Equites Newlands (Goldthorpe) Ltd
Land South of Dearne Valley Parkway, Goldthorpe

Technical Note 1: Response to National Highways Comments

11 March 2024
Version 1.0
Issue

1 Introduction

Fore Consulting Limited (Fore) has been commissioned by Equites Newlands (Goldthorpe) Ltd in relation to a hybrid planning application for a proposed employment development at Goldthorpe, Barnsley.

The commission includes the preparation of a Transport Assessment (TA) and Framework Travel Plan (FTP).

The hybrid planning application (Planning Reference: 2023/1105) was submitted as follows:

> *Outline permission sought for the construction of Storage and Distribution (Use Class B8) and General Employment (Use Class B2) space with ancillary offices and gatehouses on four separate, self-contained and severable plots as shown on the submitted Parameters Plan. All matters reserved except for site access. Full permission sought for engineering infrastructure works to support the employment development comprising: the access roads; earthworks to create the development platform zones/bunding; drainage and culvert works; a flood compensation area; and strategic landscaping areas.*

A consultation to the planning application was received from National Highways, along with a Technical Memorandum[1] (TM) prepared by NH's appointed consultants JSJV. These documents are provided to the rear of this Note at Appendices A and B, respectively.

A meeting was held between Fore and NH/JSJV on 9 February 2024 to discuss the response.

This Note provides responses to the comments received regarding the vehicle trip distribution and determines the predicted traffic impact of the proposed development at A1(M) Junction 37 and M1 Junction 36. Responses to each of the comments are provided in the following Section.

[1] *Technical Memorandum: AA.23.20.15 Land to the south of Dearne Valley Parkway, Goldthorpe*, JSJV, 22 January 2024.

2 Response to Comments Received

2.1 National Highways Comment

Although Fore's proposed vehicle trip distribution was considered appropriate by JSJV as part of the pre-application process, it was recommended that the distribution and assignment results for the M1 J36 also be presented.

On further review, JSJV would note Fore has only considered trips from a limited number of locations, including Barnsley, Doncaster, Sheffield and Rotherham, and failed to show M1 J36 distribution.

It is considered likely that employees will commute from a wider range of areas and will therefore utilise the SRN to a greater extent than considered by Fore. As a result, we would recommend Fore either provides further evidence to justify their distribution of light vehicles, or provide an updated assessment based on an extended gravity model, which considers a larger commuting area.

2.2 Fore Response

The light vehicle/car trip distribution has been estimated based on commuting trips undertaken to the Barnsley 022 and 025 Middle Layer Super Output Areas (MSOA)[2]. These MSOAs contain the Goldthorpe Industrial Estate and Fields End Business Park and are therefore considered to provide a reasonable assessment of travel to work origins/destinations in the area.

It is noted that JSJV suggest that Fore has only considered trips from a limited number of locations including Barnsley, Doncaster, Sheffield and Rotherham. For clarity, the dataset includes the full range of origins for the journeys captured by the Census, beyond those suggested by JSJV. This is clearly shown in the route choice analysis provided at Appendix F of the TA (also provided as Appendix C of this TN, for reference).

Further, it is noted that JSJV suggest that the use of Rotherham 002 MSOA, rather than Barnsley 022 and 025 MSOAs, results in employees commuting from a much wider range of locations than those considered by Fore. To explore this, Fore has undertaken a review of the datasets and compared the proportion of trips undertaken from each commuter location.

The Table below provides a summary of this review, with the proportion of trips from each commuter area disaggregated at the MSOA, District and Regional levels. The Table also

[2] 2011 Census dataset WU03EW - Location of usual residence and place of work by method of travel to work.

shows the resulting total two-way light vehicle/car trips generated by the proposed development to/from each of the locations.

Table 1: Commuter Trip Comparison (Barnsley 022 & 025 MSOAs and Rotherham 002 MSOA)

Commuting Location		Barnsley 022 & 025 MSOAs			Rotherham 002 MSOA		
		%	AM	PM	%	AM	PM
Locations Considered in the TA at MSOA Level	Barnsley, Doncaster, Sheffield and Rotherham	89%	291	317	88%	288	314
District Level (Districts with equal to or greater than 1% of commuting trips)	Wakefield	5%	16	17	3%	11	12
	Bassetlaw	1%	3	4	1%	3	3
	Kirklees	1%	3	3	1%	3	3
	North Lincolnshire	1%	3	3	1%	2	2
	Leeds	1%	3	3	1%	3	3
	North East Derbyshire	0%	1	1	1%	2	2
Regional Level (Excluding MSOAs and Districts considered above)	East	0%	1	1	0%	0	0
	East Midlands	1%	3	3	2%	5	5
	London	0%	0	0	0%	0	0
	North East	0%	1	1	0%	0	0
	North West	0%	1	1	1%	4	4
	South East	0%	0	0	0%	0	0
	South West	0%	0	0	0%	0	0
	Wales	0%	0	0	0%	0	0
	West Midlands	0%	1	1	0%	1	1
	Yorkshire and the Humber	1%	2	3	2%	5	5
Total		100%	328	358	100%	328	358

Note: Figures rounded to the nearest whole number

The Table above demonstrates that the resulting light vehicle/car trip generations to/from each of the locations are similar when using the Barnsley 022 and 025 MSOAs and the Rotherham 002 MSOA.

It is therefore considered that the assessment presented in the TA appropriately represents likely patterns of commuting to the site, and no changes to the approach are necessary.

Further, it is noted that at the pre-application stage, JSJV stated in their TM in response to the TA Scoping Note that the trip distribution is robust, as follows:

"JSJV has reviewed the proposed trip distribution rates using National Highways' gravity model GraHAM and would suggest that Fore's distribution rates are robust."

The light vehicle/car trip distribution is as per the Scoping Note and it is therefore considered that this conclusion is still valid, particularly given the assessment of commuting destinations undertaken above.

2.3 National Highways Comment

Again, JSJV would question the use of a "population-based" gravity model to derive HGV trip distribution. We would suggest rather than basing HGV trip distribution on an unrealistic population-based gravity model, Fore should consider the likely origin/destination of HGV traffic (e.g., ports, free ports airports and major distribution centres). JSJV would recommend Fore either provides evidence to justify their distribution of HGVs, or provide an alternative assessment based on the likely origin/destination of HGV traffic.

2.4 Fore Response

At this stage of the planning process and given the nature of the hybrid planning application, the proposed buildings on site are not fixed and the operators of the proposed development (and the related activities associated with their operational use) are not known. Consequently, likely patterns of HGV vehicle movements (which in practice are specific to the supply chain requirements of individual occupiers) cannot be confirmed with certainty.

Consequently, for the purposes of the TA work, a population-based gravity model has been used to estimate the distribution of HGV trips, on the basis that population centres are generally located close to potential generators of HGV traffic, including ports, free ports, airports and major distribution centres. Briefly, this approach results in:

- The majority of HGV trips (circa 67%) are predicted to utilise the strategic road network junctions to the east and west of the site (A1(M) Junction 37 and M1 Junction 36).

- The remaining trips (circa 33%) are predicted to utilise local primary routes between the site and other regional destinations, including the A635 Doncaster Road, the A633 and the A6195 Park Spring Road. Such routes are 'A'-category routes of appropriate standard for HGV use and therefore this assumption is considered reasonable.

On this basis, and given that it is not possible in the context of this planning application to be definitive about the distribution of HGV trips that may be generated, the resulting distribution provides a reasonable assessment of potential routing patterns of HGVs

to/from the proposed development, reflecting a suitable balance of local, regional and national journeys.

Notwithstanding this, as a sensitivity assessment, Fore has updated the gravity model to include workplace population data, rather than resident population data. The workplace population data[3] has been broken down by industry thus serving as a proxy for potential origins/destinations of HGV trips at the proposed development (as this cannot be determined with certainty given there are no confirmed end occupiers at this stage of the planning process).

The industries listed below, as derived from the UK Standard Industrial Classification (SIC), have been included in the dataset. These industries have been included as they are likely to represent potential demand for HGV trips to/from the proposed development. Further, these industries cover those suggested by JSJV (ports, free ports, airports and major distribution centres).

- Industry C: Manufacturing.
- Industry G: Wholesale and retail trade; repair of motor vehicles and motor cycles.
- Industry H: Transport and storage.

The updated sensitivity assessment gravity model based on workplace population is provided to the rear of this Note at Appendix D and a comparison between the resulting vehicle trip distribution and that included within the TA is undertaken in the Table below. The trip assignment methodology, as discussed and agreed with Barnsley Metropolitan Borough Council (BMBC) highways officers in preparing the TA as part of the planning application, is as per that undertaken in the TA.

[3] Dataset: WP605EW Industry (Workplace Population).

Table 2: Updated HGV Gravity Model (Sensitivity)

Ref.	Route	Transport Assessment (Resident Population)	Updated Analysis (Workplace Population)	Difference
5	A1(M) (North)	10.6%	11.1%	0.6%
6	A635 Barnsley Road	6.2%	6.2%	0.0%
7	A1(M) (South)	16.7%	17.2%	0.5%
10	A633 Manvers Way	4.6%	4.6%	0.0%
12	A633 Wath Road	5.0%	4.0%	-1.0%
13D	M1 (South)	20.8%	20.5%	-0.3%
13E	A61 (West of M1 J36)	6.3%	6.2%	-0.1%
13F	M1 (North)	6.7%	7.5%	0.8%
14	A635 Doncaster Road	13.5%	13.2%	-0.2%
15	A6195 Park Spring Road	9.7%	9.4%	-0.3%
Total		100%	100%	-

The Table above shows that the resulting HGV trip distribution onto the local and strategic highway networks is similar when using the resident population and the workplace populations for industries that would be potential trip attractors for HGV trips at the proposed development.

It is therefore considered that the use of a population-based gravity model is appropriate and reasonably captures the potential distribution of HGV trips, given that population centres are generally located within close proximity to potential origins/destinations of HGV traffic, including ports, free ports, airports and major distribution centres.

2.5 National Highways Comment

Due to the anticipated increase in traffic, JSJV would recommend the Applicant provides an opening year junction capacity assessments for the A1(M) J37 and the M1 J36.

2.6 Fore Response

With regard to the assessment of the strategic road network, in their TM in response to the TA Scoping Note, JSJV set out the following:

> *"The Goldthorpe Masterplan Framework states an evidence base for the site was collated initially as part of the Local Plan Site Allocation process, which included the "D1 Transport Impact Assessment Report" produced by AECOM (2018).*

JSJV would note Fore has not made reference to this TA in their TA Scoping Note. JSJV would state the proposed development should not exceed the level of traffic generation associated with Site ES10 as considered in the AECOM TA. If the level of traffic generation is exceeded, further capacity assessments may be required in order to determine the impact the overall uplift has on the SRN.

Therefore, JSJV would recommend that Fore provide and make reference to the AECOM TA in the upcoming TA, namely the assumed trip generation, to ensure the traffic generation associated with the proposed development does not exceed that what was considered acceptable as part of the Local Plan and Masterplan Framework."

As set out in Tables 9 and 20 of the TA, the total vehicle trip generation estimated by Fore does not exceed that estimated by AECOM and there is not a material difference between the development-generated traffic predicted by AECOM and that predicted by Fore at either M1 Junction 36 or A1(M) Junction 37. As such, and in line with comments received from JSJV, it is considered that detailed capacity assessments are not required for either junction.

To provide further context to the predicted impact of the proposed development at both junctions, the predicted impact at each approach arm/slip road is quantified and compared against base traffic flows. This is set out in the following sub-section.

2.6.1 Predicted Traffic Impact

Base Traffic Flows

Base traffic flows for A1(M) Junction 37 have been obtained from traffic surveys undertaken on Tuesday 21 June 2022, a 'neutral' date, as defined in TAG Unit M1.2[4]. The survey data was collected as part of the TA. The surveys were undertaken between 07:00-09:00 and 15:00-18:00, with the Weekday AM and PM peak hours for the junction identified as 07:15-08:15 and 16:45-17:45

Base traffic flows for the M1 Junction 36 slip roads have been obtained from WebTRIS. For consistency with the assessment undertaken for A1(M) Junction 37 and those undertaken in the TA, the traffic data has been obtained for Tuesday 21 June 2022. The Weekday AM and PM peak hours for the slip road flows have been identified as 07:15-08:15 and 16:15-17:15. Base traffic flows for the A61 approaches have been obtained from a TA prepared for planning application 2023/0815[5]. The survey data is from Tuesday 23 May 2023.

The survey data is provided at Appendix E.

[4] *Transport Analysis Guidance (TAG) Unit M1.2 – Data Sources and Surveys*, Department for Transport, 2020.
[5] Transport Assessment: Proposed Industrial Estate, Land West of Dearne Valley Parkway, Birdwell, Barnsley, Roberts Highway Consultants Limited, 2023.

Proposed Development Traffic

The predicted development traffic for A1(M) Junction 37 is as per that illustrated on Figures 5-12 of the TA, though noting that a 10% reduction has now been applied to the light vehicle/car trips reflect the mode share targets set out in the FTP submitted with the planning application. This is in line with DfT Circular 01/2022[6] which requires the residual traffic impacts of a proposed development to be assessed.

Traffic flow diagrams for M1 Junction 36 are provided at Appendix F. As per the A1(M) Junction 37 assessment, a 10% reduction has been applied to the light vehicle/car trips.

It is noted that JSJV suggest that a 10% reduction in car trips is unlikely unless improvements are made to Public Rights of Way Footpath 15 or bus services. The principle of these improvements is accepted and the applicant will work with BMBC on the specific detail to ensure that sustainable travel to and from the development is maximised. On this basis, the identified target reduction in trips by car is taken into account for the purposes of this assessment.

It should also be noted that given flexibility is required to respond to potential market demand, as per the TA, the traffic impact of the proposed development has been determined assuming a 70%:30% B8:B2 split (142,800 sqm B8 and 61,200 sqm B2). JSJV has requested that the 30% B2 limit is subject to a planning condition if it is to be relied upon in the TA process. This is accepted.

The predicted traffic impact at each junction is presented in the Tables overleaf. The trips presented are vehicles approaching the junction and slip road flows.

[6] DfT Circular 01/2022: Strategic road network and the delivery of sustainable development,

Table 3: Traffic Impact Assessment – A1(M) Junction 37

Approach/Slip Road	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Base	Dev Trips	% Impact	Base	Dev Trips	% Impact
A1(M) Southbound Off-Slip	264	8	3.2%	429	7	1.6%
A635 Barnsley Road (East)	743	10	1.3%	650	5	0.8%
A1(M) Northbound Off-Slip	561	27	4.9%	738	14	1.9%
A635 Barnsley Road (West)	978	24	2.4%	780	46	5.9%
Approach Total	2,546	69	2.7%	2,597	72	2.8%
A1(M) Northbound On-Slip	370	6	1.7%	311	8	2.7%
A1(M) Southbound On-Slip	748	13	1.7%	550	28	5.1%

Note: Proposed development trips rounded to nearest whole number

Table 4: Traffic Impact Assessment – M1 Junction 36

Approach/Slip Road	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Base	Dev Trips	% Impact	Base	Dev Trips	% Impact
A1(M) Southbound Off-Slip	925	12	1.3%	1340	6	0.5%
A61 (East)	1,789	23	1.3%	1,585	40	2.5%
A1(M) Northbound Off-Slip	618	16	2.6%	1,053	13	1.3%
A61 (West)	1,143	11	1.0%	992	5	0.6%
Approach Total	4,475	63	1.4%	4,970	65	1.3%
A1(M) Northbound On-Slip	1,281	6	0.4%	849	13	1.5%
A1(M) Southbound On-Slip	968	12	1.3%	669	15	2.3%

Note: Proposed development trips rounded to nearest whole number

The Tables above show:

- At A1(M) Junction 37, the proposed development is predicted to result in a total increase of 69 and 72 two-way vehicle trips during the Weekday AM and PM peak hours, respectively. This equates to increases of just 2.7% and 2.8% compared to the base traffic flows. Such changes are likely to be indistinguishable from daily variations to baseline traffic flows and are unlikely to represent a significant impact on the operation of the junction. With regard to individual slip roads and the A635 approaches, the change in traffic flow related to the development is generally predicted to be less than 30 vehicles per hour (on average this equates to an additional vehicle every 2 minutes). It is therefore similarly unlikely that the proposed development will have a significant impact on the operation of individual slip roads or A635 approaches.

- At M1 Junction 36, the proposed development is predicted to result in a total increase of 63 and 65 two-way vehicle trips during the Weekday AM and PM peak hours, respectively. This equates to increases of just 1.4% and 1.3% compared to the base traffic flows. Such changes are likely to be indistinguishable from daily variations to baseline traffic flows and are unlikely to represent a significant impact on the operation of the junction. With regard to individual slip roads and the A61 approaches, the change in traffic flow related to the development is generally predicted to be less than 20 vehicles per hour (on average, this equates to an additional vehicle every 3 minutes). It is therefore similarly unlikely that the proposed development will have a significant impact on the operation of individual slip roads or A61 approaches.

As such, it is considered that detailed capacity assessments are not required for either junction.

It should be noted that the analysis undertaken is robust given that no consideration has been taken of background traffic growth or traffic associated with committed developments, i.e. the impact of the proposed development has been considered in isolation.

2.7 Summary and Conclusions

This Technical Note has been prepared in response to NH's post-submission Planning Response (NHPR 22-12) and the accompanying TM prepared by NH's appointed consultants JSJV. Specifically, as agreed at the meeting held on 9 February 2024, this Note provides responses to the comments received regarding the vehicle trip distribution and determines the predicted traffic impact of the proposed development at A1(M) Junction 37 and M1 Junction 36.

It has been demonstrated that:

- The use of the Barnsley 022 and 025 MSOAs is appropriate for determining the light vehicle/car trip distribution and the resulting distribution would be similar if using the Rotherham 002 MSOA, as suggested by JSJV. It is therefore considered that employees are not likely to utilise the SRN to a significantly greater extent than that considered in the TA and an updated assessment considering a larger commuting area should not be required. The light vehicle/car trip distribution is considered to be appropriate.

- Given the nature of the planning application and that end occupiers are not known and therefore resulting HGV trips cannot realistically be determined with any certainty, the use of a population-based gravity model to derive the HGV trip distribution is appropriate as this captures potential origins/destinations of HGV trips given population centres are generally located within close proximity to potential

origins/destinations of HGV traffic, including ports, free ports, airports and major distribution centres.

- The predicted residual traffic impact of the proposed development at A1(M) Junction 37 and M1 Junction 36 is likely to be indistinguishable from the daily variations to baseline traffic flows and detailed capacity assessments are not required for either junction.

Appendix A

National Highways Response

Our ref: AA.23.20.15
Your ref: 2023/1105

Barnsley Metropolitan Borough Council,
1 Westgate,
Western Street,
Barnsley,
S70 2DR

Paula Bedford
Planning Manager
Calder View House
Wakefield
West Yorkshire
WF2 7UA

Tel: 0300 470 2337

FAO: Matthew Smith

24 January 2024

Dear Matthew,

Land to the south of Dearne Valley Parkway, Goldthorpe | 2023/1105

We have reviewed the Transport Assessment [TA] and Travel Plan [TP] prepared by Fore Consulting Limited [Fore] in relation to the hybrid planning application (ref: 2023/1105).

The proposed development comprises 204,000m² GIA for Storage and Distribution (Use Class B8) and General Employment (Use Class B2) space, with ancillary offices.

Fore notes that *"Flexibility is required to respond to potential market demand, so for the purposes of this Transport Assessment, a 70%:30% B8:B2 split has been assumed (142,800 sqm B8 and 61,200 sqm B2). The B2 element of the proposed development will be limited to 30% of the total floorspace."*

We would note that the quantum of land use assumed for development by the previous D1 Transport Impact Assessment Report – AECOM (2018) [AECOM Report] was 168,619m², i.e., 35,381m² smaller than proposed.

We would note that a limit in the B2 element of the proposed development, to 30%, will be the subject of a planning condition if it is to be relied upon in the TA process.

