15			15			

07:00 - 07:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	71	766	0.093	71	0.1	5.175	A
B-A	53	646	0.082	53	0.1	6.255	A
C-A	84			84			
C-B	4	816	0.006	4	0.0	4.437	A
A-B	2			2			
A-C	18			18			

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	87	762	0.114	87	0.1	5.334	A
B-A	65	642	0.101	65	0.1	6.428	A
C-A	102			102			
C-B	6	815	0.007	6	0.0	4.449	A
A-B	2			2			
A-C	22			22			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	87	762	0.114	87	0.1	5.334	A
B-A	65	642	0.101	65	0.1	6.428	A
C-A	102			102			
C-B	6	815	0.007	6	0.0	4.449	A
A-B	2			2			
A-C	22			22			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	71	766	0.093	71	0.1	5.177	A
B-A	53	646	0.082	53	0.1	6.259	A
C-A	84			84			
C-B	4	816	0.006	4	0.0	4.439	A
A-B	2			2			
A-C	18			18			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	59	770	0.077	60	0.1	5.070	A
B-A	44	649	0.068	44	0.1	6.139	A
C-A	70			70			
C-B	4	816	0.005	4	0.0	4.431	A
A-B	2			2			
A-C	15			15			

Do Minimum - Base 2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Hobson Way / South Marsh Road (West)	T-Junction	Two-way	3.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	72	100.000
B		✓	8	100.000
C		✓	133	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	33	39
	B	5	0	3
	C	19	114	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	9
	B	25	0	0
	C	71	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.00	5.06	0.0	A
B-A	0.01	6.95	0.0	A
C-A				
C-B	0.16	5.33	0.2	A
A-B				
A-C				

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	2	719	0.003	2	0.0	5.022	A
B-A	4	673	0.006	4	0.0	6.720	A
C-A	14			14			
C-B	86	807	0.106	85	0.1	4.983	A
A-B	25			25			
A-C	29			29			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	717	0.004	3	0.0	5.039	A
B-A	4	665	0.007	4	0.0	6.813	A
C-A	17			17			
C-B	102	805	0.127	102	0.1	5.125	A
A-B	30			30			
A-C	35			35			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	714	0.005	3	0.0	5.061	A
B-A	6	653	0.008	5	0.0	6.945	A
C-A	21			21			
C-B	126	801	0.157	125	0.2	5.324	A
A-B	36			36			
A-C	43			43			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	714	0.005	3	0.0	5.061	A
B-A	6	653	0.008	6	0.0	6.946	A
C-A	21			21			
C-B	126	801	0.157	126	0.2	5.326	A
A-B	36			36			
A-C	43			43			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	717	0.004	3	0.0	5.039	A
B-A	4	665	0.007	5	0.0	6.817	A
C-A	17			17			
C-B	102	805	0.127	103	0.1	5.129	A
A-B	30			30			
A-C	35			35			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	2	719	0.003	2	0.0	5.023	A
B-A	4	673	0.006	4	0.0	6.724	A
C-A	14			14			
C-B	86	807	0.106	86	0.1	4.992	A
A-B	25			25			
A-C	29			29			

Junctions 9				
ARCADY 9 - Roundabout Module				
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Filename: 3.0 OPERATION LAPORTE ROAD R'ABOUT.j9

Path: K:\Transport Projects\60580855 - Project Koala\Modelling\4_R'abouts\3.0 _Laporte R'bout

Report generation date: 16/01/2020 14:46:14

»Do Minimum - BASE 2018, AM

»Do Minimum - BASE 2018, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do Minimum - BASE 2018								
Arm 1	0.0	1.59	0.04	A	0.0	1.68	0.03	A
Arm 2	0.2	2.19	0.16	A	0.1	2.35	0.05	A
Arm 3	0.1	2.36	0.04	A	0.3	2.48	0.19	A
Arm 4	0.0	0.00	0.00	A	0.0	0.00	0.00	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	20/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\CLEASBYD
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	BASE 2018	AM	ONE HOUR	06:45	08:15	15
D2	BASE 2018	PM	ONE HOUR	15:45	17:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Minimum	100.000

Do Minimum - BASE 2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	2.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Hobson Way NB Approach	
2	Kiln Lane EB Approach	
3	Laporte Road SB Approach	
4	Unnamed Access	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	7.30	8.31	7.0	95.0	45.7	23.2	
2	6.21	8.60	6.1	21.5	45.5	26.0	
3	6.34	6.57	6.4	36.9	45.5	25.1	
4	4.30	5.09	1.1	63.1	45.5	27.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.813	2572
2	0.736	2239
3	0.708	2061
4	0.587	1435

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	BASE 2018	AM	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	96	100.000
2		✓	313	100.000
3		✓	79	100.000
4		✓	1	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	21	75	0
	2	90	5	215	3
	3	15	63	0	1
	4	0	1	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	33	1	0
	2	6	0	15	0
	3	0	33	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.04	1.59	0.0	A
2	0.16	2.19	0.2	A
3	0.04	2.36	0.1	A
4	0.00	0.00	0.0	A

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	72	51	2530	0.029	72	0.0	1.560	A
2	236	56	2198	0.107	235	0.1	2.051	A
3	59	74	2009	0.030	59	0.0	2.302	A
4	0	130	1358	0.000	0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	86	61	2522	0.034	86	0.0	1.574	A
2	281	67	2190	0.129	281	0.2	2.109	A
3	71	88	1998	0.036	71	0.0	2.328	A
4	0	155	1343	0.000	0	0.0	0.000	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	106	75	2511	0.042	106	0.0	1.594	A
2	345	83	2179	0.158	344	0.2	2.195	A
3	87	108	1984	0.044	87	0.1	2.365	A
4	0	190	1323	0.000	0	0.0	0.000	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	106	75	2511	0.042	106	0.0	1.594	A
2	345	83	2179	0.158	345	0.2	2.195	A
3	87	108	1984	0.044	87	0.1	2.365	A
4	0	190	1323	0.000	0	0.0	0.000	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	86	61	2522	0.034	86	0.0	1.577	A
2	281	67	2190	0.129	282	0.2	2.111	A
3	71	88	1998	0.036	71	0.0	2.328	A
4	0	156	1343	0.000	0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	72	51	2530	0.029	72	0.0	1.560	A
2	236	56	2198	0.107	236	0.1	2.051	A
3	59	74	2008	0.030	60	0.0	2.302	A
4	0	130	1358	0.000	0	0.0	0.000	A

Do Minimum - BASE 2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	2.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	BASE 2018	PM	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	56	100.000
2		✓	100	100.000
3		✓	344	100.000
4		✓	3	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	44	11	1
	2	24	1	75	0
	3	111	233	0	0
	4	1	2	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	7	10	0
	2	35	0	40	0
	3	1	22	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.03	1.68	0.0	A
2	0.05	2.35	0.1	A
3	0.19	2.48	0.3	A
4	0.00	0.00	0.0	A