Travel Plan

After reviewing the TP in line with Circular 01/2022, we would provide the following comments:

- We would note that access taken from Carr Field Lane, via the footpath located within the south-eastern corner of the site, is not to a standard conducive to commuting and should not, at this time, be considered as a suitable pedestrian access to the site;

- We would note that public right of way footpath 15 is limited in width (in the order of 1m) and does not, therefore, cater for both cyclists and pedestrians or wheeled users with mobility impairment.

- We would recommend that a firm commitment is in place, as part of the TP, as to how a suitably skilled Travel Plan Co-ordinator is to be recruited for the site. Furthermore, all occupiers should follow the TP.

- We would state cessation of monitoring may only be appropriate once it has been demonstrated that the travel patterns of the development are in line with the targets and objectives of the TP. This needs to be a consideration within the TP.

- We would note Fore has not provided information in regard to any specific 'improvements' to the existing public right of way footpath 15 or bus service. We would recommend the Applicant commits to upgrading the footpath to accommodate all users in order to maximise the accessibility of and within the site by walking, wheeling, cycling, public transport and shared travel as is required by Circular 01/2022.

- We would suggest a 10% reduction in car trips is unlikely unless improvements are made to current pedestrian and bus access.

- We would note a sustained monitoring and management strategy to confirm that vehicle trip targets are being met and a plan detailing the remediation process in the event that targets are not being met should be presented within the TP. Stating that it will be the responsibility of the Occupiers undermines the importance of this process.

- Fore has not provided any examples of alternative measures in the case that the TP is not achieving its targets or the funding that may be needed to deliver them. These should be clearly stated within the TP.

<u>Transport Assessment</u>

On further review of the proposed light vehicle trip distribution, we would note Fore has only considered commuting trips from a limited number of areas, including Barnsley, Doncaster, Sheffield and Rotherham, and have also failed to present distribution across M1 J36.

It is considered likely that employees will commute from a wider range of areas and will therefore utilise the SRN to a greater extent than considered by Fore. As a result, we would recommend Fore either provides further evidence to justify their distribution of light vehicles, or provide an updated assessment based on an extended gravity model, which considers a larger commuting area.

Furthermore, we would question the use of a "population-based" gravity model to derive HGV trip distribution. We would suggest rather than basing HGV trip distribution on an unrealistic population-based gravity model, Fore should consider the likely origin/destination of HGV traffic (e.g., ports, free ports airports and major distribution centres).

Subject to the likely increase in vehicle trips at the SRN, we would recommend the Applicant provides an opening year junction capacity assessments for the A1(M) J37 and the M1 J36.

We would note Circular 01/2022 states:

> *"An opening year assessment to include trips generated by the proposed development, forecasted growth and committed development shall be carried out to establish the residual transport impacts of a proposed development. For multi-phase developments, additional assessments shall be provided based on the opening of each phase."*

Please note that Section D.2.7 of TAG Unit M3.1 gives the PCU for HGVs on motorways and all-purpose dual carriageways as 2.5. Given the nature of the highway network around the proposed development site, we request that the PCU equivalent value of 2.5 is used in order to ensure an appropriate assessment of anticipated vehicular traffic associated with the development.

Based on the above, I enclose National Highways' formal NHPR 22-12 response recommending a period of non-determination.

I trust this response is helpful, but should you require any further information please do not hesitate to contact me.

Yours sincerely

Paula Bedford

Paula Bedford

Email: paula.bedford@nationalhighways.co.uk

National Highways Planning Response (NHPR 22-12)
Formal Recommendation to an Application for Planning Permission

From: Simon Boyle (Regional Director)
Operations Directorate
Yorkshire North East Region
National Highways
Planningyne@nationalhighways.co.uk

To: Barnsley Council (FAO Matthew Smith)
developmentmanagement@barnsley.gov.uk

CC: transportplanning@dft.gov.uk
spatialplanning@nationalhighways.co.uk

Council's Reference: 2023/1105

Proposal : Hybrid Planning Application: Outline permission sought for the construction of Storage and Distribution (Use Class B8) and General Employment (Use Class B2) space with ancillary offices and gatehouses on four separate, self-contained and severable plots as shown on the submitted Parameters Plan. All matters reserved except for site access.

Full permission sought for engineering infrastructure works to support the employment development comprising: the access roads; earthworks to create the development platform zones/bunding; drainage and culvert works; a flood compensation area; and strategic landscaping areas

Location: Land to the south of Dearne Valley Parkway, Goldthorpe, Rotherham, S72 0JE

National Highways Ref: NH/23/04170

Referring to the consultation on a planning application dated 14 December 2023 referenced above, in the vicinity of the M1 & A1(M) that forms part of the Strategic Road Network, notice is hereby given that National Highways' formal recommendation is that we:

~~a) offer no objection (see reasons at Annex A);~~

~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~

c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);

~~d) recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is not relevant to this application.[1]

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority not propose to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

The Local Planning Authority must also copy any consultation under the 2018 Direction to Planningyne@nationalhighways.co.uk.

Signature: *Paula Bedford*	**Date: 24 January 2024**
Name: Paula Bedford **National Highways** **Calder View House** **Peel Avenue** **Wakefield** **WF4 3GH**	**Position:** Assistant Spatial Planning Manager

[1] Where relevant, further information will be provided within Annex A.

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommended Temporary Non-Approval

It is recommended that the application should not be approved until the applicant has considered and responded to our technical note review of their transport assessment and travel plan which has highlighted several areas where further work, or information, will be required.

- It is noted that a limit in the B2 element of the proposed development, to 30%, will be the subject of a planning condition if it is to be relied upon in the Transport Assessment process.
- We would note that access taken from Carr Field Lane, via the footpath located within the south eastern corner of the site, is not to a standard conducive to commuting and should not, at this time, be considered as a suitable pedestrian access to the site.
- It is noted that footpath 15 is limited in width (in the order of 1m) and does not, therefore, cater for both cyclists and pedestrians or wheeled users with mobility impairment.
- We would recommend that a firm commitment is in place, as part of the Travel plan (TP), as to how a suitably skilled Travel Plan Co-ordinator is to be recruited for the site. Furthermore, all occupiers should follow the TP.
- Cessation of monitoring may only be appropriate once it has been demonstrated that the travel patterns of the development are in line with the targets and objectives of the TP. This needs to be a consideration within the TP.
- Fore has not provided information regarding any specific 'improvements' to the existing footpath 15 or bus service. We would recommend the Applicant commits to upgrading the footpath to accommodate all users to maximise the accessibility of and within the site by walking, wheeling, cycling, public transport and shared travel as is required by Circular 01/2022.
- We would suggest a 10% reduction in car trips is unlikely unless improvements are made to pedestrian and bus access.
- We would note a sustained monitoring and management strategy to confirm that vehicle trip targets are being met and a plan detailing the remediation process if targets are not being met should be presented within the TP. Stating that it will be the responsibility of the Occupiers undermines the importance of this process.

- Fore has not provided any examples of alternative measures in the case that the TP is not achieving its targets or the funding that may be needed to deliver them. These should be clearly stated within the TP.
- Although Fore's proposed vehicle trip distribution was considered appropriate as part of the pre-application process, it was recommended that the distribution and assignment results for the M1 J36 also be presented. On further review, we would note Fore has only considered trips from a limited number of locations, including Barnsley, Doncaster, Sheffield and Rotherham, and failed to show M1 J36 distribution.
- It is considered likely that employees will commute from a wider range of areas and will therefore utilise the SRN to a greater extent than considered by Fore. As a result, we would recommend Fore either provides further evidence to justify their distribution of light vehicles, or provide an updated assessment based on an extended gravity model, which considers a larger commuting area.
- Again, we would question the use of a "population-based" gravity model to derive HGV trip distribution. We would suggest rather than basing HGV trip distribution on an unrealistic population-based gravity model, Fore should consider the likely origin/destination of HGV traffic (e.g., ports, free ports airports and major distribution centres).
- We would recommend Fore either provides evidence to justify their distribution of HGVs, or provide an alternative assessment based on the likely origin/destination of HGV traffic.
- Due to the anticipated increase in traffic, we would recommend the Applicant provides an opening year junction capacity assessment for the A1(M) J37 and the M1 J36.

I will re-visit this recommendation no later than 15 July 2024

Reason: To ensure the safe and continued operation of the SRN

Standing advice to the local planning authority

The Climate Change Committee's 2022 Report to Parliament notes that for the UK to achieve net zero carbon status by 2050, action is needed to support a modal shift away from car travel. The NPPF supports this position, with paragraphs 73 and 105 prescribing that significant development should offer a genuine choice of transport modes, while paragraphs 104 and 110 advise that appropriate opportunities to promote walking, cycling and public transport should be taken up.

Moreover, the build clever and build efficiently criteria as set out in clause 6.1.4 of PAS2080 promote the use of low carbon materials and products, innovative design solutions and construction methods to minimise resource consumption.

These considerations should be weighed alongside any relevant Local Plan policies to ensure that planning decisions are in line with the necessary transition to net zero carbon.

Appendix B

JSJV Technical Memorandum

AA.23.20.15 Land to the south of Dearne Valley Parkway, Goldthorpe

Prepared for:	Paula Bedford
Prepared by:	Harry Robinson (SYSTRA)
Date:	22nd January 2024
Case Reference:	DevSY0121
Document Reference:	AA.23.20.15 Technical Memorandum
Reviewed/approved by:	Terry Dale (SYTRA)

Introduction

In December 2023, Equites Newlands (Goldthorpe) Ltd., [the Applicant], submitted a hybrid planning application (ref: 2023/1105) on land to the south of Dearne Valley Parkway, Goldthorpe:

> *Outline permission sought for the construction of Storage and Distribution (Use Class B8) and General Employment (Use Class B2) space with ancillary offices and gatehouses on four separate, self-contained and severable plots as shown on the submitted Parameters Plan. All matters reserved except for site access.*
>
> *Full permission sought for engineering infrastructure works to support the employment development comprising: the access roads; earthworks to create the development platform zones/bunding; drainage and culvert works; a flood compensation area; and strategic landscaping areas.*

The developer's Transport Consultant is Fore Consulting Limited [Fore] and the Local Planning Authority is [LPA] Barnsley Metropolitan Borough Council [BMBC].

Jacobs SYSTRA Joint Venture [JSJV], on behalf of National Highways, has reviewed the Transport Assessment [TA] and Travel Plan [TP] prepared by Fore and would provide the following comments.

Background

JSJV understands that the development site is identified within the BMBC Local Plan and forms part of the wider Goldthorpe Masterplan Framework.

BMBC Local Plan 2019

The development site was allocated for employment use within the BMBC Local Plan (2019) as Site ES10. The total size of the site is stated to be 72.9 ha; however, the Local Plan does not identify the total quantum of development to be allocated for employment use. JSJV would note that the Local Plan states that:

> *"The development will be subject to the production of a phased Masterplan Framework and will be expected to:*

Improve the highway network to mitigate the impact of additional traffic generated by the development on surrounding roads and in particular effects on the A635 and other ***strategic road links to the A1/M and M1 motorways****"*

The framework is called the Goldthorpe Masterplan Framework.

Goldthorpe Masterplan Framework

The Goldthorpe Masterplan Framework was adopted by BMBC in September 2021. JSJV would note that again the framework (version 2.0) does not specify the total quantum of land allocated to employment uses at Site ES10. It does state however, that the Transport Assessment associated with any planning application will need to dictate the delivery of off-site highway infrastructure, likely taking the form of Section 106 contributions. Therefore, the cumulative highway impacts of the ES10 site need to be established for an "*agreement to be reached on a package of measures (if needed) to offset this impact"*.

D1 Transport Impact Assessment Report – AECOM (2018)

The Goldthorpe Masterplan Framework states that an evidence base for the site was collated initially as part of the Local Plan Site Allocation process, which included the D1 Transport Impact Assessment Report" produced by AECOM (2018) [AECOM Report].

The total development floorspace (GFA) assumed as part of the Impact Assessment Report was 168,619m².

Fore has referred to the AECOM Report and presented the vehicle trip generation associated with the development. In summary, Fore has highlighted that the vehicle trip generation associated with the currently proposed development is lower than that assumed as part of the AECOM Report.

However, JSJV would note that no capacity assessments were undertaken for the AECOM Report, relative to the Strategic Road Network [SRN]. As a result, the anticipated impact of the traffic generated by the site on the SRN has not yet been established.

Access planning application: A635 Barnsley Road, Goldthorpe, Rotherham (ref: 2021/1511)

Fore notes that vehicular access to the development will be taken from a new three-arm roundabout on the A635. Planning consent for the roundabout was granted by BMBC on 16 February 2022.

The roundabout design includes a link to the existing northern, 3m wide shared footway, as shown in **Figure 1**.

Figure 1. Proposed access (Drawing No.100-SK-001, Fore)

Site history

National Highways previously responded to a request for pre-application scoping advice in relation to the proposed development in June 2022. A summary of National Highways' key comments are as follows:

- It was stated that the proposed development should not exceed the level of traffic generation associated with Site ES10 as considered in the AECOM TA. If the level of traffic generation is exceeded, further capacity assessments may be required in order to determine the impact the overall uplift has on the SRN;
- It was recommended that Fore provide and make reference to the AECOM TA in the upcoming TA, namely the assumed trip generation, to ensure the traffic generation associated with the proposed development does not exceed that what was considered acceptable as part of the Local Plan and Masterplan Framework.
- It was recommended that Fore present the quantum of land that was allocated for employment use, either as part of the Local Plan and Goldthorpe Masterplan Framework, or as was assumed as part of the AECOM TA.

Existing situation

The location of the development site relative to the SRN, is presented below in **Figure 2.** As can be seen, the application site is located approximately 8.3 km to the west of the A1(M) junction 63 [A1(M) J63]; 11.6 km to the southeast of the M1 junction 37 [M1 J37]; and 9.9 km to the northeast of the M1 junction 36 [M1 J36].

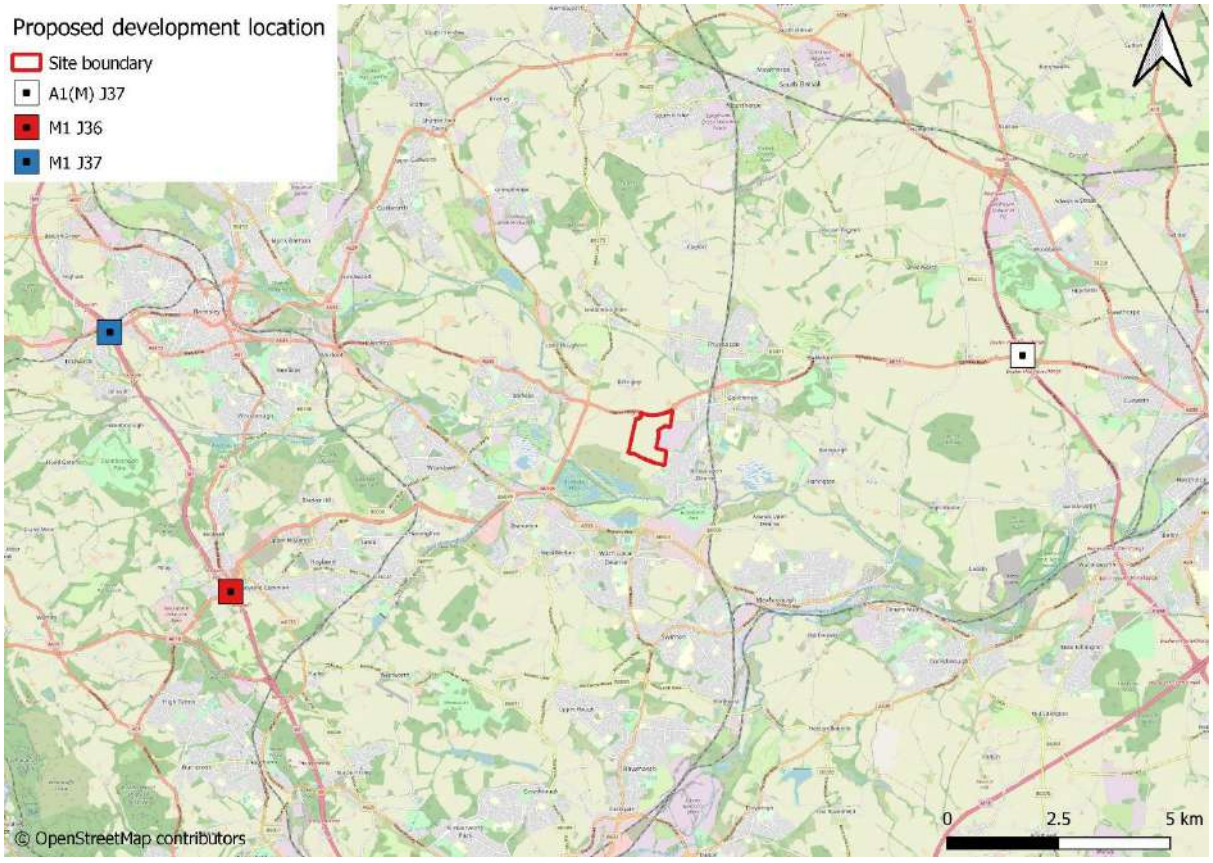


Figure 2. Proposed development site location in relation to SRN

Collision data analysis

Fore has obtained Personal Injury Collision [PIC] data from BMBC for the period covering 2015-2022. Fore has excluded the years 2020 and 2021 due to COVID-19 restrictions; JSJV welcomes this approach.

JSJV would note that Fore has only provided PIC data for the A1(M) J37. Subject to the impact of the proposed development on the SRN, JSJV would recommend the SRN junctions M1 J37 and M1 J36 are included within the collision data analysis.

Fore notes that 13 collisions have been recorded at A1(M) J37 during the assessment period, however, 9 of these occurred on the motorway section and do not relate to the roundabout or slips roads.

Fore has provided the causation factors for each of the collisions that occurred at A1(M) J37. JSJV would note that, out of the 13 collisions 12 were considered as slight and 1 as severe. The main cause of the recorded collisions was due to driver error, with causation factors such as ‘failed to look properly’, ‘failed to judge other person’s path or speed’ and ‘careless, reckless or in a hurry’ being most common.

The one severe collision occurred on the A653, east of A1 Junction 47, as a vehicle travelling eastbound was “dazzled by the dun” and collided with a vehicle travelling in the opposite direction. The causation factor was recorded as “vision affected by dazzling sun”.

JSJV would agree the cause of the collisions at A1(M) J37 during the assessment period do not suggest any specific highway safety issue.

Proposed development

The proposed development comprises **204,000m²** GIA for Storage and Distribution (Use Class B8) and General Employment (Use Class B2) space, with ancillary offices.

Fore notes that *"Flexibility is required to respond to potential market demand, so for the purposes of this Transport Assessment, a 70%:30% B8:B2 split has been assumed (**142,800 sqm B8 and 61,200 sqm B2**). The B2 element of the proposed development will be limited to 30% of the total floorspace."*

JSJV would note that the quantum of land use assumed for development by the AECOM Report was 168,619m², i.e., 35,381m² smaller than proposed. Given that the employment land use quantum for the site has increased, there is a potential for a significant increase in the level of traffic.

JSJV would note that a limit in the B2 element of the proposed development, to 30%, will be the subject of a planning condition if it is to be relied upon in the Transport Assessment process.

The proposed development site plan is shown in **Figure 3**.

Figure 3. Proposed site plan (Extracted from TA)

Vision

In line with Circular 01/2022, Fore has provided a vision that describes the aims of the development in terms of transport and illustrates how the Applicant will enable a reduction in the need to travel by private car and prioritise sustainable transport opportunities, ahead of capacity enhancements.

Fore's vision identifies the need to encourage active, healthy and sustainable travel choices, whilst referencing specific measures such as pedestrian and cycle access infrastructure that will be delivered to help achieve these aims.

Travel Plan

JSJV would note that Circular 01/2022 requires that a TP be produced prior to or alongside the preparation of the TA, as the TP should be used to inform the content of the TA. JSJV would note that although the TP has not specifically informed the content of the TA in terms of residual vehicle trip generation, the overall vision and contents of the TP is in line with Circular 01/2022.

Accessibility by sustainable modes of transport

Pedestrian access

Fore has presented an isochrone map showing a 2km walking journey from the application site (**Figure 4**). Fore also include an overview of the main pedestrian infrastructure in the vicinity of the application site and state that:

- A footway is provided on the northern side of the A635 between Hollygrove Roundabout and Cathill Roundabout;
- At Hollygrove Roundabout, dropped kerbs and pedestrian refuge islands are provided on Barnsley Road, Dudley Drive and A635 (West) arms; and
- Street lighting is provided along the routes between the site and Goldthorpe.

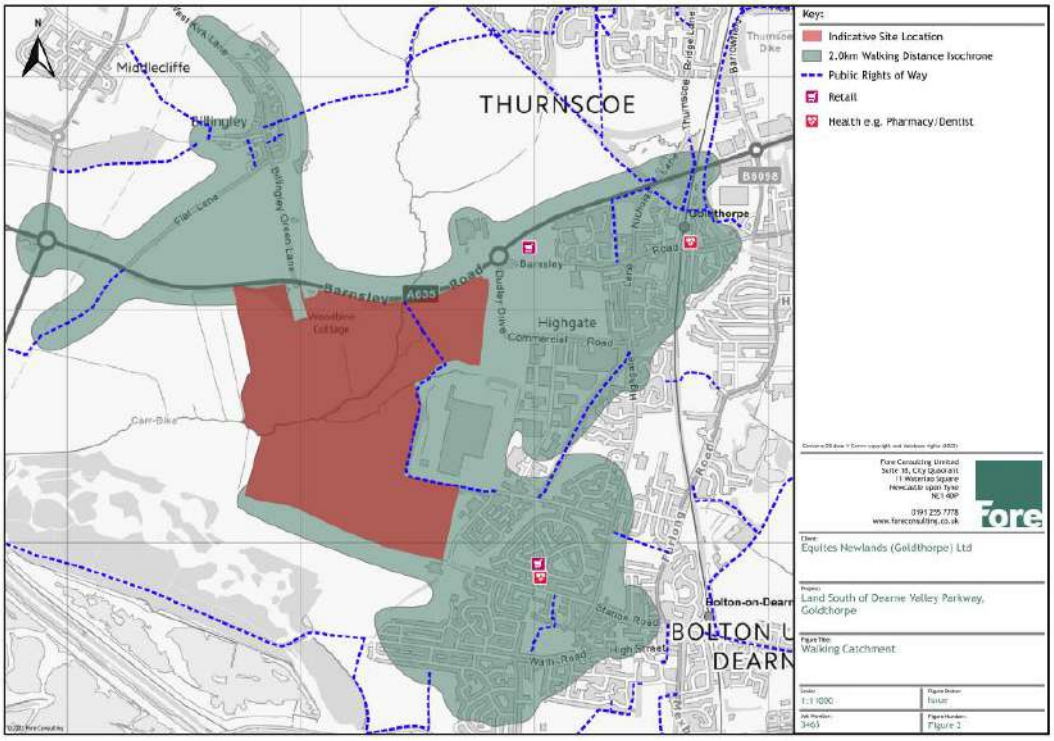


Figure 4. 2km walking isochrone (Extracted from TA)

Fore notes within the 2km walking distance a number of residential areas located, including west Goldthorpe, west Bolton-upon-Dearne and Billingley village. Furthermore, the following key amenities are also within 2km walking distance from the site:

- *"An Aldi supermarket is located to the north east of the site, approximately 1.1km walking distance from an indicative central point within the site.*
- *A number of amenities are located to the south east of the site at St Andrew's Square, including a Co-op Food convenience store, a post office and a sandwich*

bar. St Andrew's Square is located approximately 1.5km walking distance from an indicative central point within the site.

- *Weldricks Pharmacy and a dental practice (mydentist) are also located at St Andrew's Square.*
- *The Highgate Dental Practice is located on Barnsley Road to the east of the site, approximately 1.7km walking distance from an indicative central point within the site."*

JSJV would agree that the pedestrian access and facilities are attractive for users of the site taking access from the A635, however, we would note that access taken from Carr Field Lane, via the footpath located within the south eastern corner of the site, is not to a standard conducive to commuting (as discussed within the following 'Bus service' section) and should not, at this time, be considered as a suitable pedestrian access to the site.

Cycle access

Fore has presented an isochrone map showing an 8km walking journey from the application site (**Figure 5**).

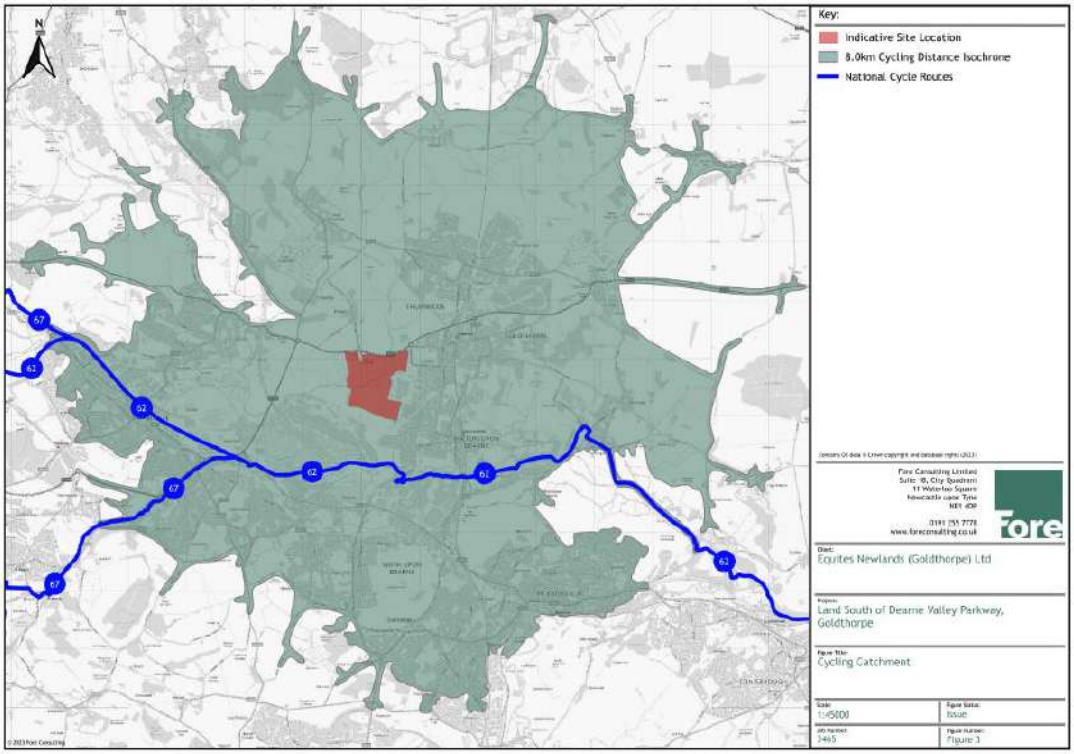


Figure 5. 8km cycling isochrone (Extracted from TA)

Fore notes within the 8km walking distance a number of residential areas located, including Bolton upon Dearne, Goldthorpe, Mexborough, Thurnscoe, Wath upon Dearne and Wombwell.

Shared 3m wide footpath north side of A635 provides cycling access to the proposed development site.

Although JSJV would agree that the development is located within a reasonable cycling distance to local amenities and residential areas, the cycling infrastructure surrounding the development site appears unattractive for commuters.

Bus service

The nearest bus stops to the north of the application site are located approximately 400m from the north eastern corner of Plot 1 on the A635. The nearest bus stops to the south of the application site are located approximately 600m from the Plot 3 and 4 boundary on Carr Field Lane.

Fore notes access to the Carr Fields Lane and A635 bus stops is to be "maximised through the provision of footpath connections to Carr Field Lane/Billingley View" via public right of way footpath 15 [footpath 15] and the A635, as can be seen in **Figure 6**.

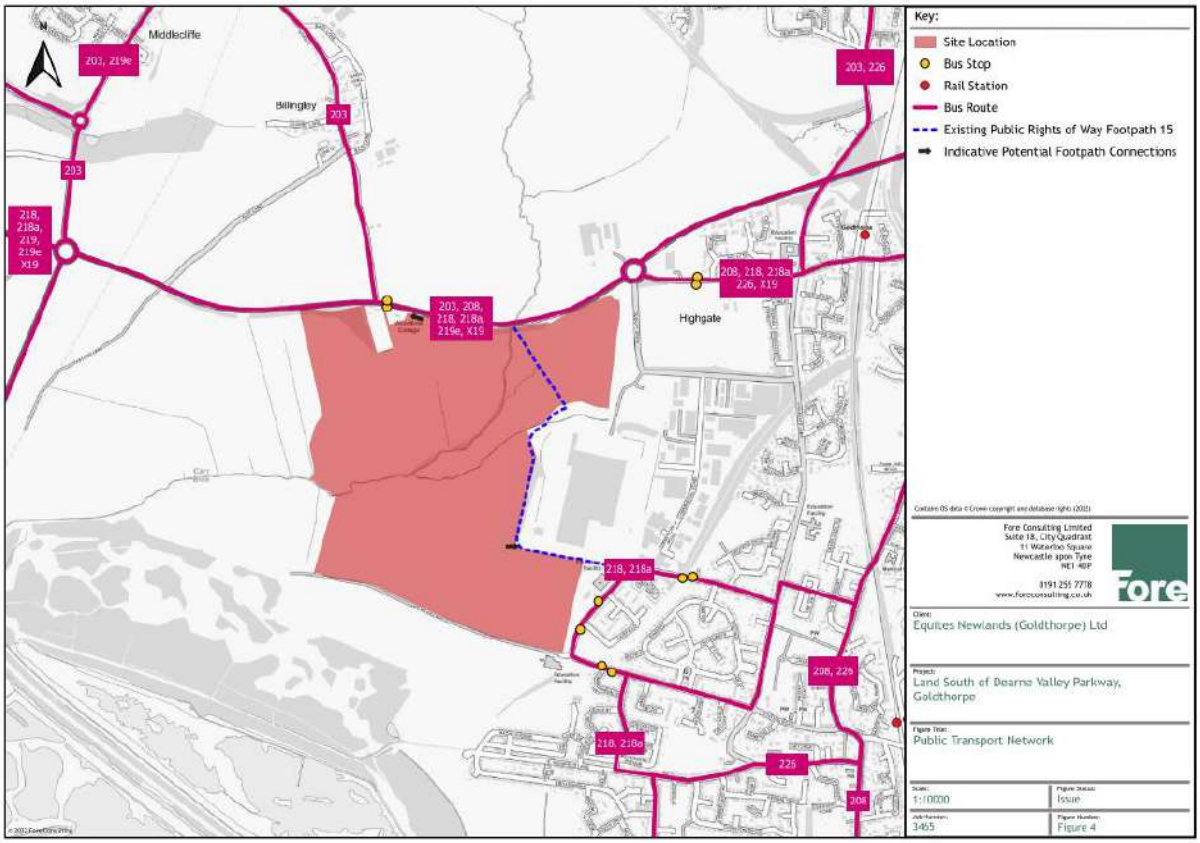


Figure 6. Public footpath network (Extracted from TP)

JSJV would note that Fore has not provided information with regard to any specific 'improvements' to the existing footpath 15.

JSJV would note that the footpath (**Figure 7**) is limited in width (in the order of 1m) and does not, therefore, cater for both cyclists and pedestrians or wheeled users with mobility impairment.

JSJV note that prevailing policy including Circular 01/2022 should be read in conjunction with the LTN 1/20 when strategic policy-making authorities are setting policies and making decisions on planning and development proposals under the Town and Country Planning Act 1990.

The Applicant has not adequately considered the safety implications for non-motorised trips to be generated by the development, via footpath 15.

Furthermore, BMBC Local Plan requires an improvement to the highway network "*to mitigate the impact of additional traffic generated by the development on surrounding roads and in particular effects on the A635 and other strategic road links to the A1/M and M1 motorways"*.

Figure 7. Exit of public rights of way footpath 15 on to Carr Field Lane (source: Google Maps)

As a result, with no improvements to footpath 15 , JSJV would consider the nearest bus stop to Plot 3 and 4 to be located on the A635, approximately 1.1km north.

Fore notes:

> *"The A635 stop provides access to the 203, 208, 218, 218a, 219e, and X19 services."*
>
> *"The Carr Field Lane and Carr Head Lane stops provide access to the 218 and 218a services."*

Fore has provided the frequency of bus services to the stops, as shown in **Figure 8**.

Table 3: Bus Services

Service	Route	Approximate Daytime Frequency (In Each Direction)		
		Monday - Friday	Saturday	Sunday
203	Wombwell - Doncaster	3 per day		No service
208	Rotherham Interchange - Grimethorpe	3 per day		
218	Barnsley Interchange - Rotherham Interchange	Hourly		No Service
218a	Barnsley Interchange - Rotherham Interchange	Hourly		No Service
219e	Doncaster Interchange - Barnsley Interchange	5 per evening		3 per evening
226	Barnsley Interchange - Thurnscoe	30 minutes		Hourly
X19	Barnsley Interchange - Doncaster Interchange	Hourly		

Note: Bus services correct as of 20 November 2023.

Figure 8. Bus service / frequency

Figure 8 highlights a maximum frequency of 1 bus every 30 minutes, however, this is only for the 226 service, which only stops on Barnsley Road, which is over 3km from the north eastern corner of Plot 1. The Applicant has not proposed any improvements to the current bus service, consequently, JSJV would not consider the current bus service as a viable alternative method of travel to the site.

Rail

Goldthorpe Railway Station is accessed via a 1.2km walk form the access junction on the A635 or via the 218, 208, 218a and X19 bus service, providing direct travel from the station to the nearest bus stop to the site. The station provides an hourly rail service, southbound to Sheffield and Rotherham and northbound to Leeds and Wakefield Westgate. JSJV would consider rail as a viable method of travel to the site, however, this does rely on catching an infrequent bus service from the station to the site.

Travel Plan Management

Fore notes the Applicant will appoint a Framework Travel Plan Coordinator [FTPC] prior to marketing the units to potential Occupiers.

Fore states:

> *"The FTPC will communicate with Occupiers the potential obligations to prepare an Occupier Travel Plan if their land use/unit exceeds the indictive thresholds for requiring a Travel Plan listed in Appendix A of the Sustainable Travel SPD".*

JSJV would recommend that a firm commitment is in place, as part of the TP, as to how a suitably skilled Travel Plan Co-ordinator is to be recruited for the site. Furthermore, all occupiers should follow the TP.

Occupier Travel Plans

Fore notes each Occupier will appoint an Occupier Travel Plan Coordinator at the signing of leases who will produce an Occupier Travel Plan for their respective unit. Additionally, it is envisaged that Occupier Travel Plans will continue for 5 years following first occupation.

JSJV would state cessation of monitoring may only be appropriate once it has been demonstrated that the travel patterns of the development are in line with the targets and objectives of the TP. This needs to be a consideration within the TP.

Funding

Fore notes the Framework Travel Plan will be funded by the Applicant, which will cover the FTPC role and infrastructure/measures required to support sustainable travel choices.

Travel Plan Measures

JSJV notes that Fore has presented a range of measures to promote active and sustainable travel to / from the proposed development. JSJV has presented a selection of measures in **Table 1** for reference.

Table 1. Proposed Travel Plan measures

Method of transport	Measure
Walking	Pedestrian and cycle access is to be provided to the development at the approved site access roundabout (Application Reference: 2021/1511)
	Footpath 15, is to be diverted as indicatively shown on the Phasing Plan provided at Appendix A. The overall routing is not to be altered as part of the proposals i.e. the route will still connect between the A635 and Carr Field Lane.
	A pedestrian and cycle link is also to be provided to connect to footpath 15, connecting to Carr Field Lane/Billingley View to the southeast of the site.
	A footway is to be provided within the site, linking to the external footways south of the A635 at a point east of Woodbine Cottage.
	Within the site, a footway and combined footway / cycleway will be provided on the west and east sides of the proposed access road respectively. South of Plot 1, the footway / cycleway would be provided on the northern side of the access road, via uncontrolled crossings on the access roads within the site
Cycling	Provision of adequate cycle parking as per BMBC Parking SPD.
	Provision of a public bike pump and repair stand for unexpected repairs
Public Transport	Maximise access to bus services through the provision of footpath connections to Carr Field Lane/Billingley View via footpath 15 and the A635.
	The benefits of using public transport will be communicated in the Travel Guide, along with maps, timetables, ticketing and journey planner information.
	Occupiers will consider offering annual season ticket loans to staff, allowing them to pay the ticket back through salary sacrifice.
	Occupiers will consider signing up to corporate travel deals (such as the Stagecoach Corporate Travel Scheme) allowing employees to access discounted ticketing options.

JSJV would reiterate that Fore has not provided information in regard to any specific 'improvements' to the existing footpath 15 or bus service. We would recommend the Applicant commits to upgrading the footpath to accommodate all users in order to maximise the accessibility of and within the site by walking, wheeling, cycling, public transport and shared travel as is required by Circular 01/2022.

Travel Plan Targets

Fore has presented the base mode share for the proposed site location based on the 2011 Census data for Method of Travel to Work (Workplace population) for the MSOA Barnsley 022 and 025, as shown in **Figure 9**; JSJV would consider this an appropriate starting point.

In order to estimate the baseline person trip generation, Fore has applied the baseline mode share to the previously agreed vehicle trip generation for the proposed development, shown in **Figure 9**. Fore notes that the *"targets will not apply to HGV trips, these have been separated out"*.

Table 1: Baseline Mode Share

Mode	Baseline Mode Share (%)	Weekday AM Peak Hour (08:00-09:00)			Weekday PM Peak Hour (17:00-18:00)		
		Arr.	Dep.	Total	Arr.	Dep.	Total
Light rail or tram	0.2%	1	0	1	0	1	1
Train	1.1%	5	1	5	1	5	6
Bus, minibus or coach	5.9%	25	4	29	5	26	31
Taxi	0.2%	1	0	1	0	1	1
Motorcycle, scooter or moped	0.5%	2	0	3	0	2	3
Driving a car or van	67.3%	279	49	328	62	296	358
Passenger in a car or van	9.1%	38	7	45	8	40	49
Bicycle	1.2%	5	1	6	1	5	6
On foot	14.5%	60	10	70	13	64	77
HGV Driver	N/A	55	57	112	60	52	112
Total		471	129	600	152	492	644

Figure 9. Fore proposed baseline mode share (Extracted from TP)

Based on the Travel Plan measures and base mode share, Fore has presented target mode share and subsequent residual trip generation for the proposed development, as show in **Figure 10**, based on a 10% reduction to the number of trips undertaken by car or van drivers.

Table 2: Initial Mode Share Targets

Mode	Baseline Mode Share (%)	Weekday AM Peak Hour (08:00-09:00)			Weekday PM Peak Hour (17:00-18:00)		
		Arr.	Dep.	Total	Arr.	Dep.	Total
Light rail or tram	0.2%	1	0	1	0	1	1
Train	1.1%	5	1	5	1	5	6
Bus, minibus or coach	7.6%	32	5	37	7	33	40
Taxi	0.2%	1	0	1	0	1	1
Motorcycle, scooter or moped	0.5%	2	0	3	0	2	3
Driving a car or van	60.5%	251	44	295	56	266	322
Passenger in a car or van	10.8%	45	8	53	10	48	58
Bicycle	2.9%	12	2	14	3	13	15
On foot	16.1%	67	12	79	15	71	86
HGV Driver	N/A	55	57	112	60	52	112
Total		471	129	600	152	492	644

Figure 10. Fore proposed target mode share and residual trip generation (Extracted from TP)

JSJV would note the proposed residual trip generation shown in **Figure 10** has been calculated correctly. We would suggest, however, a 10% reduction in car trips is unlikely, unless improvements are made to pedestrian and bus access.

JSJV would note only the baseline mode share trip generation is presented in the TA, the target / residual vehicle trip generation is not presented or used for assessments.

Monitoring

Fore state monitoring of the “Occupier Travel Plans” will indicate how they are performing and if the target mode share is being met.

Fore notes, it is ‘proposed’ that each Occupier (with an Occupier Travel Plan) will undertake an employee travel survey within three months of initial occupation.

JSJV would note a sustained monitoring and management strategy to confirm that vehicle trip targets are being met and a plan detailing the remediation process in the event that targets are not being met should be presented within the TP. Stating that it will be the responsibility of the Occupiers undermines the importance of this process.