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	42	176	2429	0.017	42	0.0	1.619	A
2	75	9	2233	0.034	75	0.0	2.305	A
3	259	20	2047	0.127	258	0.2	2.301	A
4	0	277	1272	0.000	0	0.0	0.000	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	50	210	2401	0.021	50	0.0	1.644	A
2	90	11	2231	0.040	90	0.1	2.323	A
3	309	23	2044	0.151	309	0.2	2.372	A
4	0	332	1240	0.000	0	0.0	0.000	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	62	257	2362	0.026	62	0.0	1.680	A
2	110	13	2230	0.049	110	0.1	2.347	A
3	379	29	2040	0.186	379	0.3	2.476	A
4	0	406	1196	0.000	0	0.0	0.000	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	62	258	2362	0.026	62	0.0	1.680	A
2	110	13	2230	0.049	110	0.1	2.347	A
3	379	29	2040	0.186	379	0.3	2.476	A
4	0	406	1196	0.000	0	0.0	0.000	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	50	211	2401	0.021	50	0.0	1.644	A
2	90	11	2231	0.040	90	0.1	2.325	A
3	309	23	2044	0.151	309	0.2	2.372	A
4	0	332	1240	0.000	0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	42	176	2428	0.017	42	0.0	1.622	A
2	75	9	2233	0.034	75	0.0	2.306	A
3	259	20	2047	0.127	259	0.2	2.303	A
4	0	278	1272	0.000	0	0.0	0.000	A

Junctions 9				
ARCADY 9 - Roundabout Module				
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Filename: Operation Trondheim Way Rbt.j9

Path: K:\Transport Projects\60580855 - Project Koala\PEIR\Modelling\4_R'abouts\6.0_Trondheim Way R'bout

Report generation date: 16/01/2020 14:56:45

»Base 2018, AM

»Base 2018, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Base 2018								
Arm 1	0.2	3.70	0.12	A	0.8	4.34	0.43	A
Arm 2	0.1	2.52	0.09	A	0.1	3.31	0.07	A
Arm 3	0.6	3.58	0.37	A	0.4	3.51	0.23	A
Arm 4	0.0	3.64	0.03	A	0.1	2.54	0.05	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Trondheim Way Rbt
Location	
Site number	
Date	26/09/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\cleasbyd
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	06:45	08:15	15
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	3.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Kiln Lane	
2	North Moss Lane	
3	A1173	
4	untitled	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.28	6.99	14.0	44.6	44.8	19.0	
2	4.06	7.65	10.4	33.2	44.8	14.5	
3	3.84	7.10	13.0	32.1	44.8	20.5	
4	4.46	8.23	15.6	54.3	44.8	21.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.649	1707
2	0.684	1875
3	0.663	1800
4	0.728	2116

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	175	100.000
2		✓	135	100.000
3		✓	580	100.000
4		✓	43	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	0	19	154	2
	2	59	0	63	13
	3	477	49	8	46
	4	10	3	29	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	38	50	100
	2	7	0	15	8
	3	10	7	0	14
	4	50	0	81	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.12	3.70	0.2	A
2	0.09	2.52	0.1	A
3	0.37	3.58	0.6	A
4	0.03	3.64	0.0	A

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	132	68	1663	0.079	131	0.1	3.503	A
2	102	145	1775	0.057	101	0.1	2.380	A
3	437	56	1762	0.248	435	0.4	2.979	A
4	32	445	1792	0.018	32	0.0	3.295	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	157	81	1654	0.095	157	0.2	3.583	A
2	121	174	1756	0.069	121	0.1	2.437	A
3	521	67	1755	0.297	521	0.5	3.206	A
4	39	533	1728	0.022	39	0.0	3.431	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	193	99	1642	0.117	193	0.2	3.699	A
2	149	213	1729	0.086	149	0.1	2.521	A
3	639	83	1745	0.366	638	0.6	3.572	A
4	47	652	1641	0.029	47	0.0	3.637	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	193	99	1642	0.117	193	0.2	3.700	A
2	149	214	1729	0.086	149	0.1	2.521	A
3	639	83	1745	0.366	639	0.6	3.575	A
4	47	653	1641	0.029	47	0.0	3.638	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	157	81	1654	0.095	157	0.2	3.584	A
2	121	175	1755	0.069	121	0.1	2.438	A
3	521	67	1755	0.297	522	0.5	3.212	A
4	39	534	1728	0.022	39	0.0	3.433	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	132	68	1662	0.079	132	0.1	3.504	A
2	102	146	1775	0.057	102	0.1	2.381	A
3	437	56	1762	0.248	437	0.4	2.988	A
4	32	447	1791	0.018	32	0.0	3.300	A

Base 2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	3.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	607	100.000
2		✓	94	100.000
3		✓	374	100.000
4		✓	84	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	135	459	13
	2	14	3	71	6
	3	215	107	5	47
	4	7	15	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	3	10	27
	2	60	0	22	20
	3	37	14	0	84
	4	60	13	23	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.43	4.34	0.8	A
2	0.07	3.31	0.1	A
3	0.23	3.51	0.4	A
4	0.05	2.54	0.1	A

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	457	144	1613	0.283	455	0.4	3.375	A
2	71	404	1598	0.044	71	0.1	2.955	A
3	282	27	1782	0.158	281	0.2	3.187	A
4	63	258	1928	0.033	63	0.0	2.382	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	546	172	1595	0.342	545	0.6	3.725	A
2	85	484	1544	0.055	84	0.1	3.093	A
3	336	32	1778	0.189	336	0.3	3.318	A
4	76	309	1891	0.040	75	0.1	2.446	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	668	211	1569	0.426	667	0.8	4.332	A
2	103	593	1469	0.070	103	0.1	3.304	A
3	412	40	1773	0.232	411	0.4	3.514	A
4	92	378	1841	0.050	92	0.1	2.541	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	668	211	1569	0.426	668	0.8	4.341	A
2	103	593	1469	0.070	103	0.1	3.306	A
3	412	40	1773	0.232	412	0.4	3.514	A
4	92	379	1840	0.050	92	0.1	2.541	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	546	173	1594	0.342	547	0.6	3.736	A
2	85	485	1543	0.055	85	0.1	3.098	A
3	336	32	1778	0.189	337	0.3	3.322	A
4	76	310	1891	0.040	76	0.1	2.449	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	457	145	1613	0.283	458	0.4	3.387	A
2	71	406	1597	0.044	71	0.1	2.960	A
3	282	27	1782	0.158	282	0.3	3.193	A
4	63	259	1927	0.033	63	0.0	2.383	A

Junctions 9				
ARCADY 9 - Roundabout Module				
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2020				
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Filename: Operation Trondheim Way Rbt.j9

Path: K:\Transport Projects\60580855 - Project Koala\PEIR\Modelling\4_R'abouts\6.0_Trondheim Way R'bout

Report generation date: 16/01/2020 15:06:51

»Base 2018, AM

»Base 2018, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Base 2018								
Arm 1	0.2	3.70	0.12	A	0.8	4.34	0.43	A
Arm 2	0.1	2.52	0.09	A	0.1	3.31	0.07	A
Arm 3	0.6	3.58	0.37	A	0.4	3.51	0.23	A
Arm 4	0.0	3.64	0.03	A	0.1	2.54	0.05	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Trondheim Way Rbt
Location	
Site number	
Date	26/09/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\cleasbyd
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	06:45	08:15	15
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Kiln Lane / North Moss Lane / Trondheim Way	Standard Roundabout	3.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Kiln Lane	
2	North Moss Lane	
3	A1173	
4	untitled	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.28	6.99	14.0	44.6	44.8	19.0	
2	4.06	7.65	10.4	33.2	44.8	14.5	
3	3.84	7.10	13.0	32.1	44.8	20.5	
4	4.46	8.23	15.6	54.3	44.8	21.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.649	1707
2	0.684	1875
3	0.663	1800
4	0.728	2116