Fore has not provided any examples of alternative measures in the case that the TP is not achieving its targets or the funding that may be needed to deliver them. These should be clearly stated within the TP.

Transport Assessment

JSJV has reviewed the TA in line with the Circular 01/2022 and would offer the following comments.

Policy

JSJV would note the TA has been prepared with due regard to the following documentation:

- DfT Circular 01/2022 – Strategic Road network and the delivery of sustainable development;
- National Planning Policy Framework [NPPF] (2023);
- National Planning Practice Guidance (2019);
- BMBC Local Plan (2019); and
- Goldthorpe Masterplan Framework.

Trip rates and generation

Fore proposed vehicle trip rates and generation

Fore has used JSJV's vehicle and HGV trip rates from our previous pre-application scoping response. These trip rates were derived from TRICS online database for the proposed development (142,800m² of B8 and 61,200 m² of B2).

The TRICS selection parameters used can be summarised as follows:

- 142,800 m² B8
  - TRICS Land Use Category: 02 / F (Employment / Warehousing (Commercial));
  - Location: Suburban Area, Edge of Town;
  - Trip rate parameter: Gross Floor Area (GFA);
  - Actual Range: 10,446 to 80,100 m²;
  - Range Selected by User: 10,000 to 80,100 m²; and
  - Calculation Factor: 100 m²
- 61,200 m² B2
  - TRICS Land Use Category: 02 / C (Employment / Industrial Unit);
  - Location: Suburban Area, Edge of Town;
  - Trip rate parameter: Gross Floor Area (GFA);
  - Actual Range: 8,100 to 14,125 m²;
  - Range Selected by User: 8,000 to 67,459 m²; and
  - Calculation Factor: 100 m²

However, Fore notes one survey site has been removed due to it being undertaken during COVID-19 restrictions. Fore's updated vehicle trip rates and subsequent vehicle trip generation is shown in **Figure 11** and **12**.

Table 5: Vehicle Trip Rates per 100 sqm

Vehicle Type	Weekday AM Peak Hour (07:00-08:00)			Weekday PM Peak Hour (16:00-17:00)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
Warehousing (Commercial)						
All Vehicles	0.114	0.067	0.181	0.072	0.101	0.173
HGVs	0.032	0.039	0.071	0.039	0.031	0.070
Industrial Unit						
All Vehicles	0.281	0.016	0.297	0.031	0.333	0.364
HGVs	0.016	0.002	0.018	0.007	0.013	0.020

Figure 11. Fore's proposed vehicle trip rates

Table 6: Vehicle Trip Generation (204,000 sqm)

Vehicle Type	Weekday AM Peak Hour (07:00-08:00)			Weekday PM Peak Hour (16:00-17:00)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
Warehousing (Commercial) - 142,800 sqm						
All Vehicles	163	96	258	103	144	247
HGVs	46	56	101	56	44	100
Light Vehicles	117	40	157	47	100	147
PCUs	208	151	360	159	188	347
Industrial Unit - 61,200 sqm						
All Vehicles	172	10	182	19	204	223
HGVs	10	1	11	4	8	12
Light Vehicles	162	9	171	15	196	211
PCUs	182	11	193	23	212	235
Total - 204,000 sqm						
All Vehicles	335	105	440	122	348	470
HGVs	55	57	112	60	52	112
Light Vehicles	279	49	328	62	296	358
PCUs	390	162	553	182	400	582

Note: Vehicle trips rounded to the nearest whole number.

Figure 12. Fore proposed vehicle trip generation

As can be seen in **Figure 12**, Fore forecast the total proposed development to generate 440 and 470 two-way vehicle trips during the Weekday AM and PM peak hours, respectively.

JSJV review

JSJV has compered Fore's proposed vehicle trip generation to our previous pre-application response trip rates, without the removal of the surveyed site. The results of this exercise are shown in **Table 2** and **3**.

Table 2. Review of proposed vehicle trip rates (JSJV)

	Weekday AM Peak Period (07:30 – 08:30)			Weekday PM Peak Hour (17:00 – 18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Fore 142,800 m² B8	0.114	0.067	0.181	0.072	0.101	0.173
JSJV 142,800 m² B8	0.104	0.069	0.173	0.087	0.099	0.186
Variance	**-0.010**	**+0.002**	**-0.008**	**+0.015**	**-0.002**	**+0.013**
Fore 61,200 m² B2	0.281	0.016	0.297	0.031	0.333	0.364
JSJV 61,200 m² B2	0.301	0.018	0.319	0.031	0.333	0.364
Variance	**+0.020**	**+0.002**	**+0.022**	**+0.000**	**+0.000**	**+0.000**

Table 3. Review of proposed HGV trip rates (JSJV)

	Weekday AM Peak Period (07:30 – 08:30)			Weekday PM Peak Hour (17:00 – 18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Fore 142,800 m² B8	0.032	0.039	0.071	0.039	0.031	0.07
JSJV 142,800 m² B8	0.027	0.04	0.067	0.055	0.031	0.086
Variance	**-0.005**	**+0.001**	**-0.004**	**+0.016**	**+0.000**	**+0.016**
Fore 61,200 m² B2	0.016	0.002	0.018	0.007	0.013	0.02
JSJV 61,200 m² B2	0.014	0.002	0.016	0.002	0	0.002
Variance	**-0.002**	**+0.000**	**-0.002**	**-0.005**	**-0.013**	**-0.018**

JSJV has presented the total vehicle and HGV trip generation for the proposed development, shown in **Tables 4** and **5**, using the vehicle trip rates presented in **Tables 2** and **3**.

Table 4. Review of proposed vehicle trip generation (JSJV)

	Weekday AM Peak Period (07:30 – 08:30)			Weekday PM Peak Hour (17:00 – 18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Fore 142,800 m² B8	163	96	258	103	144	247
JSJV 142,800 m² B8	149	99	247	124	141	266
Variance	**-14**	**+3**	**-11**	**+21**	**-3**	**+19**
Fore 61,200 m² B2	172	10	182	19	204	223
JSJV 61,200 m² B2	184	11	195	19	204	223
Variance	**+12**	**+1**	**+13**	**+0**	**+0**	**+0**
Fore Total	335	105	440	122	348	470
JSJV Total	333	110	442	143	345	489
Variance	**-2**	**+4**	**+2**	**+21**	**-3**	**+19**

Table 5. Review of proposed HGV trip generation (JSJV)

	Weekday AM Peak Period (07:30 – 08:30)			Weekday PM Peak Hour (17:00 – 18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Fore 142,800 m² B8	46	56	101	56	44	100
JSJV 142,800 m² B8	39	57	96	79	44	123
Variance	**-7**	**+1**	**-5**	**+23**	**+0**	**+23**
Fore 61,200 m² B2	10	1	11	4	8	12
JSJV 61,200 m² B2	9	1	10	1	0	1

Variance	**-1**	**+0**	**-1**	**-3**	**-8**	**-11**
Fore Total	55	57	112	60	52	112
JSJV Total	48	58	106	80	44	124
Variance	**-7**	**+1**	**-6**	**+20**	**-8**	**+12**

As shown in **Table 4**, JSJV forecast the proposed 142,800 m² B8 portion of the development to generate 11 fewer two-way vehicle trips in the AM peak period, and 19 more two-way vehicle trips in the PM peak period compared to Fore's proposed B8 vehicle trip generation.

JSJV forecast the proposed 61,200 m² B2 portion of the development to generate 13 more two-way vehicle trips in the AM peak period, and the same volume of two-way vehicle trips in the PM peak period compared to Fore's proposed B2 vehicle trip generation.

JSJV forecast the total proposed development to generate 2 more two-way vehicle trips in the AM peak period, and 19 more two-way vehicle trips in the PM peak period compared to Fore's proposed total vehicle trip generation.

Although when using our previous vehicle trip rates JSJV forecast the proposed development to generate 19 more two-way vehicle trips in the PM peak, we do not anticipate this to result in a material difference in vehicle movements experienced at the SRN, as a result, we would consider Fore's total vehicle trip generation as appropriate.

As shown in **Table 5**, JSJV forecast the proposed 142,800 m² B8 portion of the development to generate 5 fewer two-way HGV trips in the AM peak period, and 23 more two-way HGV trips in the PM peak period compared to Fore's proposed B8 HGV trip generation.

JSJV forecast the proposed 61,200 m² B2 portion of the development to generate 1 fewer two-way HGV trips in the AM peak period, and 11 fewer two-way HGV trips in the PM peak period compared to Fore's proposed B2 HGV trip generation.

JSJV forecast the total proposed development to generate 6 fewer two-way HGV trips in the AM peak period, and 12 more two-way HGV trips in the PM peak period compared to Fore's proposed total vehicle trip generation.

Although when using our previous HGV trip rates JSJV forecast the proposed development to generate 12 more two-way HGV trips in the PM peak, we do not anticipate this to result in a material difference in HGV movements experienced at the SRN, as a result, we would consider Fore's total HGV trip generation as appropriate.

AECOM Transport Assessment: ES10 Site

Previously, it was recommended that Fore provide and present the trip rates and generations that were used in the AECOM TA for the ES10 Site. This will provide a suitable comparison between the level of traffic generation associated with the proposed development and the level that was previously considered acceptable as part of the Local Plan and Masterplan Framework.

Fore has provided a comparison between their forecast vehicle trip generation and the vehicle trip generation estimated by AECOM (shown in **Figure 13**) from the following TA:

- **Development of D1, Goldthorpe Summary Report – D1 Impact Assessment (2018).** This report assessed the traffic impact of the potential development site on the local road network and assessed a Gross Floor Area (GFA) of 168,619m².

Table 9: AECOM/Fore Trip Generation Comparison

Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
	Arr.	Dep.	Total	Arr.	Dep.	Total
AECOM Assessment						
Vehicle Trip Rate (per 100 sqm)	0.269	0.132	0.401	0.085	0.234	0.319
Vehicle Trip Generation (168,619 sqm)	454	223	677	143	395	538
Fore Assessment						
Vehicle Trip Generation (204,000 sqm)	335	105	440	122	348	470
Difference						
Fore / AECOM Comparison	-119	-117	-236	-22	-47	-68

Figure 13. AECOM TA vehicle trip generation comparison

As can be seen from **Figure 13**, Fore forecast the proposed development to generate 236 fewer two-way vehicle trips in the AM peak and 68 fewer two-way vehicle trips in the PM peak compared to what was assumed by the D1 Transport Impact Assessment Report.

However, JSJV would reiterate as part of the AECOM Report, no capacity assessments were undertaken at the SRN, as a result, although Fore highlights a reduction in vehicle tips generated by the proposed development compared to what was assumed within the AECOM Report, a considerable volume of additional vehicle trips is still anticipated.

Inter peak vehicle trip generation

Previously, National Highways requested the Applicant to provide an inter peak vehicle trip generation assessment due to the growing propensity for storage and distribution centres to operate with non-typical working patterns or with 'shift' change patterns that occur outside of the typical morning and evening peak hour periods, including at weekends.

Fore has undertaken a vehicle trip generation assessment for both the identified weekday and weekend inter peak. Through TRICS, Fore has established the weekday inter peak vehicle trip generation as 614 PCUs from 15:30-16:30. Fore notes this is higher than the two-way PCU trip generation during the peak periods, (553 PCUs in the AM peak and 582 PCUs in the PM peak), however, claims the base traffic on the local and SRN is likely to be lower during the inter-peak period.

JSJV will withhold commenting on the outcome of the inter peak vehicle trip generation assessment once the trip distribution results have been considered appropriate.

Trip distribution and assignment

Light vehicle/car trip distribution

Although Fore's proposed vehicle trip distribution was considered appropriate by JSJV as part of the pre-application process, it was recommended that the distribution and assignment results for the M1 J36 also be presented. On further review, JSJV would note Fore has only considered trips from a limited number of locations, including Barnsley, Doncaster, Sheffield and Rotherham, and failed to show M1 J36 distribution.

As can be seen in **Figure 14**, using Wath upon Dearne (Rotherham 002 MSOA), which is considered to be a more appropriate proxy than Goldthorpe (Barnsley 022 MSOA) (due to the increased level of employment opportunities), employees commute to the area from a much wider range of locations than considered by Fore, including Huddersfield, Thorne, Retford, Castleford and North Lincolnshire.

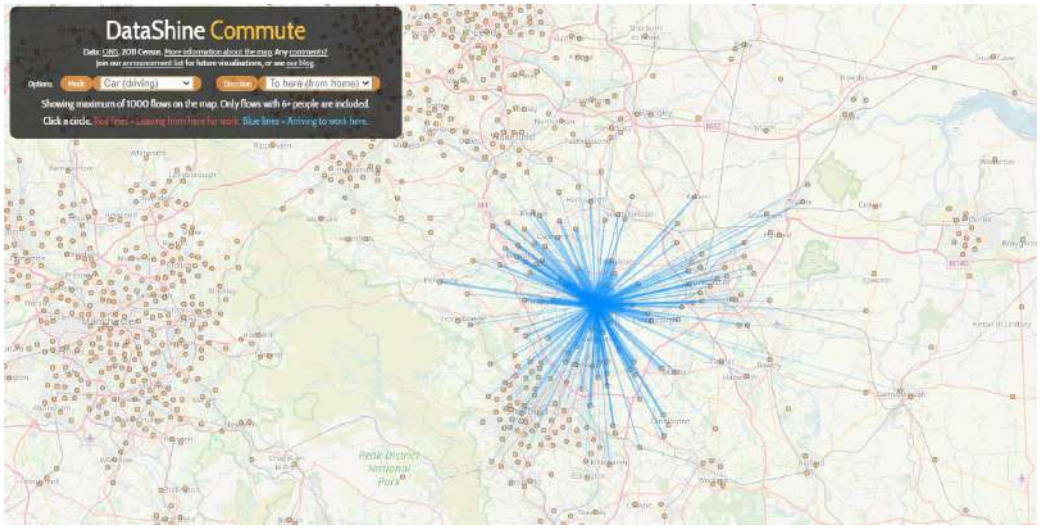


Figure 14. Usual residence of workplace population for Rotherham 002 (source: commute.datashine.org.uk)

Furthermore, as can be seen in **Figure 15**, the majority of these locations are within a 45 minute car journey from the site.

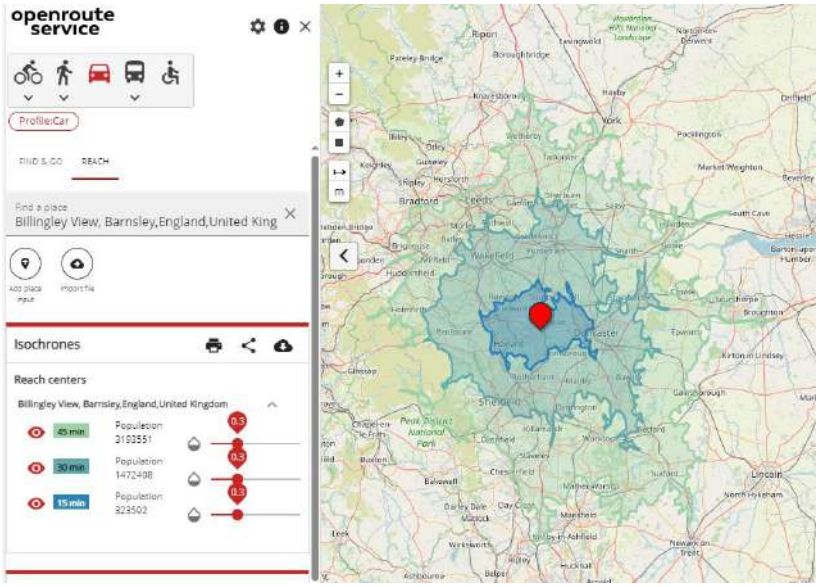


Figure 15. 45 minute driving isochrone from site (source: maps.openrouteservice.org)

It is considered likely that employees will commute from a wider range of areas and will therefore utilise the SRN to a greater extent than considered by Fore. As a result, we would recommend Fore either provides further evidence to justify their distribution of light vehicles, or provide an updated assessment based on an extended gravity model, which considers a larger commuting area.

Notwithstanding the above, Fore's proposed light vehicle/car trip distribution rates and the associated trip assignment is shown in **Table 6**.

Table 6. Fore light vehicle/car trip distribution results

Junction	AM Peak Period (07:30 – 08:30)	PM Peak Period (17:00 – 18:00)
A1(M) J37 (North)	1%	1%
A1(M) J37 (South)	7.2%	7.2%
A6195 Dearne Valley Parkway	10.5%	10.5%

JSJV would note Fore has still only presented the distribution of traffic as far as the A6195 Dearne Valley Parkway / Corton Wood junction. As the A6195 Dearne Valley Parkway continues west towards the M1 at junction 36, JSJV would note Fore should present the distribution and assignment results for the M1 J36 in line with our previous comments.

The resultant light vehicle trip distribution and assignment is shown in **Table 7**.

Table 7. Fore's light vehicle/car trip assignment results

Junction	AM Peak Period (07:30 – 08:30)			PM Peak Period (17:00 – 18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
A1(M) J37 North	3	0	3	1	3	4
A1(M) J37 South	20	4	24	4	21	26
A6195 Dearne Valley Parkway	29	5	34	6	31	37

As can be seen from **Table 7**, applying Fore's trip distribution results to the proposed vehicle trip generations in **Figure 12,** assigns 3 and 2 two-way light vehicle/car trips in the AM and PM peak periods respectively at A1(M) J37 north; 24 and 26 two-way vehicle trips in the AM and PM peak periods at A1(M) J37 south; and 34 and 37 two-way vehicle trips in the AM and PM peak periods to the A6195 Dearne Valley Parkway.

JSJV would suggest the vehicle assignment results shown in **Table 7** highlight that the proposed development could potentially cause a significant impact at the A1(M) J37 and the M1 J36, considering the A6195 Dearne Valley Parkway continues on to the M1 J36.

HGV trip distribution

It was previously requested that Fore provides further information regarding the methodology used to derive the HGV trip distribution. Fore notes the HGV distribution is based on a high-level assessment of likely routing and settlement patterns.

Fore has estimated HGV distribution using a population-based gravity model that considers 2011 Census population data. Fore notes:

> *"HGVs are assumed to utilise the strategic road network to the east and west of the site at A1(M) Junction 37 and M1 Junction 36, and local primary routes between the site and other regional destinations, including the A635 Doncaster Road, the A633 and the A6195 Park Spring Road. Such routes are 'A'-category routes, of appropriate standard for HGV use and therefore this assumption is considered reasonable."*

The following assumptions are made to assign HGV trips:

- *"Journeys to / from the midlands and the south of England are generally split between the A1(M) and M1 on a 50%:50% basis.*
- *Journeys to Leeds and Wakefield are assigned to routes via the A1(M) and M1.*
- *Journeys to / from North Yorkshire and the north east of England are assigned to the A1(M) north only.*
- *Journeys to / from the north west of England are assigned to the M62 via the A1(M) and M1 routes. Although the journey distance is longer using the A1(M), the journey time is comparable. This is with the exception of journeys to / from districts east of Manchester and Kirklees, which are assigned to the A628 via the A6195 Dearne Valley Parkway only, given the M62 is relatively long in terms of travel time and therefore less attractive for these journeys."*

Again, JSJV would question the use of a "population-based" gravity model to derive HGV trip distribution. We would suggest rather than basing HGV trip distribution on an unrealistic population-based gravity model, Fore should consider the likely origin/destination of HGV traffic (e.g., ports, free ports airports and major distribution centres).

The resultant HGV trip distribution and assignment is shown in **Figure 16**, JSJV would question why a high percentage of trips are so locally distributed.