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	175	100.000
2		✓	135	100.000
3		✓	580	100.000
4		✓	43	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	0	19	154	2
	2	59	0	63	13
	3	477	49	8	46
	4	10	3	29	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	38	50	100
	2	7	0	15	8
	3	10	7	0	14
	4	50	0	81	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.12	3.70	0.2	A
2	0.09	2.52	0.1	A
3	0.37	3.58	0.6	A
4	0.03	3.64	0.0	A

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	132	68	1663	0.079	131	0.1	3.503	A
2	102	145	1775	0.057	101	0.1	2.380	A
3	437	56	1762	0.248	435	0.4	2.979	A
4	32	445	1792	0.018	32	0.0	3.295	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	157	81	1654	0.095	157	0.2	3.583	A
2	121	174	1756	0.069	121	0.1	2.437	A
3	521	67	1755	0.297	521	0.5	3.206	A
4	39	533	1728	0.022	39	0.0	3.431	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	193	99	1642	0.117	193	0.2	3.699	A
2	149	213	1729	0.086	149	0.1	2.521	A
3	639	83	1745	0.366	638	0.6	3.572	A
4	47	652	1641	0.029	47	0.0	3.637	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	193	99	1642	0.117	193	0.2	3.700	A
2	149	214	1729	0.086	149	0.1	2.521	A
3	639	83	1745	0.366	639	0.6	3.575	A
4	47	653	1641	0.029	47	0.0	3.638	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	157	81	1654	0.095	157	0.2	3.584	A
2	121	175	1755	0.069	121	0.1	2.438	A
3	521	67	1755	0.297	522	0.5	3.212	A
4	39	534	1728	0.022	39	0.0	3.433	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	132	68	1662	0.079	132	0.1	3.504	A
2	102	146	1775	0.057	102	0.1	2.381	A
3	437	56	1762	0.248	437	0.4	2.988	A
4	32	447	1791	0.018	32	0.0	3.300	A

Base 2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Kiln Lane / North Moss Lane / Trondheim Way	Standard Roundabout	3.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	607	100.000
2		✓	94	100.000
3		✓	374	100.000
4		✓	84	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	135	459	13
	2	14	3	71	6
	3	215	107	5	47
	4	7	15	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	3	10	27
	2	60	0	22	20
	3	37	14	0	84
	4	60	13	23	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.43	4.34	0.8	A
2	0.07	3.31	0.1	A
3	0.23	3.51	0.4	A
4	0.05	2.54	0.1	A

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	457	144	1613	0.283	455	0.4	3.375	A
2	71	404	1598	0.044	71	0.1	2.955	A
3	282	27	1782	0.158	281	0.2	3.187	A
4	63	258	1928	0.033	63	0.0	2.382	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	546	172	1595	0.342	545	0.6	3.725	A
2	85	484	1544	0.055	84	0.1	3.093	A
3	336	32	1778	0.189	336	0.3	3.318	A
4	76	309	1891	0.040	75	0.1	2.446	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	668	211	1569	0.426	667	0.8	4.332	A
2	103	593	1469	0.070	103	0.1	3.304	A
3	412	40	1773	0.232	411	0.4	3.514	A
4	92	378	1841	0.050	92	0.1	2.541	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	668	211	1569	0.426	668	0.8	4.341	A
2	103	593	1469	0.070	103	0.1	3.306	A
3	412	40	1773	0.232	412	0.4	3.514	A
4	92	379	1840	0.050	92	0.1	2.541	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	546	173	1594	0.342	547	0.6	3.736	A
2	85	485	1543	0.055	85	0.1	3.098	A
3	336	32	1778	0.189	337	0.3	3.322	A
4	76	310	1891	0.040	76	0.1	2.449	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	457	145	1613	0.283	458	0.4	3.387	A
2	71	406	1597	0.044	71	0.1	2.960	A
3	282	27	1782	0.158	282	0.3	3.193	A
4	63	259	1927	0.033	63	0.0	2.383	A

Junctions 9				
ARCADY 9 - Roundabout Module				
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Filename: 4.0 Kiln Lane ROUNDABOUT 15 min segments.j9

Path: K:\Transport Projects\60580855 - Project Koala\PEIR\Modelling\4_R'abouts\4.0_Kiln Lane R'about

Report generation date: 16/01/2020 15:12:14

»Do Minimum - BASE 2018, PM

»Do Minimum - BASE 2018, AM

Summary of junction performance

	PM				AM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do Minimum - BASE 2018								
Arm 1	0.0	7.10	0.01	A	0.0	3.28	0.00	A
Arm 2	0.6	4.02	0.33	A	6.0	15.47	0.86	C
Arm 3	4.3	13.49	0.82	B	1.0	6.67	0.45	A
Arm 4	2.7	13.30	0.72	B	0.4	4.33	0.22	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A1173 / Kiln Lane
Location	
Site number	
Date	20/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\CLEASBYD
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	BASE 2018	PM	DIRECT	16:00	17:00	60	15
D3	BASE 2018	AM	DIRECT	07:00	08:00	60	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Do Minimum	100.000

Do Minimum - BASE 2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	A1173 / Kiln Lane	Standard Roundabout	11.19	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Unnamed Access	
2	A1173 EB Approach	
3	A1173 SB Approach	
4	Kiln Lane WB Approach	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.52	6.09	5.7	16.9	49.2	11.9	
2	3.75	7.04	9.9	26.2	49.2	12.8	
3	3.40	7.95	6.8	20.8	49.2	14.0	
4	3.49	8.20	6.6	28.5	49.2	13.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.582	1460
2	0.639	1735
3	0.601	1553
4	0.614	1599

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	BASE 2018	PM	DIRECT	16:00	17:00	60	15

Vehicle mix varies over time	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1		✓	100.000
2		✓	100.000
3		✓	100.000
4		✓	100.000

Origin-Destination Data

Demand (PCU/hr)

16:00 - 16:15

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	244	312
	3	0	976	0	140
	4	0	612	112	0

Demand (PCU/hr)

16:15 - 16:30

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	236	228
	3	0	460	0	168
	4	0	492	140	0

Demand (PCU/hr)

16:30 - 16:45

	To				
		1	2	3	4
From	1	0	4	0	0
	2	0	0	276	180
	3	0	892	4	164
	4	0	596	152	0

Demand (PCU/hr)

16:45 - 17:00

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	292	164
	3	0	656	0	140
	4	0	480	76	0

Vehicle Mix

Heavy Vehicle Percentages

16:00 - 16:15

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	13	35
	3	0	4	0	24
	4	0	12	21	0

Heavy Vehicle Percentages

16:15 - 16:30

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	19	35
	3	0	5	0	62
	4	0	11	20	0

Heavy Vehicle Percentages

16:30 - 16:45

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	17	34
	3	0	5	0	41
	4	0	9	18	0