Table 12: HGV Trip Distribution

Ref.	Route	% of Trips	Weekday AM Peak Hour			Weekday AM Peak Hour		
			Arr.	Dep.	Total	Arr.	Dep.	Total
5	A1(M) (North)	10.6%	6	6	12	6	6	12
6	A635 Barnsley Road	6.2%	3	4	7	4	3	7
7	A1(M) (South)	16.7%	9	9	19	10	9	19
10	A633 Manvers Way	4.6%	3	3	5	3	2	5
12	A633 Wath Road	5.0%	3	3	6	3	3	6
13	A6195 Dearne Valley Parkway	33.8%	19	19	38	20	18	38
14	A635 Doncaster Road	13.5%	7	8	15	8	7	15
15	A6195 Park Spring Road	9.7%	5	5	11	6	5	11
Total		100%	55	57	112	60	52	112

Figure 16. Fore proposed HGV trip distribution and assignment

As can be seen from **Figure 16**, applying Fore's trip distribution results to the proposed HGV trip generations in **Figure 12,** assigns 12 two-way HGV trips in the AM and PM peak periods at A1(M) J37 north; 19 two-way HGV trips in the AM and PM peak periods at A1(M) J37 south; and 38 two-way HGV trips in the AM and PM peak periods to the A6195 Dearne Valley Parkway.

JSJV would recommend Fore either provides evidence to justify their distribution of HGVs or provide an alternative assessment based on the likely origin/destination of HGV traffic.

Total vehicle trip distribution

Fore has presented the total sum of light vehicle and HGV trips distributed across the highway network, as shown in **Figure 17**.

Table 13: Total Vehicle Trip Distribution

Ref.	Route	Weekday AM Peak Hour			Weekday AM Peak Hour		
		Arr.	Dep.	Total	Arr.	Dep.	Total
1	Billingley Green Lane	6	1	8	1	7	8
2	Nicholas Lane	13	2	15	3	14	17
3	Barrowfield Road	13	2	15	3	14	17
4	Red Hill Lane	2	0	3	1	2	3
5	A1(M) (North)	9	7	15	7	9	16
6	A635 Barnsley Road	10	5	15	5	11	16
7	A1(M) (South)	29	13	42	14	30	45
8	Barnsley Road	17	3	20	4	18	22
9	Highgate Lane	60	10	70	13	63	77
10	A633 Manvers Way	7	3	11	4	8	11
11	B6273 Pontefract Road	34	6	40	7	36	43
12	A633 Wath Road	11	4	15	5	11	16
13	A6195 Dearne Valley Parkway	48	24	72	27	49	75
14	A635 Doncaster Road	44	14	58	16	45	61
15	A6195 Park Spring Road	31	10	41	12	32	44
Total		335	105	440	122	348	470

Figure 17. Total vehicle trip distribution

As can be seen from **Figure 17**, Fore forecast the proposed development to generate 15 and 16 two-way vehicle trips in the AM and PM peak periods respectively at A1(M) J37 north; 42 and 45 two-way HGV trips in the AM and PM peak periods at A1(M) J37 south; and 72 and 75 two-way HGV trips in the AM and PM peak periods to the A6195 Dearne Valley Parkway.

Notwithstanding the need to reassess trip distribution methodology, JSJV would suggest the vehicle assignment results shown in **Figure 17** highlights that the proposed development could potentially cause a significant impact at the A1(M) J37 and the M1 J36, considering the A6195 Dearne Valley Parkway continues on to the M1 J36.

Assessments

In conclusion, Fore states that as the vehicle trip generation associated with the current proposed development is lower than that assumed as part of the AECOM Report, no junction capacity assessments are required for the A1(M) J37 and M1 J36.

As highlighted within **Figure 17**, JSJV would suggest that the proposed development could potentially cause a significant impact at the A1(M) J37 and the M1 J36, considering the A6195 Dearne Valley Parkway continues on to the M1 J36.

Furthermore, as no capacity assessments were undertaken within the AECOM Report for the SRN, the anticipated impact of the traffic generated by the site has not yet been established.

Due to the anticipated increase in traffic, JSJV would recommend the Applicant provides an opening year junction capacity assessments for the A1(M) J37 and the M1 J36.

JSJV would note Circular 01/2022 states:

> *"An **opening year assessment** to include trips generated by the proposed development, forecasted growth and committed development shall be carried out to establish the residual transport impacts of a proposed development. For multi-phase developments, additional assessments shall be provided based on the opening of each phase."*

Please note that Section D.2.7 of TAG Unit M3.1 gives the PCU for HGVs on motorways and all-purpose dual carriageways as 2.5. Given the nature of the highway network around the proposed development site, we request that the PCU equivalent value of 2.5 is used in order to ensure an appropriate assessment of anticipated vehicular traffic associated with the development.

Assessment results

If the opening year assessments demonstrate that a mitigation scheme is required in order to accommodate the impact of the proposed development, this would need to be assessed, agreed with National Highways and a Stage 1 Road Safety Audit undertaken prior to determination of the planning application.

Summary and Conclusions

On the basis of this review, the recommendation to National Highways in relation to this development proposals is:

Holding recommendation – further evidence is required (as identified below).

The review has highlighted the need for further information as follows:

- JSJV would note that a limit in the B2 element of the proposed development, to 30%, will be the subject of a planning condition if it is to be relied upon in the Transport Assessment process.
- We would note that access taken from Carr Field Lane, via the footpath located within the south eastern corner of the site, is not to a standard conducive to commuting and should not, at this time, be considered as a suitable pedestrian access to the site.
- JSJV would note that footpath 15 is limited in width (in the order of 1m) and does not, therefore, cater for both cyclists and pedestrians or wheeled users with mobility impairment.
- JSJV would recommend that a firm commitment is in place, as part of the TP, as to how a suitably skilled Travel Plan Co-ordinator is to be recruited for the site. Furthermore, all occupiers should follow the TP.
- JSJV would state cessation of monitoring may only be appropriate once it has been demonstrated that the travel patterns of the development are in line with the targets and objectives of the TP. This needs to be a consideration within the TP.
- JSJV would note Fore has not provided information in regard to any specific 'improvements' to the existing footpath 15 or bus service. We would recommend the Applicant commits to upgrading the footpath to accommodate all users in order to maximise the accessibility of and within the site by walking, wheeling, cycling, public transport and shared travel as is required by Circular 01/2022.
- We would suggest a 10% reduction in car trips is unlikely, unless improvements are made to pedestrian and bus access.
- JSJV would note a sustained monitoring and management strategy to confirm that vehicle trip targets are being met and a plan detailing the remediation process in the event that targets are not being met should be presented within the TP. Stating that it will be the responsibility of the Occupiers undermines the importance of this process.
- Fore has not provided any examples of alternative measures in the case that the TP is not achieving its targets or the funding that may be needed to deliver them. These should be clearly stated within the TP.
- Although Fore's proposed vehicle trip distribution was considered appropriate by JSJV as part of the pre-application process, it was recommended that the distribution and assignment results for the M1 J36 also be presented. On further review, JSJV would note Fore has only considered trips from a limited number of locations, including Barnsley, Doncaster, Sheffield and Rotherham, and failed to show M1 J36 distribution.
- It is considered likely that employees will commute from a wider range of areas and will therefore utilise the SRN to a greater extent than considered by Fore. As a result, we would recommend Fore either provides further evidence to justify their

distribution of light vehicles, or provide an updated assessment based on an extended gravity model, which considers a larger commuting area.

- Again, JSJV would question the use of a “population-based” gravity model to derive HGV trip distribution. We would suggest rather than basing HGV trip distribution on an unrealistic population-based gravity model, Fore should consider the likely origin/destination of HGV traffic (e.g., ports, free ports airports and major distribution centres).
- JSJV would recommend Fore either provides evidence to justify their distribution of HGVs, or provide an alternative assessment based on the likely origin/destination of HGV traffic.
- Due to the anticipated increase in traffic, JSJV would recommend the Applicant provides an opening year junction capacity assessments for the A1(M) J37 and the M1 J36.

Appendix C

Car/LGV Route Choice Analysis (As per Appendix F of TA)

LGV Trip Distribution

Source: WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level), 2011 Census, Place of Work: Barnsley 022 and 025

Reference	Route	Trip %						Car/LGV Trips by Route					
								AM Peak Hour			PM Peak Hour		
		A	B	C	D	E	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
1	Billingley Green Lane	2.3%					2.3%	6	1	8	1	7	8
2	Nicholas Lane	4.7%					4.7%	13	2	15	3	14	17
3	Barrowfield Road		4.7%				4.7%	13	2	15	3	14	17
4	Red Hill Lane	0.8%					0.8%	2	0	3	1	2	3
5	A1(M) North	1.0%	0.1%				1.0%	3	0	3	1	3	4
6	A635 Barnsley Road	2.5%					2.5%	7	1	8	2	7	9
7	A1(M) South	5.6%	1.6%				7.2%	20	4	24	4	21	26
8	Barnsley Road	6.1%					6.1%	17	3	20	4	18	22
9	Highgate Lane (South)	17.9%	3.6%				21.4%	60	10	70	13	63	77
10	A633 Manvers Way	1.5%	0.3%				1.8%	5	1	6	1	5	6
11	B6273 Pontefract Road	9.9%	1.8%	0.4%			12.1%	34	6	40	7	36	43
12	A633 Wath Road	2.8%					2.8%	8	1	9	2	8	10
13	A6195 Dearne Valley Parkway	6.1%	4.3%				10.5%	29	5	34	6	31	37
13A	Roebuck Hill		0.4%				0.4%	1	0	1	0	1	2
13B	B6096	1.3%					1.3%	4	1	4	1	4	5
13C	Sheffield Road		0.6%				0.6%	2	0	2	0	2	2
13D	M1 South		1.8%				1.8%	5	1	6	1	5	6
13E	A61	2.8%	0.4%				3.2%	9	2	10	2	9	11
13F	M1 North	2.1%	1.2%				3.2%	9	2	11	2	10	12
14	A635 Doncaster Road	9.8%	3.1%				12.9%	36	6	42	8	38	46
15	A6195 Park Spring Road	8.2%	1.1%				9.2%	26	4	30	6	27	33
		79.0%	20.6%	0.4%	0.0%	0.0%	100.0%	279	49	328	62	296	358

Place of Usual Residence	Vehicle Trips		Route Assignment					Proportion by Route (%)						Trips by Route (%)					
	Number of Trips	%	A	B	C	D	E	A	B	C	D	E	Total	A	B	C	D	E	Total
E02001509 : Barnsley 001	11	0.6%	15					100%					100.0%	0.6%					0.6%
E02001510 : Barnsley 002	15	0.8%	15					100%					100.0%	0.8%					0.8%
E02001511 : Barnsley 003	17	0.9%	15					100%					100.0%	0.9%					0.9%
E02001512 : Barnsley 004	21	1.1%	14	15				50%	50%				100.0%	0.6%	0.6%				1.1%
E02001513 : Barnsley 005	12	0.6%	13F					100%					100.0%	0.6%					0.6%
E02001514 : Barnsley 006	18	1.0%	15					100%					100.0%	1.0%					1.0%
E02001515 : Barnsley 007	19	1.0%	14	15				50%	50%				100.0%	0.5%	0.5%				1.0%
E02001516 : Barnsley 008	17	0.9%	14					100%					100.0%	0.9%					0.9%
E02001517 : Barnsley 009	27	1.5%	14					100%					100.0%	1.5%					1.5%
E02001518 : Barnsley 010	18	1.0%	14					100%					100.0%	1.0%					1.0%
E02001519 : Barnsley 011	15	0.8%	14					100%					100.0%	0.8%					0.8%
E02001520 : Barnsley 012	20	1.1%	13F	14				50%	50%				100.0%	0.5%	0.5%				1.1%
E02001521 : Barnsley 013	16	0.9%	14					100%					100.0%	0.9%					0.9%
E02001522 : Barnsley 014	173	9.3%	2	3				50%	50%				100.0%	4.7%	4.7%				9.3%
E02001523 : Barnsley 015	35	1.9%	14					100%					100.0%	1.9%					1.9%
E02001524 : Barnsley 016	11	0.6%	13F					100%					100.0%	0.6%					0.6%
E02001525 : Barnsley 017	7	0.4%	14					100%					100.0%	0.4%					0.4%
E02001526 : Barnsley 018	8	0.4%	14					100%					100.0%	0.4%					0.4%
E02001527 : Barnsley 019	11	0.6%	13F	14				50%	50%				100.0%	0.3%	0.3%				0.6%
E02001528 : Barnsley 020	84	4.5%	1	14				50%	50%				100.0%	2.3%	2.3%				4.5%
E02001529 : Barnsley 021	19	1.0%	14					100%					100.0%	1.0%					1.0%
E02001530 : Barnsley 022	129	7.0%	8	9				50%	50%				100.0%	3.5%	3.5%				7.0%
E02001531 : Barnsley 023	19	1.0%	12					100%					100.0%	1.0%					1.0%
E02001532 : Barnsley 024	19	1.0%	13E					100%					100.0%	1.0%					1.0%
E02001533 : Barnsley 025	198	10.7%	9					100%					100.0%	10.7%					10.7%
E02001534 : Barnsley 026	33	1.8%	12					100%					100.0%	1.8%					1.8%
E02001535 : Barnsley 027	4	0.2%	13E					100%					100.0%	0.2%					0.2%
E02001536 : Barnsley 028	22	1.2%	13B	13C				50%	50%				100.0%	0.6%	0.6%				1.2%
E02001537 : Barnsley 029	16	0.9%	11	13A				50%	50%				100.0%	0.4%	0.4%				0.9%
E02001538 : Barnsley 030	13	0.7%	13B					100%					100.0%	0.7%					0.7%
E02001540 : Doncaster 002	2	0.1%	4					100%					100.0%	0.1%					0.1%
E02001542 : Doncaster 004	3	0.2%	6	7				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001543 : Doncaster 005	5	0.3%	4					100%					100.0%	0.3%					0.3%
E02001544 : Doncaster 006	1	0.1%	6	7				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001545 : Doncaster 007	11	0.6%	6	7				50%	50%				100.0%	0.3%	0.3%				0.6%
E02001546 : Doncaster 008	6	0.3%	6	7				50%	50%				100.0%	0.2%	0.2%				0.3%
E02001547 : Doncaster 009	8	0.4%	4					100%					100.0%	0.4%					0.4%
E02001548 : Doncaster 010	1	0.1%	6					100%					100.0%	0.1%					0.1%
E02001549 : Doncaster 011	3	0.2%	6	7				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001550 : Doncaster 012	4	0.2%	6					100%					100.0%	0.2%					0.2%
E02001551 : Doncaster 013	2	0.1%	6					100%					100.0%	0.1%					0.1%
E02001552 : Doncaster 014	1	0.1%	6	7				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001553 : Doncaster 015	2	0.1%	6					100%					100.0%	0.1%					0.1%
E02001554 : Doncaster 016	8	0.4%	6					100%					100.0%	0.4%					0.4%
E02001555 : Doncaster 017	4	0.2%	6	7				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001556 : Doncaster 018	4	0.2%	6	7				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001557 : Doncaster 019	9	0.5%	6	7				50%	50%				100.0%	0.2%	0.2%				0.5%
E02001558 : Doncaster 020	39	2.1%	8					100%					100.0%	2.1%					2.1%
E02001559 : Doncaster 021	9	0.5%	8					100%					100.0%	0.5%					0.5%
E02001560 : Doncaster 022	1	0.1%	6	7				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001561 : Doncaster 023	1	0.1%	7					100%					100.0%	0.1%					0.1%
E02001562 : Doncaster 024	4	0.2%	6	7				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001563 : Doncaster 025	6	0.3%	6	7				50%	50%				100.0%	0.2%	0.2%				0.3%
E02001564 : Doncaster 026	4	0.2%	7					100%					100.0%	0.2%					0.2%
E02001565 : Doncaster 027	5	0.3%	6	7				50%	50%				100.0%	0.1%	0.1%				0.3%
E02001566 : Doncaster 028	5	0.3%	7					100%					100.0%	0.3%					0.3%
E02001568 : Doncaster 030	13	0.7%	9					100%					100.0%	0.7%					0.7%
E02001569 : Doncaster 031	42	2.3%	9					100%					100.0%	2.3%					2.3%
E02001570 : Doncaster 032	3	0.2%	9					100%					100.0%	0.2%					0.2%
E02001571 : Doncaster 033	11	0.6%	7					100%					100.0%	0.6%					0.6%
E02001572 : Doncaster 034	2	0.1%	7					100%					100.0%	0.1%					0.1%
E02001573 : Doncaster 035	13	0.7%	9					100%					100.0%	0.7%					0.7%
E02001574 : Doncaster 036	1	0.1%	7					100%					100.0%	0.1%					0.1%
E02001576 : Doncaster 038	2	0.1%	7					100%					100.0%	0.1%					0.1%
E02001577 : Doncaster 039	7	0.4%	7					100%					100.0%	0.4%					0.4%
E02001611 : Sheffield 001	3	0.2%	13E					100%					100.0%	0.2%					0.2%
E02001613 : Sheffield 003	2	0.1%	13E					100%					100.0%	0.1%					0.1%
E02001614 : Sheffield 004	2	0.1%	11					100%					100.0%	0.1%					0.1%
E02001615 : Sheffield 005	3	0.2%	13E					100%					100.0%	0.2%					0.2%
E02001616 : Sheffield 006	4	0.2%	11					100%					100.0%	0.2%					0.2%
E02001618 : Sheffield 008	3	0.2%	13E					100%					100.0%	0.2%					0.2%
E02001619 : Sheffield 009	1	0.1%	13E					100%					100.0%	0.1%					0.1%
E02001620 : Sheffield 010	1	0.1%	11					100%					100.0%	0.1%					0.1%
E02001621 : Sheffield 011	2	0.1%	11					100%					100.0%	0.1%					0.1%
E02001622 : Sheffield 012	1	0.1%	11	13E				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001623 : Sheffield 013	2	0.1%	11					100%					100.0%	0.1%					0.1%
E02001624 : Sheffield 014	5	0.3%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.3%
E02001625 : Sheffield 015	3	0.2%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001627 : Sheffield 017	2	0.1%	11	13E				50%	50%				100.0%	0.1%	0.1%				0.1%
E02001628 : Sheffield 018	2	0.1%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.1%
E02001630 : Sheffield 020	3	0.2%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001634 : Sheffield 024	1	0.1%	11	13E				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001635 : Sheffield 025	3	0.2%	11	13E				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001637 : Sheffield 027	5	0.3%	11	13E				50%	50%				100.0%	0.1%	0.1%				0.3%
E02001639 : Sheffield 029	3	0.2%	11	13E				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001646 : Sheffield 036	2	0.1%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.1%
E02001648 : Sheffield 038	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001649 : Sheffield 039	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001651 : Sheffield 041	1	0.1%	13E					100%					100.0%	0.1%					0.1%
E02001652 : Sheffield 042	3	0.2%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001654 : Sheffield 044	2	0.1%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.1%
E02001655 : Sheffield 045	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001657 : Sheffield 047	5	0.3%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.3%
E02001658 : Sheffield 048	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001661 : Sheffield 051	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001665 : Sheffield 055	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001671 : Sheffield 061	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001672 : Sheffield 062	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001674 : Sheffield 064	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001675 : Sheffield 065	4	0.2%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001678 : Sheffield 068	3	0.2%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.2%