Heavy Vehicle Percentages

16:45 - 17:00

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	16	50
	3	0	4	0	54
	4	0	8	27	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.01	7.10	0.0	A
2	0.33	4.02	0.6	A
3	0.82	13.49	4.3	B
4	0.72	13.30	2.7	B

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	0	1674	486	0.000	0	0.0	0.000	A
2	556	110	1664	0.334	554	0.6	4.022	A
3	1116	311	1367	0.816	1099	4.3	13.488	B
4	724	961	1010	0.717	713	2.7	13.303	B

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	0	1111	813	0.000	0	0.0	0.000	A
2	464	141	1645	0.282	464	0.5	3.856	A
3	628	228	1416	0.443	642	0.9	5.472	A
4	632	472	1309	0.483	639	1.1	6.115	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	4	1631	511	0.008	4	0.0	7.098	A
2	456	155	1636	0.279	456	0.5	3.761	A
3	1060	180	1445	0.733	1052	2.9	9.820	A
4	748	889	1054	0.710	742	2.6	12.537	B

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	0	1224	748	0.000	0.03	0.0	0.000	A
2	456	78	1685	0.271	456	0.5	3.698	A
3	796	164	1455	0.547	802	1.4	6.138	A
4	556	661	1194	0.466	562	1.0	6.352	A

Do Minimum - BASE 2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	A1173 / Kiln Lane	Standard Roundabout	12.39	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	BASE 2018	AM	DIRECT	07:00	08:00	60	15

Vehicle mix varies over time	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1		✓	100.000
2		✓	100.000
3		✓	100.000
4		✓	100.000

Origin-Destination Data

Demand (PCU/hr)

07:00 - 07:15

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	4	660	508
	3	0	156	0	52
	4	0	228	100	0

Demand (PCU/hr)

07:15 - 07:30

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	848	564
	3	0	232	0	88
	4	0	168	36	0

Demand (PCU/hr)

07:30 - 07:45

	To				
From		1	2	3	4
	1	0	0	0	0
	2	0	4	760	700
	3	0	328	0	72
	4	0	156	56	0

Demand (PCU/hr)

07:45 - 08:00

	To				
From		1	2	3	4
	1	0	4	0	0
	2	0	0	696	664
	3	4	332	0	188
	4	0	200	84	0

Vehicle Mix

Heavy Vehicle Percentages

07:00 - 07:15

	To				
From		1	2	3	4
	1	0	0	0	0
	2	0	0	4	8
	3	0	19	0	18
	4	0	35	56	0

Heavy Vehicle Percentages

07:15 - 07:30

	To				
From		1	2	3	4
	1	0	0	0	0
	2	0	0	5	14
	3	0	27	0	33
	4	0	40	67	0

Heavy Vehicle Percentages

07:30 - 07:45

	To				
From		1	2	3	4
	1	0	0	0	0
	2	0	0	3	10
	3	0	27	0	29
	4	0	41	25	0

Heavy Vehicle Percentages

07:45 - 08:00

	To				
From		1	2	3	4
	1	0	0	0	0
	2	0	0	6	8
	3	0	21	0	11
	4	0	38	24	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.00	3.28	0.0	A
2	0.86	15.47	6.0	C
3	0.45	6.67	1.0	A
4	0.22	4.33	0.4	A

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	0	486	1177	0.000	0	0.0	0.000	A
2	1172	100	1671	0.701	1162	2.4	7.344	A
3	208	508	1248	0.167	207	0.2	4.102	A
4	328	159	1502	0.218	326	0.4	4.307	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	0	436	1206	0.000	0	0.0	0.000	A
2	1412	36	1712	0.825	1403	4.8	12.272	B
3	320	561	1217	0.263	319	0.5	5.152	A
4	204	231	1457	0.140	205	0.2	4.142	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	0	543	1144	0.000	0	0.0	0.000	A
2	1464	56	1699	0.862	1459	6.0	15.470	C
3	400	700	1133	0.353	399	0.7	6.239	A
4	212	331	1396	0.152	212	0.2	4.148	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	4	615	1102	0.004	4	0.0	3.278	A
2	1360	84	1681	0.809	1365	4.8	12.404	B
3	524	666	1153	0.454	523	1.0	6.675	A
4	284	336	1393	0.204	284	0.3	4.332	A

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2018							
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Filename: 5.0 A180 A1173 Interchange.j9

Path: \\UKLDS2PFPSW001.na.aecomnet.com\LE_PROJECTS\Transport Projects\60580855 - Project
Koala\Modelling\4_R'abouts\5.0_A180 Interchange

Report generation date: 19/09/2018 11:41:11

»Do Minimum - OPERATION - BASE 2018, AM

»Do Minimum - OPERATION - BASE 2018, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do Minimum [Lane Simulation] - OPERATION - BASE 2018								
Arm A	0.6	8.10		A	0.3	5.04		A
Arm B	0.5	4.08		A	0.3	3.96		A
Arm C	0.4	2.15		A	2.1	3.09		A
Arm D	2.9	8.83		A	0.6	3.29		A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	20/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\CLEASBYD
Description	

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Lane Simulation options

Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Use crossings quick response	Last run random seed	Last run number of trials	Last run time taken (s)
1.00	100000	100000	-1	3	1	✓	50197840	159	10.25

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	OPERATION - BASE 2018	AM	ONE HOUR	06:45	08:15	15	✓
D2	OPERATION - BASE 2018	PM	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Minimum	✓	✓	100.000	100.000

Do Minimum - OPERATION - BASE 2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do Minimum [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A1173 / A180 INTERCHANGE	Large Roundabout	A,B,C,D	6.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A1173 NB APPROACH	
B	A180 EB OFFSLIP	
C	A1173 SB APPROACH	
D	A180 WB OFF-SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	4.48	7.91	21.9	31.0	136.2	26.3	
B	6.21	8.38	24.6	46.7	67.6	20.6	
C	5.22	8.26	21.2	40.2	136.5	17.6	
D	8.01	8.75	22.5	95.7	67.1	27.4	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1025	39.00
B	1211	110.00
C	248	49.00
D	248	104.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.889	2658
B	1.116	2893
C	1.128	3070
D	1.434	3345

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A	Evenly split	10.00
B	Evenly split	10.00
C	Evenly split	10.00
D	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A	1 [Give-way line]	1	B	✓	8.00	0	99999
		2	A, C, D	✓	8.00	0	99999
	2	1	(A, B, C, D)		Infinity		
B	1 [Give-way line]	1	B, C, D		Infinity	1500	2000
		2	A, B, D		Infinity	1500	2000
C	1 [Give-way line]	1	A, B, C, D		Infinity	1800	99999
D	1 [Give-way line]	1	A, B		Infinity	1500	2000
		2	B, C, D		Infinity	1500	2000

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A	1 [Give-way line]	1	0.445	1329
		2	0.445	1329
B	1 [Give-way line]	1	0.558	1447
		2	0.558	1447
C	1 [Give-way line]	1	1.128	3070
D	1 [Give-way line]	1	0.717	1673
		2	0.717	1673

Lane Movements

Arm	Lane Level	Lane	Destination arm			
			A	B	C	D
A	1 [Give-way line]	1		✓		
		2	✓		✓	✓
	2	1	✓	✓	✓	✓
B	1 [Give-way line]	1		✓	✓	✓
		2	✓	✓		✓
C	1 [Give-way line]	1	✓	✓	✓	✓
D	1 [Give-way line]	1	✓	✓		
		2		✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	OPERATION - BASE 2018	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	229	100.000
B		ONE HOUR	✓	354	100.000
C		ONE HOUR	✓	422	100.000
D		ONE HOUR	✓	1083	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	0	11	62	156
	B	16	1	336	1
	C	40	176	0	206
	D	74	0	1009	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	0	0	45	3
	B	33	0	23	0
	C	52	75	0	13
	D	15	0	3	0

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	8.10	0.6	A	212	318
B	4.08	0.5	A	323	485
C	2.15	0.4	A	392	588
D	8.83	2.9	A	998	1497

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	170	43	882	171	101	0.0	0.2	4.988	A
B	268	67	916	268	138	0.0	0.3	3.624	A
C	319	80	129	318	1055	0.0	0.2	1.935	A
D	812	203	173	811	274	0.0	1.1	4.434	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	206	52	1077	206	118	0.2	0.3	6.142	A
B	312	78	1115	312	169	0.3	0.2	3.859	A
C	384	96	153	384	1274	0.2	0.2	1.996	A
D	984	246	210	985	328	1.1	1.5	5.601	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	253	63	1302	255	142	0.3	0.6	8.098	A
B	394	98	1347	392	210	0.2	0.5	3.851	A
C	476	119	191	475	1548	0.2	0.4	2.153	A
D	1185	296	259	1184	407	1.5	2.7	8.829	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	254	63	1322	254	149	0.6	0.5	8.075	A
B	381	95	1371	381	206	0.5	0.5	4.080	A
C	476	119	188	475	1563	0.4	0.3	2.148	A
D	1208	302	259	1212	404	2.7	2.9	8.826	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	206	52	1047	205	118	0.5	0.5	6.503	A
B	319	80	1089	319	163	0.5	0.4	3.704	A
C	376	94	150	376	1258	0.3	0.2	2.013	A
D	966	241	203	961	322	2.9	1.9	5.834	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	183	46	907	183	107	0.5	0.3	5.346	A
B	265	66	946	266	144	0.4	0.3	3.551	A
C	320	80	140	319	1073	0.2	0.2	1.930	A
D	832	208	183	831	276	1.9	1.2	4.744	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

06:45 - 07:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	9	937	0.009	9	0.0	0.0	3.899	A
			2	A,C,D	162	937	0.173	163	0.0	0.2	5.048	A
	Exit	1	1	(A,B,C,D)	170			170	0.0	0.0	0.005	A
			1		101			101	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	256	1500	0.170	256	0.0	0.3	3.642	A
			2	A,B,D	12	1500	0.008	12	0.0	0.0	3.232	A
	Exit	1	1		138			138	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	319	2923	0.109	318	0.0	0.2	1.935	A
	Exit	1	1		1055			1055	0.0	0.0	0.000	A
D	Entry	1	1	A,B	58	1553	0.037	58	0.0	0.1	2.809	A
			2	B,C,D	755	1553	0.486	753	0.0	1.1	4.539	A
	Exit	1	1		274			274	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	10	850	0.012	10	0.0	0.0	4.204	A
			2	A,C,D	196	850	0.230	196	0.2	0.3	6.254	A
		2	1	(A,B,C,D)	206			206	0.0	0.0	0.000	A
	Exit	1	1		118			118	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	298	1500	0.199	298	0.3	0.2	3.895	A
			2	A,B,D	14	1500	0.009	14	0.0	0.0	3.106	A
	Exit	1	1		169			169	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	384	2896	0.132	384	0.2	0.2	1.996	A
	Exit	1	1		1274			1274	0.0	0.0	0.000	A
D	Entry	1	1	A,B	67	1533	0.044	67	0.1	0.0	2.759	A
			2	B,C,D	917	1533	0.598	919	1.1	1.4	5.794	A
	Exit	1	1		328			328	0.0	0.0	0.000	A

07:15 - 07:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	13	750	0.017	13	0.0	0.0	4.565	A
			2	A,C,D	240	750	0.321	242	0.3	0.6	8.287	A
		2	1	(A,B,C,D)	253			253	0.0	0.0	0.008	A
	Exit	1	1		142			142	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	375	1500	0.250	373	0.2	0.5	3.885	A
			2	A,B,D	19	1500	0.012	19	0.0	0.0	3.137	A
	Exit	1	1		210			210	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	476	2854	0.167	475	0.2	0.4	2.153	A
	Exit	1	1		1548			1548	0.0	0.0	0.000	A
D	Entry	1	1	A,B	79	1514	0.052	79	0.0	0.1	3.045	A
			2	B,C,D	1106	1514	0.730	1105	1.4	2.6	9.211	A
	Exit	1	1		407			407	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	12	741	0.017	12	0.0	0.0	5.368	A
			2	A,C,D	241	741	0.326	242	0.6	0.5	8.228	A
		2	1	(A,B,C,D)	254			254	0.0	0.0	0.002	A
	Exit	1	1		149			149	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	362	1500	0.241	363	0.5	0.4	4.107	A
			2	A,B,D	19	1500	0.012	18	0.0	0.0	3.508	A
	Exit	1	1		206			206	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	476	2857	0.167	475	0.4	0.3	2.148	A
	Exit	1	1		1563			1563	0.0	0.0	0.000	A
D	Entry	1	1	A,B	83	1516	0.055	84	0.1	0.1	2.893	A
			2	B,C,D	1125	1516	0.742	1128	2.6	2.8	9.216	A
	Exit	1	1		404			404	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	9	863	0.010	9	0.0	0.0	4.262	A
			2	A,C,D	198	863	0.229	196	0.5	0.5	6.632	A
		2	1	(A,B,C,D)	206			206	0.0	0.0	0.000	A
	Exit	1	1		118			118	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	303	1500	0.202	304	0.4	0.4	3.732	A
			2	A,B,D	15	1500	0.010	15	0.0	0.0	3.116	A
	Exit	1	1		163			163	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	376	2901	0.130	376	0.3	0.2	2.013	A
	Exit	1	1		1258			1258	0.0	0.0	0.000	A
D	Entry	1	1	A,B	69	1538	0.045	68	0.1	0.1	2.882	A
			2	B,C,D	897	1538	0.583	894	2.8	1.8	6.030	A
	Exit	1	1		322			322	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	8	925	0.008	8	0.0	0.0	3.904	A
			2	A,C,D	175	925	0.190	175	0.5	0.3	5.424	A
		2	1	(A,B,C,D)	183			183	0.0	0.0	0.000	A
	Exit	1	1		107			107	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	250	1500	0.167	251	0.4	0.3	3.565	A
			2	A,B,D	15	1500	0.010	15	0.0	0.0	3.266	A
	Exit	1	1		144			144	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	320	2912	0.110	319	0.2	0.2	1.930	A
	Exit	1	1		1073			1073	0.0	0.0	0.000	A
D	Entry	1	1	A,B	60	1547	0.039	60	0.1	0.0	2.662	A
			2	B,C,D	772	1547	0.499	771	1.8	1.1	4.884	A
	Exit	1	1		276			276	0.0	0.0	0.000	A