E02001681 : Sheffield 071	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02006868 : Sheffield 075	4	0.2%	11	13D				50%	50%				100.0%	0.1%	0.1%				0.2%
E02006869 : Sheffield 076	1	0.1%	11	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001578 : Rotherham 001	49	2.6%	11					100%					100.0%	2.6%					2.6%
E02001579 : Rotherham 002	24	1.3%	10	11				50%	50%				100.0%	0.6%	0.6%				1.3%
E02001580 : Rotherham 003	33	1.8%	9					100%					100.0%	1.8%					1.8%
E02001581 : Rotherham 004	16	0.9%	9					100%					100.0%	0.9%					0.9%
E02001582 : Rotherham 005	5	0.3%	10	11				50%	50%				100.0%	0.1%	0.1%				0.3%
E02001583 : Rotherham 006	7	0.4%	10	11				50%	50%				100.0%	0.2%	0.2%				0.4%
E02001584 : Rotherham 007	14	0.8%	11					100%					100.0%	0.8%					0.8%
E02001585 : Rotherham 008	11	0.6%	10	11				50%	50%				100.0%	0.3%	0.3%				0.6%
E02001586 : Rotherham 009	8	0.4%	11					100%					100.0%	0.4%					0.4%
E02001587 : Rotherham 010	9	0.5%	9	10	11			33%	33%	33%			100.0%	0.2%	0.2%	0.2%			0.5%
E02001588 : Rotherham 011	8	0.4%	11					100%					100.0%	0.4%					0.4%
E02001589 : Rotherham 012	8	0.4%	9	10	11			33%	33%	33%			100.0%	0.1%	0.1%	0.1%			0.4%
E02001590 : Rotherham 013	3	0.2%	11					100%					100.0%	0.2%					0.2%
E02001591 : Rotherham 014	7	0.4%	10	11				50%	50%				100.0%	0.2%	0.2%				0.4%
E02001592 : Rotherham 015	15	0.8%	11					100%					100.0%	0.8%					0.8%
E02001593 : Rotherham 016	6	0.3%	11					100%					100.0%	0.3%					0.3%
E02001594 : Rotherham 017	3	0.2%	11					100%					100.0%	0.2%					0.2%
E02001595 : Rotherham 018	5	0.3%	7					100%					100.0%	0.3%					0.3%
E02001596 : Rotherham 019	4	0.2%	11					100%					100.0%	0.2%					0.2%
E02001597 : Rotherham 020	1	0.1%	7	9				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001598 : Rotherham 021	11	0.6%	9	11				50%	50%				100.0%	0.3%	0.3%				0.6%
E02001599 : Rotherham 022	3	0.2%	9	11				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001600 : Rotherham 023	5	0.3%	11					100%					100.0%	0.3%					0.3%
E02001601 : Rotherham 024	8	0.4%	11					100%					100.0%	0.4%					0.4%
E02001602 : Rotherham 025	8	0.4%	11					100%					100.0%	0.4%					0.4%
E02001603 : Rotherham 026	4	0.2%	7					100%					100.0%	0.2%					0.2%
E02001604 : Rotherham 027	2	0.1%	11					100%					100.0%	0.1%					0.1%
E02001605 : Rotherham 028	2	0.1%	7	9				50%	50%				100.0%	0.1%	0.1%				0.1%
E02001606 : Rotherham 029	3	0.2%	7	13D				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001607 : Rotherham 030	3	0.2%	7	13D				50%	50%				100.0%	0.1%	0.1%				0.2%
E02001608 : Rotherham 031	1	0.1%	7	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001609 : Rotherham 032	1	0.1%	7	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
E02001610 : Rotherham 033	2	0.1%	7	13D				50%	50%				100.0%	0.1%	0.1%				0.1%
Redcar and Cleveland	3	0.2%	5					100%					100.0%	0.2%					0.2%
Hyndburn	1	0.1%	13E	13F				50%	50%				100.0%	0.0%	0.0%				0.1%
Bury	2	0.1%	13E	13F				50%	50%				100.0%	0.1%	0.1%				0.1%
Manchester	1	0.1%	13E	13F				50%	50%				100.0%	0.0%	0.0%				0.1%
Oldham	1	0.1%	13E	13F				50%	50%				100.0%	0.0%	0.0%				0.1%
Salford	1	0.1%	13E	13F				50%	50%				100.0%	0.0%	0.0%				0.1%
Kingston upon Hull, City of	2	0.1%	5	7				50%	50%				100.0%	0.1%	0.1%				0.1%
East Riding of Yorkshire	1	0.1%	5	7				50%	50%				100.0%	0.0%	0.0%				0.1%
North East Lincolnshire	1	0.1%	7					100%					100.0%	0.1%					0.1%
North Lincolnshire	16	0.9%	7					100%					100.0%	0.9%					0.9%
Hambleton	1	0.1%	5					100%					100.0%	0.1%					0.1%
Harrogate	3	0.2%	5					100%					100.0%	0.2%					0.2%
Selby	2	0.1%	1	5				50%	50%				100.0%	0.1%	0.1%				0.1%
Bradford	4	0.2%	5	13F				50%	50%				100.0%	0.1%	0.1%				0.2%
Kirklees	18	1.0%	13E	13F				50%	50%				100.0%	0.5%	0.5%				1.0%
Leeds	15	0.8%	5	13F				50%	50%				100.0%	0.4%	0.4%				0.8%
Wakefield	90	4.9%	15					100%					100.0%	4.9%					4.9%
Amber Valley	2	0.1%	7	13D				50%	50%				100.0%	0.1%	0.1%				0.1%
Chesterfield	1	0.1%	7	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
High Peak	3	0.2%	13E					100%					100.0%	0.2%					0.2%
North East Derbyshire	3	0.2%	7	13D	11			33%	33%	33%			100.0%	0.1%	0.1%	0.1%			0.2%
North West Leicestershire	1	0.1%	7	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
Boston	1	0.1%	7					100%					100.0%	0.1%					0.1%
South Holland	1	0.1%	7					100%					100.0%	0.1%					0.1%
South Kesteven	1	0.1%	7					100%					100.0%	0.1%					0.1%
West Lindsey	1	0.1%	7					100%					100.0%	0.1%					0.1%
Ashfield	1	0.1%	7	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
Bassetlaw	19	1.0%	7					100%					100.0%	1.0%					1.0%
Broxtowe	1	0.1%	7	13D				50%	50%				100.0%	0.0%	0.0%				0.1%
Newark and Sherwood	2	0.1%	7					100%					100.0%	0.1%					0.1%
Wychavon	2	0.1%	7					100%					100.0%	0.1%					0.1%
Solihull	1	0.1%	7					100%					100.0%	0.1%					0.1%
Peterborough	1	0.1%	7					100%					100.0%	0.1%					0.1%
Castle Point	1	0.1%	7					100%					100.0%	0.1%					0.1%
North Hertfordshire	1	0.1%	7					100%					100.0%	0.1%					0.1%
Mid Suffolk	1	0.1%	7					100%					100.0%	0.1%					0.1%
Barnet	1	0.1%	7					100%					100.0%	0.1%					0.1%
Cardiff	1	0.1%	7					100%					100.0%	0.1%					0.1%
Total	1,852	100.0%												79.0%	20.6%	0.4%	0.0%	0.0%	100.0%

Appendix D

HGV Sensitivity Gravity Model – Workplace Population

HGV Trip Distribution - Gravity Model

Reference	Route	Trip Dist %					AM Peak Hour			PM Peak Hour		
		A	B	C	D	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
1	Billingley Green Lane					0.0%	0	0	0	0	0	0
2	Nicholas Lane					0.0%	0	0	0	0	0	0
3	Barrowfield Road					0.0%	0	0	0	0	0	0
4	Red Hill Lane					0.0%	0	0	0	0	0	0
5	A1(M) North	10.4%	0.4%		0.3%	11.1%	6	6	13	7	6	12
6	A635 Barnsley Road	6.2%				6.2%	3	4	7	4	3	7
7	A1(M) South	7.9%	9.3%			17.2%	10	10	19	10	9	19
8	B6098					0.0%	0	0	0	0	0	0
9	Highgate Lane (South)					0.0%	0	0	0	0	0	0
10	A633 Manvers Way	4.6%				4.6%	3	3	5	3	2	5
11	B6273 Pontefract Road					0.0%	0	0	0	0	0	0
12	A633 Wath Road	4.0%				4.0%	2	2	4	2	2	4
13	A6195 Dearne Valley Parkway	15.9%	18.3%			34.3%	19	20	39	21	18	38
13A	Roebuck Hill					0.0%	0	0	0	0	0	0
13B	B6096					0.0%	0	0	0	0	0	0
13C	Sheffield Road					0.0%	0	0	0	0	0	0
13D	M1 South	11.3%	9.3%			20.5%	11	12	23	12	11	23
13E	A61	4.2%	2.1%			6.2%	3	4	7	4	3	7
13F	M1 North	0.5%	7.0%			7.5%	4	4	8	4	4	8
14	A635 Doncaster Road		4.3%	9.0%		13.2%	7	8	15	8	7	15
15	A6195 Park Spring Road			4.3%	5.1%	9.4%	5	5	11	6	5	11
		49.1%	32.3%	13.2%	5.4%	100.0%	55	57	112	60	52	112

Population data derived from 2011 Census data

2 Distance coefficient

350 Maximum travel time

2011 Census Dataset WP605EW - Industry (Workplace Population)

	Origin Zone	Industry (Workplace Population)	Distance (D) *(m)*	Travel Time (seconds)	Travel Time (mins)	P / D^N	% of Total	Trip Distribution									
								Route Assumptions					Trips Per Route				
								A	B	C	D	Count	A	B	C	D	Total
	Darlington	15,723	139966	5478	91	0	0%	5				1	0.1%				0.1%
	County Durham	63,724	154567	6484	108	0	0%	5				1	0.3%				0.3%
	Hartlepool	10,481	151719	6048	101	0	0%	5				1	0.0%				0.0%
	Middlesbrough	15,552	134271	5235	87	0	0%	5				1	0.1%				0.1%
	Northumberland	35,798	237406	10294	172	0	0%	5				1	0.1%				0.1%
	Redcar and Cleveland	15,375	141919	5827	97	0	0%	5				1	0.1%				0.1%
	Stockton-on-Tees	28,442	138668	5400	90	0	0%	5				1	0.1%				0.1%
	Gateshead	34,650	187149	7528	125	0	0%	5				1	0.1%				0.1%
	Newcastle upon Tyne	39,238	196486	8067	134	0	0%	5				1	0.1%				0.1%
	North Tyneside	23,075	194200	7500	125	0	0%	5				1	0.1%				0.1%
	South Tyneside	15,989	187589	7246	121	0	0%	5				1	0.0%				0.0%
	Sunderland	42,588	177583	6646	111	0	0%	5				1	0.1%				0.1%
	Blackburn with Darwen	23,509	134896	5971	100	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.1%
	Blackpool	16,090	180858	7184	120	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.0%
	Cheshire East	63,421	105299	6110	102	0	1%	5	13E	14		3	0.2%	0.2%	0.2%		0.6%
	Cheshire West and Chester	52,614	124433	6727	112	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.3%
	Halton	23,128	113259	6039	101	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.2%
	Warrington	36,573	102452	5458	91	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.3%
	Allerdale	13,844	239859	9845	164	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.0%
	Barrow-in-Furness	12,575	256394	10095	168	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.0%
	Carlisle	20,208	242479	9785	163	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.0%
	Copeland	12,204	279896	12473	208	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.0%
	Eden	8,075	188372	7362	123	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.0%
	South Lakeland	16,117	224175	8560	143	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.0%
	Bolton	39,962	124484	5201	87	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.3%
	Bury	23,382	86667	5039	84	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.3%
	Manchester	78,386	81229	4878	81	0	1%	5	13E	14		3	0.4%	0.4%	0.4%		1.2%
	Oldham	34,074	61761	3972	66	0	1%	13E				1	0.9%				0.9%
	Rochdale	30,060	99568	4433	74	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.3%
	Salford	29,480	94091	4977	83	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.3%
	Stockport	39,306	69967	4418	74	0	1%	13E				1	0.8%				0.8%
	Tameside	29,411	57164	3682	61	0	1%	13E				1	0.9%				0.9%
	Trafford	45,508	85305	4803	80	0	1%	5	13E	14		3	0.2%	0.2%	0.2%		0.6%
	Wigan	41,181	130366	5605	93	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.2%
	Burnley	14,340	121911	6097	102	0	0%	5	13E	14		3	0.0%	0.0%	0.0%		0.1%
	Chorley	11,244	141874	5641	94	0	0%	5	13E	14		3	0.0%	0.0%	0.0%		0.1%
	Fylde	15,620	173677	6755	113	0	0%	5	13D	14		3	0.0%	0.0%	0.0%		0.1%
	Hyndburn	12,996	112348	5830	97	0	0%	7	13E			2	0.1%	0.1%			0.1%
	Lancaster	14,757	195189	7669	128	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.0%
	Pendle	15,378	101104	5927	99	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.1%
	Preston	23,951	161326	6415	107	0	0%	5	13E	14		3	0.0%	0.0%	0.0%		0.1%
	Ribble Valley	12,000	126379	7145	119	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.1%
	Rossendale	9,585	98693	5397	90	0	0%	7	13D			2	0.0%	0.0%			0.1%
	South Ribble	18,439	150409	6020	100	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.1%
	West Lancashire	18,697	163003	7335	122	0	0%	5	13E	14		3	0.0%	0.0%	0.0%		0.1%
	Wyre	11,724	174930	7175	120	0	0%	5	13F			2	0.0%	0.0%			0.0%
	Knowsley	19,738	124981	6128	102	0	0%	5	13E	14		3	0.0%	0.0%	0.0%		0.1%
	Liverpool	60,151	127281	6296	105	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.4%
	Sefton	28,301	149441	7351	123	0	0%	5	13D	14		3	0.0%	0.0%	0.0%		0.1%
	St. Helens	23,053	117101	6356	106	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.2%
	Wirral	31,390	142025	6729	112	0	0%	5	13E	14		3	0.1%	0.1%	0.1%		0.2%
	East Riding of Yorkshire	44,243	89085	3950	66	0	1%	5	7			2	0.3%	0.3%			0.5%
	Kingston upon Hull, City of	45,952	97547	4277	71	0	0%	7	5			2	0.2%	0.2%			0.5%
	North East Lincolnshire	29,177	98354	4275	71	0	0%	7				1	0.3%				0.3%
	North Lincolnshire	34,621	74868	3352	56	0	1%	7				1	0.6%				0.6%
	York	28,753	72550	3385	56	0	1%	5				1	0.5%				0.5%
	Craven	8,367	114676	6859	114	0	0%	5	13F	14		3	0.0%	0.0%	0.0%		0.1%
	Hambleton	13,000	103088	4041	67	0	0%	5				1	0.1%				0.1%
	Harrogate	22,466	84331	3938	66	0	0%	5				1	0.3%				0.3%
	Richmondshire	5,207	135396	5850	98	0	0%	5				1	0.0%				0.0%
	Ryedale	8,552	109257	4872	81	0	0%	5				1	0.1%				0.1%
	Scarborough	14,032	140724	7504	125	0	0%	5				1	0.1%				0.1%
	Selby	13,081	48951	2345	39	0	1%	5				1	0.5%				0.5%
	Barnsley	27,564	14955	1288	21	0	12%	12	14	15		3	4.0%	4.0%	4.0%		12.0%
	Doncaster	45,537	18898	1465	24	0	12%	6	7			2	6.2%	6.2%			12.4%
	Rotherham	38,339	20116	1550	26	0	9%	10	13D			2	4.6%	4.6%			9.2%
	Sheffield	79,369	30131	2109	35	0	9%	13D				1	8.5%				8.5%
	Bradford	74,603	79800	4373	73	0	1%	13F	14	15	5	4	0.3%	0.3%	0.3%	0.3%	1.1%
	Calderdale	30,131	87270	4407	73	0	0%	13F	5			2	0.2%	0.2%			0.4%
	Kirklees	64,683	35618	2831	47	0	5%	13E	13F	14		3	1.7%	1.7%	1.7%		5.0%
	Leeds	115,876	56074	3034	51	0	4%	5	13F	14	15	4	0.9%	0.9%	0.9%	0.9%	3.6%
	Wakefield	58,945	18447	1466	24	0	17%	5	13F	14	15	4	4.2%	4.2%	4.2%	4.2%	16.9%
	Derby	45,600	93112	4163	69	0	1%	7	13D			2	0.3%	0.3%			0.5%
	Leicester	55,352	129769	5687	95	0	0%	13D	7			2	0.2%	0.2%			0.3%
	Nottingham	46,509	85693	3882	65	0	1%	13D	7			2	0.3%	0.3%			0.6%
	Rutland	5,514	132673	5807	97	0	0%	7	13D			2	0.0%	0.0%			0.0%

HGV Trip Distribution - Gravity Model

Reference	Route	Trip Dist %					AM Peak Hour			PM Peak Hour		
		A	B	C	D	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
1	Billingley Green Lane					0.0%	0	0	0	0	0	0
2	Nicholas Lane					0.0%	0	0	0	0	0	0
3	Barrowfield Road					0.0%	0	0	0	0	0	0
4	Red Hill Lane					0.0%	0	0	0	0	0	0
5	A1(M) North	10.4%	0.4%		0.3%	11.1%	6	6	13	7	6	12
6	A635 Barnsley Road	6.2%				6.2%	3	4	7	4	3	7
7	A1(M) South	7.9%	9.3%			17.2%	10	10	19	10	9	19
8	B6098					0.0%	0	0	0	0	0	0
9	Highgate Lane (South)					0.0%	0	0	0	0	0	0
10	A633 Manvers Way	4.6%				4.6%	3	3	5	3	2	5
11	B6273 Pontefract Road					0.0%	0	0	0	0	0	0
12	A633 Wath Road	4.0%				4.0%	2	2	4	2	2	4
13	A6195 Dearne Valley Parkway	15.9%	18.3%			34.3%	19	20	39	21	18	38
13A	Roebuck Hill					0.0%	0	0	0	0	0	0
13B	B6096					0.0%	0	0	0	0	0	0
13C	Sheffield Road					0.0%	0	0	0	0	0	0
13D	M1 South	11.3%	9.3%			20.5%	11	12	23	12	11	23
13E	A61	4.2%	2.1%			6.2%	3	4	7	4	3	7
13F	M1 North	0.5%	7.0%			7.5%	4	4	8	4	4	8
14	A635 Doncaster Road		4.3%	9.0%		13.2%	7	8	15	8	7	15
15	A6195 Park Spring Road			4.3%	5.1%	9.4%	5	5	11	6	5	11
		49.1%	32.3%	13.2%	5.4%	100.0%	55	57	112	60	52	112