Do Minimum - OPERATION - BASE 2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do Minimum [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A1173 / A180 INTERCHANGE	Large Roundabout	A,B,C,D	3.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	1025	39.00
B	1211	110.00
C	248	49.00
D	248	104.00

Slope / Intercept / Capacity

[same as above]

Lane Simulation: Arm options

[same as above]

Lanes

[same as above]

Entry Lane slope and intercept

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	OPERATION - BASE 2018	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	172	100.000
B		ONE HOUR	✓	218	100.000
C		ONE HOUR	✓	1398	100.000
D		ONE HOUR	✓	490	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		A	B	C	D
From	A	2	11	63	96
	B	61	1	156	0
	C	123	295	0	980
	D	186	2	301	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	0	0	44	5
	B	3	0	73	0
	C	9	22	0	4
	D	3	100	13	0

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	5.04	0.3	A	159	238
B	3.96	0.3	A	196	294
C	3.09	2.1	A	1281	1922
D	3.29	0.6	A	442	663

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	133	33	448	132	275	0.0	0.2	4.127	A
B	161	40	350	162	230	0.0	0.1	3.870	A
C	1036	259	122	1036	390	0.0	0.7	2.065	A
D	360	90	365	358	793	0.0	0.4	2.971	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	161	40	548	160	323	0.2	0.2	4.454	A
B	185	46	426	185	282	0.1	0.1	3.912	A
C	1275	319	141	1273	470	0.7	0.8	2.443	A
D	443	111	429	442	985	0.4	0.4	3.148	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	192	48	659	193	405	0.2	0.2	4.661	A
B	235	59	515	236	338	0.1	0.3	3.963	A
C	1523	381	176	1526	575	0.8	1.2	3.015	A
D	536	134	528	536	1174	0.4	0.6	3.222	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	187	47	652	187	416	0.2	0.3	5.040	A
B	238	59	504	237	335	0.3	0.2	3.831	A
C	1540	385	181	1532	561	1.2	2.1	3.093	A
D	533	133	536	532	1176	0.6	0.6	3.293	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	154	39	534	156	325	0.3	0.2	4.511	A
B	198	49	417	198	272	0.2	0.2	3.783	A
C	1254	313	141	1257	474	2.1	0.7	2.493	A
D	434	109	424	435	973	0.6	0.4	3.096	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	124	31	441	123	272	0.2	0.1	3.968	A
B	160	40	333	160	232	0.2	0.2	3.560	A
C	1061	265	120	1061	372	0.7	0.8	2.130	A
D	347	87	367	347	814	0.4	0.3	2.938	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

15:45 - 16:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	7	1130	0.007	7	0.0	0.0	3.054	A
			2	A,C,D	125	1130	0.111	124	0.0	0.2	4.211	A
	Exit	2	1	(A,B,C,D)	133			133	0.0	0.0	0.000	A
			1		275			275	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	113	1500	0.075	114	0.0	0.1	4.687	A
			2	A,B,D	48	1500	0.032	48	0.0	0.0	2.664	A
	Exit	1	1		230			230	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	1036	2932	0.353	1036	0.0	0.7	2.065	A
	Exit	1	1		390			390	0.0	0.0	0.000	A
D	Entry	1	1	A,B	133	1501	0.089	132	0.0	0.1	2.588	A
			2	B,C,D	227	1501	0.151	226	0.0	0.2	3.214	A
	Exit	1	1		793			793	0.0	0.0	0.000	A

16:00 - 16:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	10	1085	0.009	10	0.0	0.0	3.440	A
			2	A,C,D	151	1085	0.139	150	0.2	0.2	4.540	A
	Exit	2	1	(A,B,C,D)	161			161	0.0	0.0	0.000	A
			1		323			323	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	135	1500	0.090	135	0.1	0.1	4.745	A
			2	A,B,D	49	1500	0.033	49	0.0	0.0	2.618	A
	Exit	1	1		282			282	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	1275	2910	0.438	1273	0.7	0.8	2.443	A
	Exit	1	1		470			470	0.0	0.0	0.000	A
D	Entry	1	1	A,B	166	1500	0.111	166	0.1	0.1	2.776	A
			2	B,C,D	277	1500	0.185	276	0.2	0.2	3.388	A
	Exit	1	1		985			985	0.0	0.0	0.000	A

16:15 - 16:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	11	1036	0.011	11	0.0	0.0	3.577	A
			2	A,C,D	180	1036	0.174	182	0.2	0.2	4.742	A
	Exit	2	1	(A,B,C,D)	192			192	0.0	0.0	0.002	A
			1		405			405	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	168	1500	0.112	169	0.1	0.2	4.897	A
			2	A,B,D	67	1500	0.045	67	0.0	0.0	2.553	A
	Exit	1	1		338			338	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	1523	2871	0.530	1526	0.8	1.2	3.015	A
	Exit	1	1		575			575	0.0	0.0	0.000	A
D	Entry	1	1	A,B	202	1500	0.135	203	0.1	0.1	2.861	A
			2	B,C,D	334	1500	0.223	334	0.2	0.5	3.463	A
	Exit	1	1		1174			1174	0.0	0.0	0.000	A

16:30 - 16:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	12	1039	0.012	12	0.0	0.0	3.469	A
			2	A,C,D	176	1039	0.169	175	0.2	0.3	5.174	A
		2	1	(A,B,C,D)	187			187	0.0	0.0	0.000	A
	Exit	1	1		416			416	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	170	1500	0.113	169	0.2	0.2	4.660	A
			2	A,B,D	68	1500	0.045	68	0.0	0.0	2.595	A
	Exit	1	1		335			335	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	1540	2866	0.537	1532	1.2	2.1	3.093	A
	Exit	1	1		561			561	0.0	0.0	0.000	A
D	Entry	1	1	A,B	204	1500	0.136	203	0.1	0.2	2.881	A
			2	B,C,D	329	1500	0.219	329	0.5	0.3	3.568	A
	Exit	1	1		1176			1176	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	10	1092	0.009	10	0.0	0.0	3.429	A
			2	A,C,D	145	1092	0.132	146	0.3	0.2	4.602	A
		2	1	(A,B,C,D)	154			154	0.0	0.0	0.000	A
	Exit	1	1		325			325	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	146	1500	0.097	146	0.2	0.2	4.565	A
			2	A,B,D	52	1500	0.035	52	0.0	0.0	2.549	A
	Exit	1	1		272			272	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	1254	2911	0.431	1257	2.1	0.7	2.493	A
	Exit	1	1		474			474	0.0	0.0	0.000	A
D	Entry	1	1	A,B	161	1500	0.107	161	0.2	0.1	2.775	A
			2	B,C,D	273	1500	0.182	274	0.3	0.2	3.313	A
	Exit	1	1		973			973	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	Entry	1	1	B	7	1133	0.007	7	0.0	0.0	2.830	A
			2	A,C,D	116	1133	0.102	116	0.2	0.1	4.061	A
		2	1	(A,B,C,D)	124			124	0.0	0.0	0.000	A
	Exit	1	1		272			272	0.0	0.0	0.000	A
B	Entry	1	1	B,C,D	112	1500	0.075	112	0.2	0.1	4.278	A
			2	A,B,D	48	1500	0.032	48	0.0	0.0	2.435	A
	Exit	1	1		232			232	0.0	0.0	0.000	A
C	Entry	1	1	A,B,C,D	1061	2934	0.362	1061	0.7	0.8	2.130	A
	Exit	1	1		372			372	0.0	0.0	0.000	A
D	Entry	1	1	A,B	128	1501	0.086	129	0.1	0.1	2.638	A
			2	B,C,D	218	1501	0.145	218	0.2	0.2	3.144	A
	Exit	1	1		814			814	0.0	0.0	0.000	A

Junctions 9				
ARCADY 9 - Roundabout Module				
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Filename: Operation Westgate Roundabout Grimsby.j9

Path: K:\Transport Projects\60580855 - Project Koala\PEIR\Modelling\4_R'abouts\7.0 Westgate Roundabout Grimsby

Report generation date: 16/01/2020 15:21:34

»Base 2018, AM

»Base 2018, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Base 2018								
Arm 1	44.1	73.20	1.02	F	3.1	7.97	0.75	A
Arm 2	5.8	31.36	0.87	D	1.3	6.95	0.57	A
Arm 3	4.0	98.54	0.85	F	1.7	19.53	0.63	C
Arm 4	2.6	6.92	0.70	A	200.0	336.80	1.19	F
Arm 5	0.6	9.52	0.32	A	19.3	210.43	1.07	F

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Westgate Roundabout
Location	
Site number	
Date	26/09/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EU\cleasbyd
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	06:45	08:15	15
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Westgate Roundabout	Standard Roundabout	44.38	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A180 E	
2	Pyewipe Rd	
3	Birchin Way	
4	A180 W	
5	Moody Lane	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	7.25	7.25	0.0	33.0	83.0	18.0	
2	4.75	6.75	10.0	20.0	83.0	15.0	
3	3.25	4.25	8.0	17.0	83.0	20.0	
4	7.25	7.25	0.0	18.0	83.0	25.0	
5	4.00	4.00	0.0	26.0	83.0	25.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.571	2331
2	0.507	1903
3	0.404	1232
4	0.544	2223
5	0.407	1247

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2018	AM	ONE HOUR	06:45	08:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1869	100.000
2		✓	644	100.000
3		✓	146	100.000
4		✓	1245	100.000
5		✓	194	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	2	42	83	1526	216
	2	49	0	63	433	99
	3	33	32	0	74	7
	4	820	264	93	4	64
	5	87	28	8	69	2

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
From	1	0	2	5	4	2
	2	2	0	2	2	0
	3	14	3	0	9	0
	4	15	6	8	0	74
	5	14	16	14	32	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	1.02	73.20	44.1	F
2	0.87	31.36	5.8	D
3	0.85	98.54	4.0	F
4	0.70	6.92	2.6	A
5	0.32	9.52	0.6	A

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	1407	375	2117	0.665	1399	2.0	5.147	A
2	485	1499	1143	0.424	482	0.7	5.513	A
3	110	1796	507	0.217	109	0.3	9.756	A
4	937	329	2044	0.459	933	1.0	3.695	A
5	146	972	852	0.172	145	0.2	6.103	A

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	1680	448	2075	0.810	1671	4.2	9.072	A
2	579	1792	995	0.582	576	1.4	8.694	A
3	131	2147	365	0.359	130	0.6	16.479	C
4	1119	393	2009	0.557	1117	1.4	4.608	A
5	174	1163	774	0.225	174	0.3	7.195	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	2058	547	2018	1.019	1960	28.6	39.301	E
2	709	2109	834	0.850	695	4.9	24.296	C
3	161	2539	207	0.776	152	2.8	62.909	F
4	1371	465	1970	0.696	1366	2.6	6.770	A
5	214	1419	670	0.319	213	0.6	9.427	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	2058	549	2017	1.020	1996	44.1	73.203	F
2	709	2145	816	0.869	705	5.8	31.358	D
3	161	2581	190	0.846	156	4.0	98.545	F
4	1371	474	1965	0.698	1371	2.6	6.920	A
5	214	1425	667	0.320	214	0.6	9.515	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	1680	454	2071	0.811	1837	4.8	25.410	D
2	579	1955	912	0.635	595	1.8	12.076	B
3	131	2319	296	0.444	144	0.9	27.501	D
4	1119	424	1992	0.562	1124	1.5	4.764	A
5	174	1177	768	0.227	175	0.4	7.291	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	1407	378	2115	0.665	1418	2.1	5.439	A
2	485	1519	1133	0.428	489	0.8	5.721	A
3	110	1821	497	0.221	112	0.3	10.189	B
4	937	335	2041	0.459	939	1.0	3.742	A
5	146	980	848	0.172	146	0.3	6.154	A

Base 2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Westgate Roundabout	Standard Roundabout	172.10	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Base 2018	PM	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1309	100.000
2		✓	627	100.000
3		✓	293	100.000
4		✓	2135	100.000
5		✓	299	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	2	182	80	995	50
	2	142	1	97	358	29
	3	90	89	0	109	5
	4	1559	494	54	3	25
	5	181	63	7	48	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
From	1	0	2	1	6	6
	2	1	0	2	2	12
	3	1	0	0	6	0
	4	3	2	8	0	69
	5	1	2	50	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.75	7.97	3.1	A
2	0.57	6.95	1.3	A
3	0.63	19.53	1.7	C
4	1.19	336.80	200.0	F
5	1.07	210.43	19.3	F

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	985	566	2008	0.491	981	1.0	3.674	A
2	472	928	1432	0.330	470	0.5	3.814	A
3	221	1220	740	0.298	219	0.4	7.061	A
4	1607	305	2057	0.782	1593	3.6	7.804	A
5	225	1817	508	0.443	222	0.8	13.025	B

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	1177	670	1948	0.604	1174	1.6	4.875	A
2	564	1110	1341	0.420	563	0.7	4.723	A
3	263	1460	643	0.410	262	0.7	9.666	A
4	1919	366	2024	0.948	1883	12.6	22.196	C
5	269	2151	372	0.722	262	2.4	32.639	D

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	1441	722	1918	0.751	1435	3.1	7.736	A
2	690	1342	1223	0.565	688	1.3	6.850	A
3	323	1779	514	0.628	319	1.6	18.567	C
4	2351	446	1980	1.187	1974	106.8	116.334	F
5	329	2305	310	1.063	291	12.0	115.836	F

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	1441	728	1915	0.753	1441	3.1	7.968	A
2	690	1349	1219	0.566	690	1.3	6.949	A
3	323	1787	511	0.632	322	1.7	19.527	C
4	2351	449	1978	1.188	1978	200.0	282.548	F
5	329	2311	307	1.072	300	19.3	210.434	F

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	1177	722	1919	0.613	1183	1.7	5.181	A
2	564	1128	1331	0.423	566	0.8	4.822	A
3	263	1476	636	0.414	267	0.7	10.099	B
4	1919	370	2021	0.949	2011	177.1	336.805	F
5	269	2282	319	0.842	306	10.0	186.296	F