Population data derived from 2011 Census data

2 Distance coefficient

350 Maximum travel time

2011 Census Dataset WP605EW - Industry (Workplace Population)

	Origin Zone	Industry (Workplace Population	Distance (D) *(m)*	Travel Time (seconds)	Travel Time (mins)	P / D^N	% of Total	Trip Distribution									
								Route Assumptions					Trips Per Route				
								A	B	C	D	Count	A	B	C	D	Total
	Amber Valley	23,425	81688	3670	61	0	0%	13D	7			2	0.2%	0.2%			0.3%
	Bolsover	13,361	58099	2641	44	0	0%	7	13D			2	0.2%	0.2%			0.4%
	Chesterfield	18,495	53630	2859	48	0	1%	13D	7			2	0.3%	0.3%			0.6%
	Derbyshire Dales	10,903	86846	4594	77	0	0%	7	13D			2	0.1%	0.1%			0.1%
	Erewash	18,325	94898	4111	69	0	0%	7	13D			2	0.1%	0.1%			0.2%
	High Peak	13,281	63778	4985	83	0	0%	13D	7			2	0.2%	0.2%			0.3%
	North East Derbyshire	10,893	65389	3046	51	0	0%	7	13D			2	0.1%	0.1%			0.2%
	South Derbyshire	14,134	106354	4647	77	0	0%	13D	7			2	0.1%	0.1%			0.1%
	Blaby	19,277	133797	5447	91	0	0%	13D	7			2	0.1%	0.1%			0.1%
	Charnwood	24,202	119104	5146	86	0	0%	13D	7			2	0.1%	0.1%			0.2%
	Harborough	18,611	148006	6564	109	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Hinckley and Bosworth	16,899	134866	5865	98	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Melton	8,807	117607	5033	84	0	0%	7	13D			2	0.0%	0.0%			0.1%
	North West Leicestershire	26,114	117394	4639	77	0	0%	7	13D			2	0.1%	0.1%			0.2%
	Oadby and Wigston	8,649	136890	5841	97	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Boston	12,562	125874	5560	93	0	0%	7	13D			2	0.0%	0.0%			0.1%
	East Lindsey	15,858	119144	6069	101	0	0%	7				1	0.1%				0.1%
	Lincoln	17,237	77156	3788	63	0	0%	7				1	0.3%				0.3%
	North Kesteven	13,803	98970	4303	72	0	0%	7				1	0.1%				0.1%
	South Holland	18,166	141554	6369	106	0	0%	7	13D			2	0.0%	0.0%			0.1%
	South Kesteven	20,880	111331	4650	78	0	0%	7				1	0.2%				0.2%
	West Lindsey	9,782	76770	4235	71	0	0%	7				1	0.2%				0.2%
	Corby	18,351	154655	6506	108	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Daventry	17,139	166788	6521	109	0	0%	13D	7			2	0.0%	0.0%			0.1%
	East Northamptonshire	12,242	161922	6718	112	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Kettering	15,274	164080	6856	114	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Northampton	42,190	182016	7688	128	0	0%	7	13D			2	0.1%	0.1%			0.1%
	South Northamptonshire	10,292	190306	7711	129	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Wellingborough	15,254	183896	7861	131	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Ashfield	21,798	71428	3382	56	0	0%	13D	7			2	0.2%	0.2%			0.4%
	Bassetlaw	19,576	42337	2108	35	0	1%	7				1	1.1%				1.1%
	Broxtowe	14,320	88852	4012	67	0	0%	7	13D			2	0.1%	0.1%			0.2%
	Gedling	12,065	75414	3697	62	0	0%	7	13D			2	0.1%	0.1%			0.2%
	Mansfield	14,142	62209	2938	49	0	0%	7	13D			2	0.2%	0.2%			0.4%
	Newark and Sherwood	17,622	65103	3083	51	0	0%	7	13D			2	0.2%	0.2%			0.4%
	Rushcliffe	11,350	97849	4042	67	0	0%	13D	7			2	0.1%	0.1%			0.1%
	Herefordshire, County of	28,968	260815	11002	183	0	0%	13D	7			2	0.0%	0.0%			0.0%
	Shropshire	44,194	205999	8589	143	0	0%	7	13D			2	0.1%	0.1%			0.1%
	Stoke-on-Trent	41,799	147537	6338	106	0	0%	13D	7			2	0.1%	0.1%			0.2%
	Telford and Wrekin	32,174	187447	8031	134	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Cannock Chase	15,944	140133	6268	104	0	0%	13D	7			2	0.0%	0.0%			0.1%
	East Staffordshire	25,148	121087	5248	87	0	0%	7	13D			2	0.1%	0.1%			0.2%
	Lichfield	15,501	128512	5526	92	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Newcastle-under-Lyme	18,962	158541	6906	115	0	0%	13D	7			2	0.0%	0.0%			0.1%
	South Staffordshire	12,261	159412	6969	116	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Stafford	19,968	151860	6922	115	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Staffordshire Moorlands	11,237	129846	6016	100	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Tamworth	13,314	140742	5647	94	0	0%	13D	7			2	0.0%	0.0%			0.1%
	North Warwickshire	20,076	143456	5941	99	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Nuneaton and Bedworth	18,228	154620	6311	105	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Rugby	18,357	166483	6732	112	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Stratford-on-Avon	21,396	190180	7649	127	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Warwick	23,672	175546	6971	116	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Birmingham	136,702	158525	6788	113	0	1%	7	13D			2	0.3%	0.3%			0.5%
	Coventry	48,374	167440	6870	115	0	0%	13D	7			2	0.1%	0.1%			0.2%
	Dudley	44,582	173812	8104	135	0	0%	13D	7			2	0.1%	0.1%			0.1%
	Sandwell	54,234	171109	7236	121	0	0%	13D	7			2	0.1%	0.1%			0.2%
	Solihull	32,823	159534	6104	102	0	0%	13D	7			2	0.1%	0.1%			0.1%
	Walsall	42,244	142942	6307	105	0	0%	7	13D			2	0.1%	0.1%			0.2%
	Wolverhampton	37,418	158249	7011	117	0	0%	13D	7			2	0.1%	0.1%			0.1%
	Bromsgrove	10,678	188729	7340	122	0	0%	13D	7			2	0.0%	0.0%			0.0%
	Malvern Hills	9,477	225174	9068	151	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Redditch	17,827	189167	7475	125	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Worcester	16,323	209590	8229	137	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Wychavon	20,561	216561	8565	143	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Wyre Forest	14,471	206420	8681	145	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Bedford	23,080	200785	8412	140	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Central Bedfordshire	32,584	217037	8559	143	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Luton	33,746	233421	9239	154	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Peterborough	34,827	152523	6056	101	0	0%	7	13D			2	0.1%	0.1%			0.1%
	Southend-on-Sea	17,957	311878	12633	211	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Thurrock	30,819	293867	11542	192	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Cambridge	17,070	205618	8144	136	0	0%	7	13D			2	0.0%	0.0%			0.0%
	East Cambridgeshire	10,379	207709	9237	154	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Fenland	15,436	177862	7287	121	0	0%	7				1	0.0%				0.0%
	Huntingdonshire	25,304	168591	6674	111	0	0%	7	13D			2	0.0%	0.0%			0.1%
	South Cambridgeshire	21,075	204534	7940	132	0	0%	7	13D			2	0.0%	0.0%			0.0%

HGV Trip Distribution - Gravity Model

Reference	Route	Trip Dist %					AM Peak Hour			PM Peak Hour		
		A	B	C	D	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
1	Billingley Green Lane					0.0%	0	0	0	0	0	0
2	Nicholas Lane					0.0%	0	0	0	0	0	0
3	Barrowfield Road					0.0%	0	0	0	0	0	0
4	Red Hill Lane					0.0%	0	0	0	0	0	0
5	A1(M) North	10.4%	0.4%		0.3%	11.1%	6	6	13	7	6	12
6	A635 Barnsley Road	6.2%				6.2%	3	4	7	4	3	7
7	A1(M) South	7.9%	9.3%			17.2%	10	10	19	10	9	19
8	B6098					0.0%	0	0	0	0	0	0
9	Highgate Lane (South)					0.0%	0	0	0	0	0	0
10	A633 Manvers Way	4.6%				4.6%	3	3	5	3	2	5
11	B6273 Pontefract Road					0.0%	0	0	0	0	0	0
12	A633 Wath Road	4.0%				4.0%	2	2	4	2	2	4
13	A6195 Dearne Valley Parkway	15.9%	18.3%			34.3%	19	20	39	21	18	38
13A	Roebuck Hill					0.0%	0	0	0	0	0	0
13B	B6096					0.0%	0	0	0	0	0	0
13C	Sheffield Road					0.0%	0	0	0	0	0	0
13D	M1 South	11.3%	9.3%			20.5%	11	12	23	12	11	23
13E	A61	4.2%	2.1%			6.2%	3	4	7	4	3	7
13F	M1 North	0.5%	7.0%			7.5%	4	4	8	4	4	8
14	A635 Doncaster Road		4.3%	9.0%		13.2%	7	8	15	8	7	15
15	A6195 Park Spring Road			4.3%	5.1%	9.4%	5	5	11	6	5	11
		49.1%	32.3%	13.2%	5.4%	100.0%	55	57	112	60	52	112

Population data derived from 2011 Census data

2 Distance coefficient

350 Maximum travel time

2011 Census Dataset WP605EW - Industry (Workplace Population)

	Origin Zone	Industry (Workplace Population	Distance (D) *(m)*	Travel Time (seconds)	Travel Time (mins)	P / D^N	% of Total	Trip Distribution									
								Route Assumptions					Trips Per Route				
								A	B	C	D	Count	A	B	C	D	Total
	Basildon	29,995	292213	11317	189	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Braintree	19,210	277301	10590	177	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Brentwood	9,152	279997	10404	173	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Castle Point	7,941	306345	12239	204	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Chelmsford	21,850	273394	10866	181	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Colchester	22,380	293323	11462	191	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Epping Forest	13,339	259434	9629	160	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Harlow	15,271	256182	9883	165	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Maldon	7,846	306553	12835	214	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Rochford	7,994	304194	12787	213	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Tendring	14,652	312676	12088	201	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Uttlesford	15,304	252502	9969	166	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Broxbourne	16,597	255462	10543	176	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Dacorum	21,041	261272	10482	175	0	0%	7	13D			2	0.0%	0.0%			0.0%
	East Hertfordshire	16,966	245372	9778	163	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Hertsmere	13,222	256516	10063	168	0	0%	7	13D			2	0.0%	0.0%			0.0%
	North Hertfordshire	17,713	217152	8435	141	0	0%	7	13D			2	0.0%	0.0%			0.0%
	St Albans	15,534	249286	9742	162	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Stevenage	14,652	223984	8842	147	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Three Rivers	7,831	261840	10147	169	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Watford	17,772	260478	10117	169	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Welwyn Hatfield	24,607	244734	9596	160	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Breckland	18,922	209617	9882	165	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Broadland	14,517	241622	11245	187	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Great Yarmouth	11,927	267835	12180	203	0	0%	7	13D			2	0.0%	0.0%			0.0%
	King's Lynn and West Norfolk	20,533	174135	7923	132	0	0%	7				1	0.1%				0.1%
	North Norfolk	12,815	227642	10810	180	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Norwich	25,985	234271	10962	183	0	0%	7	13D			2	0.0%	0.0%			0.0%
	South Norfolk	14,392	249588	11444	191	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Babergh	13,540	276327	11503	192	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Forest Heath	8,547	237685	9081	151	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Ipswich	19,975	287714	11355	189	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Mid Suffolk	14,155	281164	10871	181	0	0%	7	13D			2	0.0%	0.0%			0.0%
	St Edmundsbury	20,865	244390	9310	155	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Suffolk Coastal	18,018	305307	12112	202	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Waveney	16,103	273840	13042	217	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Camden	38,984	280233	11216	187	0	0%	13D	7			2	0.0%	0.0%			0.0%
	City of London	21,938	283345	11922	199	0	0%	13D	7			2	0.0%	0.0%			0.0%
	Hackney	17,692	286617	11491	192	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Hammersmith and Fulham	23,815	277739	12190	203	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Haringey	19,494	281767	11440	191	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Islington	24,684	280855	11645	194	0	0%	13D	7			2	0.0%	0.0%			0.0%
	Kensington and Chelsea	25,747	284412	11997	200	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Lambeth	19,620	302717	13306	222	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Lewisham	15,077	300109	12339	206	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Newham	27,152	284392	11064	184	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Southwark	27,379	299625	12612	210	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Tower Hamlets	27,617	289308	11428	190	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Wandsworth	24,365	285543	13244	221	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Westminster	98,991	283345	11922	199	0	0%	13D	7			2	0.1%	0.1%			0.1%
	Barking and Dagenham	20,511	288649	11193	187	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Barnet	29,921	259898	10293	172	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Bexley	22,986	302824	11934	199	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Brent	35,630	278094	10762	179	0	0%	13D	7			2	0.0%	0.0%			0.0%
	Bromley	26,821	317677	12242	204	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Croydon	29,459	328925	13194	220	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Ealing	42,452	274929	11637	194	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Enfield	29,929	262755	10611	177	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Greenwich	18,974	295444	11744	196	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Harrow	17,802	266973	10722	179	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Havering	24,672	282422	11074	185	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Hillingdon	70,205	286402	11069	184	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Hounslow	42,540	292500	11598	193	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Kingston upon Thames	18,082	321411	12398	207	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Merton	20,072	327292	12790	213	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Redbridge	19,463	279606	10727	179	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Richmond upon Thames	15,403	293425	12660	211	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Sutton	17,833	330391	13366	223	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Waltham Forest	20,284	279624	10579	176	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Bracknell Forest	17,188	325382	12129	202	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Brighton and Hove	28,463	383947	14588	243	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Isle of Wight	16,338	378624	20150	336	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Medway	29,133	322400	12414	207	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Milton Keynes	52,929	229047	8974	150	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Portsmouth	30,507	395335	15132	252	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Reading	21,054	301689	12356	206	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Slough	29,701	294620	11581	193	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Southampton	30,780	344449	13792	230	0	0%	7	13D			2	0.0%	0.0%			0.0%

HGV Trip Distribution - Gravity Model

Reference	Route	Trip Dist %					AM Peak Hour			PM Peak Hour		
		A	B	C	D	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
1	Billingley Green Lane					0.0%	0	0	0	0	0	0
2	Nicholas Lane					0.0%	0	0	0	0	0	0
3	Barrowfield Road					0.0%	0	0	0	0	0	0
4	Red Hill Lane					0.0%	0	0	0	0	0	0
5	A1(M) North	10.4%	0.4%		0.3%	11.1%	6	6	13	7	6	12
6	A635 Barnsley Road	6.2%				6.2%	3	4	7	4	3	7
7	A1(M) South	7.9%	9.3%			17.2%	10	10	19	10	9	19
8	B6098					0.0%	0	0	0	0	0	0
9	Highgate Lane (South)					0.0%	0	0	0	0	0	0
10	A633 Manvers Way	4.6%				4.6%	3	3	5	3	2	5
11	B6273 Pontefract Road					0.0%	0	0	0	0	0	0
12	A633 Wath Road	4.0%				4.0%	2	2	4	2	2	4
13	A6195 Dearne Valley Parkway	15.9%	18.3%			34.3%	19	20	39	21	18	38
13A	Roebuck Hill					0.0%	0	0	0	0	0	0
13B	B6096					0.0%	0	0	0	0	0	0
13C	Sheffield Road					0.0%	0	0	0	0	0	0
13D	M1 South	11.3%	9.3%			20.5%	11	12	23	12	11	23
13E	A61	4.2%	2.1%			6.2%	3	4	7	4	3	7
13F	M1 North	0.5%	7.0%			7.5%	4	4	8	4	4	8
14	A635 Doncaster Road		4.3%	9.0%		13.2%	7	8	15	8	7	15
15	A6195 Park Spring Road			4.3%	5.1%	9.4%	5	5	11	6	5	11
		49.1%	32.3%	13.2%	5.4%	100.0%	55	57	112	60	52	112

Population data derived from 2011 Census data

2 Distance coefficient

350 Maximum travel time

2011 Census Dataset WP605EW - Industry (Workplace Population)

	Origin Zone	Industry (Workplace Population	Distance (D) *(m)*	Travel Time (seconds)	Travel Time (mins)	P / D^N	% of Total	Trip Distribution									
								Route Assumptions					Trips Per Route				
								A	B	C	D	Count	A	B	C	D	Total
	West Berkshire	24,928	278334	11380	190	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Windsor and Maidenhead	19,056	290645	11591	193	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Wokingham	15,456	321806	11988	200	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Aylesbury Vale	21,392	221520	9700	162	0	0%	13D	7			2	0.0%	0.0%			0.0%
	Chiltern	8,841	278538	11198	187	0	0%	7	13D			2	0.0%	0.0%			0.0%
	South Bucks	9,455	286707	11413	190	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Wycombe	26,276	266841	10691	178	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Eastbourne	12,455	386736	15775	263	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Hastings	10,010	377918	14923	249	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Lewes	9,871	396552	15014	250	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Rother	7,576	369879	14338	239	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Wealden	15,128	363035	14274	238	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Basingstoke and Deane	28,324	305389	13013	217	0	0%	7	13D			2	0.0%	0.0%			0.0%
	East Hampshire	14,180	352706	13811	230	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Eastleigh	24,377	363031	13908	232	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Fareham	17,866	355662	14848	247	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Gosport	7,637	365914	15492	258	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Hart	9,311	324930	12682	211	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Havant	14,811	390755	14886	248	0	0%	7	13D			2	0.0%	0.0%			0.0%
	New Forest	22,497	366208	14832	247	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Rushmoor	13,294	320134	12287	205	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Test Valley	19,077	333177	13235	221	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Winchester	16,350	334109	13266	221	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Ashford	18,018	366362	14064	234	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Canterbury	16,862	367300	14029	234	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Dartford	21,687	297772	11259	188	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Dover	14,088	385061	14549	242	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Gravesham	10,046	312745	12015	200	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Maidstone	19,978	343724	13086	218	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Sevenoaks	12,500	318511	12030	201	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Folkestone and Hythe	11,061	385000	14400	240	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Swale	19,123	357726	13644	227	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Thanet	13,493	385398	14372	240	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Tonbridge and Malling	19,466	321623	12204	203	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Tunbridge Wells	14,915	347680	13070	218	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Cherwell	26,172	219666	9069	151	0	0%	7	13D			2	0.0%	0.0%			0.1%
	Oxford	19,348	257736	10106	168	0	0%	7	13D			2	0.0%	0.0%			0.0%
	South Oxfordshire	15,599	282564	10617	177	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Vale of White Horse	15,173	259686	10782	180	0	0%	7	13D			2	0.0%	0.0%			0.0%
	West Oxfordshire	13,964	237631	10356	173	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Elmbridge	16,713	307635	12196	203	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Epsom and Ewell	6,443	321682	12635	211	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Guildford	17,617	322187	12311	205	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Mole Valley	10,218	328352	12776	213	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Reigate and Banstead	15,063	329773	12640	211	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Runnymede	11,980	301752	11554	193	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Spelthorne	12,820	295374	11609	193	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Surrey Heath	11,651	310779	12159	203	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Tandridge	7,998	334159	12534	209	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Waverley	12,361	337042	13106	218	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Woking	11,936	306018	11978	200	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Adur	7,599	392402	14733	246	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Arun	14,762	375928	15276	255	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Chichester	16,402	365405	15080	251	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Crawley	37,323	349395	13143	219	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Horsham	16,731	357378	14177	236	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Mid Sussex	15,354	361980	13895	232	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Worthing	12,714	381472	15413	257	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Bath and North East Somerset	21,390	320970	12853	214	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Bournemouth	19,151	387154	15352	256	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Bristol, City of	56,391	306884	11886	198	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Cornwall	67,844	537121	19482	325	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Isles of Scilly	288	537121	19482	325	0	0%	7	13D			2	0.0%	0.0%			0.0%
	North Somerset	27,337	325985	12534	209	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Plymouth	34,815	485259	17757	296	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Poole	26,513	393478	15770	263	0	0%	7	13D			2	0.0%	0.0%			0.0%
	South Gloucestershire	43,332	291956	11345	189	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Swindon	40,244	294952	11252	188	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Torbay	13,040	454965	16898	282	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Wiltshire	61,298	339657	13878	231	0	0%	13D	7			2	0.0%	0.0%			0.1%
	East Devon	15,943	406550	15943	266	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Exeter	19,710	418456	15541	259	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Mid Devon	10,725	409886	15566	259	0	0%	7	13D			2	0.0%	0.0%			0.0%
	North Devon	15,135	440349	16568	276	0	0%	7	13D			2	0.0%	0.0%			0.0%
	South Hams	13,169	468551	17253	288	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Teignbridge	15,764	441151	16375	273	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Torridge	7,556	469207	18558	309	0	0%	7	13D			2	0.0%	0.0%			0.0%
	West Devon	5,953	477199	19039	317	0	0%	7	13D			2	0.0%	0.0%			0.0%

HGV Trip Distribution - Gravity Model

Reference	Route	Trip Dist %					AM Peak Hour			PM Peak Hour		
		A	B	C	D	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
1	Billingley Green Lane					0.0%	0	0	0	0	0	0
2	Nicholas Lane					0.0%	0	0	0	0	0	0
3	Barrowfield Road					0.0%	0	0	0	0	0	0
4	Red Hill Lane					0.0%	0	0	0	0	0	0
5	A1(M) North	10.4%	0.4%		0.3%	11.1%	6	6	13	7	6	12
6	A635 Barnsley Road	6.2%				6.2%	3	4	7	4	3	7
7	A1(M) South	7.9%	9.3%			17.2%	10	10	19	10	9	19
8	B6098					0.0%	0	0	0	0	0	0
9	Highgate Lane (South)					0.0%	0	0	0	0	0	0
10	A633 Manvers Way	4.6%				4.6%	3	3	5	3	2	5
11	B6273 Pontefract Road					0.0%	0	0	0	0	0	0
12	A633 Wath Road	4.0%				4.0%	2	2	4	2	2	4
13	A6195 Dearne Valley Parkway	15.9%	18.3%			34.3%	19	20	39	21	18	38
13A	Roebuck Hill					0.0%	0	0	0	0	0	0
13B	B6096					0.0%	0	0	0	0	0	0
13C	Sheffield Road					0.0%	0	0	0	0	0	0
13D	M1 South	11.3%	9.3%			20.5%	11	12	23	12	11	23
13E	A61	4.2%	2.1%			6.2%	3	4	7	4	3	7
13F	M1 North	0.5%	7.0%			7.5%	4	4	8	4	4	8
14	A635 Doncaster Road		4.3%	9.0%		13.2%	7	8	15	8	7	15
15	A6195 Park Spring Road			4.3%	5.1%	9.4%	5	5	11	6	5	11
		49.1%	32.3%	13.2%	5.4%	100.0%	55	57	112	60	52	112