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	985	696	1933	0.510	988	1.1	4.012	A
2	472	952	1421	0.332	473	0.5	3.886	A
3	221	1234	734	0.300	222	0.4	7.214	A
4	1607	308	2055	0.782	2043	68.1	217.690	F
5	225	2264	326	0.690	254	2.7	63.880	F

Junctions 9					
ARCADY 9 - Roundabout Module					
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2020					
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Filename: Operation - Pyewipe Roundabout.j9

Path: K:\Transport Projects\60580855 - Project Koala\DCO\Junction Modelling JC\Pyewipe Roundabout

Report generation date: 02/03/2020 12:39:43

»2018 Base, AM

»2018 Base, PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
2018 Base										
Arm 1	0.1	4.21	0.07	A	-6 % [Arm 3]	0.6	6.96	0.35	A	16 % [Arm 5]
Arm 2	0.2	5.43	0.15	A		0.7	10.04	0.39	B	
Arm 3	55.7	77.30	1.03	F		3.0	6.44	0.74	A	
Arm 4	0.4	5.03	0.22	A		0.7	4.30	0.39	A	
Arm 5	2.3	5.16	0.67	A		4.7	8.94	0.82	A	

Values shown are the highest values encountered 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.

File summary

File Description

Title	Pyewipe Roundabout
Location	
Site number	
Date	11/02/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NA\jonathan.scott
Description	

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15
D2	2018 Base	PM	ONE HOUR	15:45	17:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	43.57	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	Arm 3

Arms

Arms

Arm	Name	Description
1	Estate Road No 1	
2	Gilbey Road	
3	A180 (E)	
4	Estate Road No 2	
5	A180 (W)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.32	8.09	15.8	33.2	88.0	21.1	
2	3.70	7.28	14.9	23.6	88.0	23.1	
3	7.17	9.02	3.1	27.9	88.0	20.6	
4	4.49	9.51	24.2	33.0	88.0	19.4	
5	6.95	8.68	16.7	47.6	88.0	21.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.520	2055
2	0.478	1789
3	0.579	2475
4	0.571	2402
5	0.607	2648

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	70	100.000
2		✓	138	100.000
3		✓	2187	100.000
4		✓	236	100.000
5		✓	1475	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	0	12	31	3	24
	2	0	0	74	5	59
	3	120	76	8	290	1693
	4	7	6	127	1	95
	5	144	81	1134	116	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
From	1	0	7	28	0	47
	2	0	0	44	0	23
	3	5	4	0	7	6
	4	17	20	26	0	42
	5	12	20	14	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.07	4.21	0.1	A
2	0.15	5.43	0.2	A
3	1.03	77.30	55.7	F
4	0.22	5.03	0.4	A
5	0.67	5.16	2.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	53	1162	1451	0.036	53	0.0	3.290	A
2	104	1083	1271	0.082	103	0.1	4.074	A
3	1646	156	2385	0.690	1637	2.3	5.044	A
4	178	1482	1556	0.114	177	0.2	3.426	A
5	1110	258	2492	0.446	1107	0.9	2.973	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	63	1390	1332	0.047	63	0.1	3.624	A
2	124	1296	1169	0.106	124	0.2	4.554	A
3	1966	187	2367	0.831	1956	4.9	9.054	A
4	212	1771	1392	0.152	212	0.2	4.007	A
5	1326	309	2461	0.539	1324	1.3	3.626	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	77	1697	1173	0.066	77	0.1	4.199	A
2	152	1586	1031	0.147	152	0.2	5.412	A
3	2408	229	2343	1.028	2288	34.9	40.016	E
4	260	2076	1218	0.213	259	0.4	4.932	A
5	1624	368	2425	0.670	1620	2.3	5.103	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	77	1702	1170	0.066	77	0.1	4.209	A
2	152	1589	1029	0.148	152	0.2	5.425	A
3	2408	229	2342	1.028	2325	55.7	77.300	F
4	260	2108	1199	0.217	260	0.4	5.033	A
5	1624	372	2423	0.670	1624	2.3	5.164	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	63	1404	1325	0.047	63	0.1	3.648	A
2	124	1302	1166	0.106	124	0.2	4.569	A
3	1966	187	2367	0.831	2166	5.7	32.485	D
4	212	1953	1287	0.165	213	0.3	4.401	A
5	1326	329	2449	0.541	1330	1.4	3.698	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	53	1168	1448	0.036	53	0.0	3.301	A
2	104	1089	1268	0.082	104	0.1	4.088	A
3	1646	157	2384	0.691	1660	2.4	5.362	A
4	178	1502	1545	0.115	178	0.2	3.462	A
5	1110	261	2490	0.446	1112	0.9	3.000	A

2018 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	7.42	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	Arm 5

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2018 Base	PM	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	270	100.000
2		✓	215	100.000
3		✓	1556	100.000
4		✓	509	100.000
5		✓	1761	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	1	13	178	10	68
	2	4	1	124	16	70
	3	29	61	5	195	1266
	4	4	13	307	0	185
	5	31	65	1582	80	3

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
From	1	0	8	2	11	15
	2	0	0	3	0	11
	3	11	3	0	13	7
	4	33	8	4	0	11
	5	18	25	4	43	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.35	6.96	0.6	A
2	0.39	10.04	0.7	B
3	0.74	6.44	3.0	A
4	0.39	4.30	0.7	A
5	0.82	8.94	4.7	A

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	203	1588	1230	0.165	202	0.2	3.697	A
2	162	1676	988	0.164	161	0.2	4.572	A
3	1171	190	2365	0.495	1167	1.0	3.223	A
4	383	1131	1757	0.218	382	0.3	2.792	A
5	1326	319	2455	0.540	1321	1.2	3.355	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	243	1900	1067	0.227	242	0.3	4.605	A
2	193	2005	831	0.233	193	0.3	5.930	A
3	1399	227	2344	0.597	1397	1.6	4.081	A
4	458	1354	1630	0.281	457	0.4	3.274	A
5	1583	382	2417	0.655	1580	2.0	4.551	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	297	2320	849	0.350	296	0.6	6.864	A
2	237	2448	619	0.383	235	0.6	9.839	A
3	1713	277	2315	0.740	1708	3.0	6.322	A
4	560	1655	1458	0.384	559	0.7	4.272	A
5	1939	467	2365	0.820	1928	4.6	8.554	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	297	2330	844	0.352	297	0.6	6.958	A
2	237	2459	614	0.386	237	0.7	10.039	B
3	1713	279	2314	0.740	1713	3.0	6.443	A
4	560	1660	1455	0.385	560	0.7	4.295	A
5	1939	468	2365	0.820	1938	4.7	8.941	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	243	1914	1060	0.229	244	0.3	4.665	A
2	193	2020	824	0.235	195	0.3	6.030	A
3	1399	229	2343	0.597	1404	1.6	4.154	A
4	458	1361	1625	0.282	459	0.4	3.297	A
5	1583	383	2416	0.655	1594	2.0	4.706	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	203	1597	1225	0.166	204	0.2	3.726	A
2	162	1686	983	0.165	162	0.2	4.615	A
3	1171	191	2365	0.495	1174	1.1	3.260	A
4	383	1137	1753	0.219	384	0.3	2.808	A
5	1326	320	2454	0.540	1329	1.3	3.406	A