Population data derived from 2011 Census data

2	Distance coefficient
350	Maximum travel time

2011 Census Dataset WP605EW - Industry (Workplace Population)

	Origin Zone	Industry (Workplace Population	Distance (D) *(m)*	Travel Time (seconds)	Travel Time (mins)	P / D^N	% of Total	Trip Distribution									
								Route Assumptions					Trips Per Route				
								A	B	C	D	Count	A	B	C	D	Total
	Christchurch	7,753	385626	15391	257	0	0%	7	13D			2	0.0%	0.0%			0.0%
	East Dorset	11,417	385227	15351	256	0	0%	7	13D			2	0.0%	0.0%			0.0%
	North Dorset	8,596	389223	16548	276	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Purbeck	4,701	406824	16629	277	0	0%	7	13D			2	0.0%	0.0%			0.0%
	West Dorset	13,775	426327	16463	274	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Weymouth and Portland	5,997	449767	17812	297	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Cheltenham	16,853	249060	9765	163	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Cotswold	12,076	238772	10482	175	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Forest of Dean	9,735	269213	10870	181	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Gloucester	17,822	253070	9990	167	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Stroud	17,118	268702	10258	171	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Tewkesbury	16,631	241397	9515	159	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Mendip	16,698	337070	14094	235	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Sedgemoor	17,558	352314	13218	220	0	0%	7	13D			2	0.0%	0.0%			0.0%
	South Somerset	29,467	399934	14945	249	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Taunton Deane	15,799	385504	14394	240	0	0%	7	13D			2	0.0%	0.0%			0.0%
	West Somerset	3,375	406957	15892	265	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Isle of Anglesey	7,127	242504	11185	186	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Gwynedd	13,476	254569	12746	212	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Conwy	11,234	200576	9782	163	0	0%	7	13E			2	0.0%	0.0%			0.0%
	Denbighshire	10,519	165920	8463	141	0	0%	7	13E			2	0.0%	0.0%			0.0%
	Flintshire	33,212	144814	7247	121	0	0%	7	13E			2	0.1%	0.1%			0.2%
	Wrexham	23,563	156702	7575	126	0	0%	13D	7			2	0.0%	0.0%			0.1%
	Powys	17,271	249866	12730	212	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Ceredigion	7,358	302191	15915	265	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Pembrokeshire	14,416	484259	19023	317	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Carmarthenshire	23,023	435647	16941	282	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Swansea	28,547	408270	15772	263	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Neath Port Talbot	19,443	362473	14711	245	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Bridgend	20,553	365962	14105	235	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Vale of Glamorgan	12,479	357418	14234	237	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Cardiff	47,048	339123	13113	219	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Rhondda Cynon Taff	26,418	359838	14403	240	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Merthyr Tydfil	8,234	331554	12745	212	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Caerphilly	21,755	327227	13190	220	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Blaenau Gwent	8,728	321312	12861	214	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Torfaen	13,436	312968	12365	206	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Monmouthshire	11,602	291721	11192	187	0	0%	7	13D			2	0.0%	0.0%			0.0%
	Newport	23,681	315090	12193	203	0	0%	7	13D			2	0.0%	0.0%			0.0%
Total		7,873,337			56,517	0	100%						49.1%	32.3%	13.2%	5.4%	100.0%

Appendix E

Traffic Survey Data

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	A - D FROM A1 (M) DONCASTER BYPASS (N) TO A635 (E)								A - C FROM A1 (M) DONCASTER BYPASS (N) TO A1 (M) DONCASTER BYPASS (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	11	5	4	1	0	0	0	21	0	0	0	0	0	0	0	0
07:15	12	4	1	1	0	0	0	18	0	0	0	0	0	0	0	0
07:30	8	2	0	2	0	0	0	12	0	0	0	0	0	0	0	0
07:45	13	1	1	0	0	0	0	15	0	0	0	0	0	0	0	0
H/TOT	44	12	6	4	0	0	0	66	0	0	0	0	0	0	0	0
08:00	12	3	2	0	0	0	0	17	0	0	0	0	0	0	0	0
08:15	19	7	2	1	0	0	0	29	0	0	0	1	1	0	0	2
08:30	16	5	1	0	0	0	0	22	4	1	0	0	0	0	0	5
08:45	23	7	1	2	0	0	0	33	1	0	0	0	0	0	0	1
H/TOT	70	22	6	3	0	0	0	101	5	1	0	1	1	0	0	8
P/TOT	114	34	12	7	0	0	0	167	5	1	0	1	1	0	0	8

TIME	A - D FROM A1 (M) DONCASTER BYPASS (N) TO A635 (E)								A - C FROM A1 (M) DONCASTER BYPASS (N) TO A1 (M) DONCASTER BYPASS (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	12	6	4	3	0	0	0	25	0	0	0	0	0	0	0	0
15:15	27	8	0	1	0	0	0	36	1	2	0	0	0	0	0	3
15:30	18	5	0	1	0	0	0	24	0	0	0	0	0	0	0	0
15:45	11	1	2	2	0	0	0	16	0	0	0	0	0	0	0	0
H/TOT	68	20	6	7	0	0	0	101	1	2	0	0	0	0	0	3
16:00	18	6	0	1	0	1	0	26	0	0	0	0	0	0	0	0
16:15	24	7	2	0	0	1	0	34	0	0	0	0	0	0	0	0
16:30	35	17	0	0	0	0	0	52	0	0	0	0	0	0	0	0
16:45	24	5	0	1	0	0	0	30	0	0	0	0	0	0	0	0
H/TOT	101	35	2	2	0	2	0	142	0	0	0	0	0	0	0	0
17:00	23	6	1	0	0	0	0	30	0	0	0	0	0	0	0	0
17:15	28	9	2	0	0	0	0	39	0	0	0	0	0	0	0	0
17:30	27	8	2	1	0	0	0	38	0	0	0	0	0	0	0	0
17:45	26	6	0	0	0	0	0	32	0	0	0	0	0	0	0	0
H/TOT	104	29	5	1	0	0	0	139	0	0	0	0	0	0	0	0
P/TOT	273	84	13	10	0	2	0	382	1	2	0	0	0	0	0	3

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	A - B FROM A1 (M) DONCASTER BYPASS (N) TO A635 (W)								A - A FROM A1 (M) DONCASTER BYPASS (N) TO A1 (M) DONCASTER BYPASS (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	18	12	3	6	0	0	0	39	0	0	0	0	0	0	0	0
07:15	33	7	5	3	0	0	0	48	0	0	0	0	0	0	0	0
07:30	22	8	3	7	0	0	0	40	0	0	0	0	0	0	0	0
07:45	32	10	3	6	0	0	0	51	0	0	0	0	0	0	0	0
H/TOT	105	37	14	22	0	0	0	178	0	0	0	0	0	0	0	0
08:00	41	13	2	7	0	0	0	63	0	0	0	0	0	0	0	0
08:15	30	9	1	5	0	0	0	45	0	0	0	0	0	0	0	0
08:30	33	15	1	15	0	0	0	64	0	0	0	0	0	0	0	0
08:45	23	11	4	16	0	0	0	54	0	0	0	0	0	0	0	0
H/TOT	127	48	8	43	0	0	0	226	0	0	0	0	0	0	0	0
P/TOT	232	85	22	65	0	0	0	404	0	0	0	0	0	0	0	0

TIME	A - B FROM A1 (M) DONCASTER BYPASS (N) TO A635 (W)								A - A FROM A1 (M) DONCASTER BYPASS (N) TO A1 (M) DONCASTER BYPASS (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	24	15	1	3	0	0	0	43	0	0	0	0	0	0	0	0
15:15	33	16	1	3	0	0	0	53	0	0	0	0	0	0	0	0
15:30	35	23	2	3	0	0	0	63	0	0	0	0	0	0	0	0
15:45	39	18	3	6	0	0	0	66	0	0	0	0	0	0	0	0
H/TOT	131	72	7	15	0	0	0	225	0	0	0	0	0	0	0	0
16:00	30	18	5	6	0	2	0	61	0	0	0	0	0	0	0	0
16:15	56	28	3	3	0	3	0	93	0	0	0	0	0	0	0	0
16:30	58	24	4	3	0	1	0	90	0	0	0	0	0	0	0	0
16:45	53	17	4	2	0	0	0	76	0	0	0	0	0	0	0	0
H/TOT	197	87	16	14	0	6	0	320	0	0	0	0	0	0	0	0
17:00	42	21	1	6	0	1	0	71	0	0	0	0	0	0	0	0
17:15	44	17	5	4	0	1	0	71	0	0	0	0	0	0	0	0
17:30	56	15	2	1	0	0	0	74	0	0	0	0	0	0	0	0
17:45	43	18	1	4	0	0	0	66	0	0	0	0	0	0	0	0
H/TOT	185	71	9	15	0	2	0	282	0	0	0	0	0	0	0	0
P/TOT	513	230	32	44	0	8	0	827	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	B - A FROM A635 (W) TO A1 (M) DONCASTER BYPASS (N)								B - D FROM A635 (W) TO A635 (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	28	15	2	3	0	0	0	48	61	15	5	2	0	1	0	84
07:15	20	12	2	3	0	1	0	38	68	14	1	1	1	2	0	87
07:30	19	18	3	2	0	0	0	42	42	18	0	1	1	1	0	63
07:45	15	13	3	16	0	1	0	48	55	14	2	2	0	0	0	73
H/TOT	82	58	10	24	0	2	0	176	226	61	8	6	2	4	0	307
08:00	19	10	4	7	0	0	0	40	61	14	3	2	1	0	0	81
08:15	13	4	1	8	0	1	0	27	53	18	1	0	2	3	0	77
08:30	15	10	6	17	0	0	0	48	48	6	6	3	0	0	0	63
08:45	15	9	3	12	0	0	0	39	50	6	2	0	1	0	0	59
H/TOT	62	33	14	44	0	1	0	154	212	44	12	5	4	3	0	280
P/TOT	144	91	24	68	0	3	0	330	438	105	20	11	6	7	0	587

TIME	B - A FROM A635 (W) TO A1 (M) DONCASTER BYPASS (N)								B - D FROM A635 (W) TO A635 (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	19	10	4	8	0	2	0	43	44	7	0	2	1	0	0	54
15:15	15	3	0	4	0	0	0	22	51	7	2	3	0	0	0	63
15:30	14	9	2	2	0	0	0	27	46	4	5	0	0	3	0	58
15:45	20	5	1	2	0	0	0	28	44	8	2	0	0	1	0	55
H/TOT	68	27	7	16	0	2	0	120	185	26	9	5	1	4	0	230
16:00	15	10	2	6	0	0	0	33	36	19	3	1	1	0	0	60
16:15	15	3	2	4	0	0	0	24	48	12	1	0	0	1	0	62
16:30	22	6	1	1	0	0	0	30	31	8	0	0	1	3	0	43
16:45	25	11	1	4	0	0	0	41	47	8	0	2	0	2	0	59
H/TOT	77	30	6	15	0	0	0	128	162	47	4	3	2	6	0	224
17:00	25	6	1	0	0	0	0	32	50	16	0	0	0	0	0	66
17:15	34	2	1	2	0	0	0	39	59	14	1	0	1	4	0	79
17:30	31	9	1	1	0	1	0	43	51	13	0	1	0	0	0	65
17:45	21	2	0	0	0	1	0	24	36	11	5	1	1	0	0	54
H/TOT	111	19	3	3	0	2	0	138	196	54	6	2	2	4	0	264
P/TOT	256	76	16	34	0	4	0	386	543	127	19	10	5	14	0	718

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	B - C FROM A635 (W) TO A1 (M) DONCASTER BYPASS (S)								B - B FROM A635 (W) TO A635 (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	75	48	5	13	0	1	0	142	0	0	0	0	0	0	0	0
07:15	92	42	8	9	0	0	0	151	0	0	0	0	0	0	0	0
07:30	70	33	9	8	0	2	0	122	0	0	0	0	0	0	0	0
07:45	83	30	5	6	1	0	0	125	0	0	0	0	0	0	0	0
H/TOT	320	153	27	36	1	3	0	540	0	0	0	0	0	0	0	0
08:00	68	23	7	8	0	2	0	108	0	0	0	0	0	0	0	0
08:15	63	20	9	11	0	0	0	103	0	0	0	0	0	0	0	0
08:30	49	18	8	10	0	2	0	87	0	0	0	0	0	0	0	0
08:45	37	18	5	15	0	0	0	75	0	0	0	0	0	0	0	0
H/TOT	217	79	29	44	0	4	0	373	0	0	0	0	0	0	0	0
P/TOT	537	232	56	80	1	7	0	913	0	0	0	0	0	0	0	0

TIME	B - C FROM A635 (W) TO A1 (M) DONCASTER BYPASS (S)								B - B FROM A635 (W) TO A635 (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	33	17	3	8	0	0	0	61	0	0	0	0	0	0	0	0
15:15	67	20	3	8	1	0	0	99	0	0	0	0	0	0	0	0
15:30	48	20	2	4	1	1	0	76	0	0	0	0	0	0	0	0
15:45	51	14	3	9	0	0	0	77	0	0	0	0	0	0	0	0
H/TOT	199	71	11	29	2	1	0	313	0	0	0	0	0	0	0	0
16:00	53	15	3	10	0	0	0	81	0	0	0	0	0	0	0	0
16:15	51	14	2	10	0	0	0	77	0	0	0	0	0	0	0	0
16:30	66	17	5	7	0	0	0	95	0	0	0	0	0	0	0	0
16:45	68	17	2	6	0	0	0	93	0	0	0	0	0	0	0	0
H/TOT	238	63	12	33	0	0	0	346	0	0	0	0	0	0	0	0
17:00	67	8	3	4	0	0	0	82	0	0	0	0	0	0	0	0
17:15	72	9	2	8	0	0	0	91	0	0	0	0	0	0	0	0
17:30	67	17	0	5	0	1	0	90	0	0	0	0	0	0	0	0
17:45	50	7	0	7	0	1	0	65	0	0	0	0	0	0	0	0
H/TOT	256	41	5	24	0	2	0	328	0	0	0	0	0	0	0	0
P/TOT	693	175	28	86	2	3	0	987	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	C - B FROM A1 (M) DONCASTER BYPASS (S) TO A635 (W)								C - A FROM A1 (M) DONCASTER BYPASS (S) TO A1 (M) DONCASTER BYPASS (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	21	16	1	12	1	0	0	51	1	0	0	1	0	0	0	2
07:15	43	20	5	12	1	1	0	82	1	0	0	0	0	0	0	1
07:30	53	14	4	13	0	0	0	84	1	0	0	0	0	0	0	1
07:45	61	19	2	13	0	0	0	95	0	0	0	0	0	0	0	0
H/TOT	178	69	12	50	2	1	0	312	3	0	0	1	0	0	0	4
08:00	59	18	5	12	0	0	0	94	0	0	0	0	0	0	0	0
08:15	73	17	5	13	0	0	0	108	0	0	0	0	0	0	0	0
08:30	57	12	6	10	0	0	0	85	0	0	0	0	0	0	0	0
08:45	50	18	4	15	0	0	0	87	0	0	0	0	0	0	0	0
H/TOT	239	65	20	50	0	0	0	374	0	0	0	0	0	0	0	0
P/TOT	417	134	32	100	2	1	0	686	3	0	0	1	0	0	0	4

TIME	C - B FROM A1 (M) DONCASTER BYPASS (S) TO A635 (W)								C - A FROM A1 (M) DONCASTER BYPASS (S) TO A1 (M) DONCASTER BYPASS (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	35	26	8	17	0	0	0	86	0	0	0	0	0	0	0	0
15:15	48	26	8	15	0	0	0	97	0	0	0	0	0	0	0	0
15:30	51	24	17	12	0	0	0	104	0	0	0	0	0	0	0	0
15:45	53	19	6	13	0	0	0	91	0	0	0	0	0	0	0	0
H/TOT	187	95	39	57	0	0	0	378	0	0	0	0	0	0	0	0
16:00	71	34	5	7	0	1	0	118	0	0	0	0	0	0	0	0
16:15	83	30	8	11	0	1	0	133	0	0	1	0	0	0	0	1
16:30	53	24	3	4	0	0	0	84	0	0	0	0	0	0	0	0
16:45	87	30	4	9	0	0	0	130	0	1	0	0	0	0	0	1
H/TOT	294	118	20	31	0	2	0	465	0	1	1	0	0	0	0	2
17:00	67	24	3	7	0	1	0	102	0	0	1	0	0	0	0	1
17:15	84	24	4	5	0	1	0	118	0	0	0	0	0	0	0	0
17:30	79	17	2	8	0	1	0	107	0	0	0	0	0	0	0	0
17:45	67	19	3	9	0	1	0	99	0	1	0	0	0	0	0	1
H/TOT	297	84	12	29	0	4	0	426	0	1	1	0	0	0	0	2
P/TOT	778	297	71	117	0	6	0	1269	0	2	2	0	0	0	0	4

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	C - D FROM A1 (M) DONCASTER BYPASS (S) TO A635 (E)								C - C FROM A1 (M) DONCASTER BYPASS (S) TO A1 (M) DONCASTER BYPASS (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	20	8	4	0	0	0	0	32	0	0	0	0	0	0	0	0
07:15	30	5	1	2	0	0	0	38	0	0	0	0	0	0	0	0
07:30	53	13	2	2	0	0	0	70	0	0	0	0	0	0	0	0
07:45	37	10	1	0	0	0	0	48	0	0	0	0	0	0	0	0
H/TOT	140	36	8	4	0	0	0	188	0	0	0	0	0	0	0	0
08:00	31	16	0	1	0	0	0	48	0	0	0	0	0	0	0	0
08:15	34	6	1	2	0	0	0	43	0	0	0	0	0	0	0	0
08:30	40	14	1	0	0	0	0	55	0	0	0	0	0	0	0	0
08:45	22	7	3	2	0	0	0	34	0	0	0	0	0	0	0	0
H/TOT	127	43	5	5	0	0	0	180	0	0	0	0	0	0	0	0
P/TOT	267	79	13	9	0	0	0	368	0	0	0	0	0	0	0	0

TIME	C - D FROM A1 (M) DONCASTER BYPASS (S) TO A635 (E)								C - C FROM A1 (M) DONCASTER BYPASS (S) TO A1 (M) DONCASTER BYPASS (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	31	9	2	3	1	0	0	46	0	0	0	0	0	0	0	0
15:15	33	10	1	3	0	0	0	47	0	0	0	0	0	0	0	0
15:30	29	20	2	1	0	0	0	52	0	0	0	0	0	0	0	0
15:45	41	18	1	0	0	1	0	61	0	0	0	0	0	0	0	0
H/TOT	134	57	6	7	1	1	0	206	0	0	0	0	0	0	0	0
16:00	38	15	2	3	0	0	0	58	0	0	0	0	0	0	0	0
16:15	44	26	4	1	0	0	0	75	0	0	0	0	0	0	0	0
16:30	49	16	1	0	0	0	0	66	0	0	0	0	0	0	0	0
16:45	49	23	3	1	0	0	0	76	0	0	0	0	0	0	0	0
H/TOT	180	80	10	5	0	0	0	275	0	0	0	0	0	0	0	0
17:00	51	13	3	1	0	1	0	69	0	0	0	0	0	0	0	0
17:15	50	11	1	1	1	0	0	64	0	0	0	0	0	0	0	0
17:30	56	11	2	1	0	0	0	70	0	0	0	0	0	0	0	0
17:45	55	12	0	2	0	0	0	69	0	0	0	0	0	0	0	0
H/TOT	212	47	6	5	1	1	0	272	0	0	0	0	0	0	0	0
P/TOT	526	184	22	17	2	2	0	753	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	D - C FROM A635 (E) TO A1 (M) DONCASTER BYPASS (S)								D - B FROM A635 (E) TO A635 (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	35	17	1	0	0	0	0	53	35	15	4	0	0	1	0	55
07:15	41	17	0	3	0	0	0	61	52	16	3	0	0	2	0	73
07:30	41	16	2	1	0	0	0	60	67	11	3	1	1	1	1	85
07:45	37	10	2	0	1	0	0	50	55	15	4	2	0	0	0	76
H/TOT	154	60	5	4	1	0	0	224	209	57	14	3	1	4	1	289
08:00	55	14	2	0	0	0	0	71	50	13	3	0	1	0	0	67
08:15	28	9	2	1	2	0	0	42	53	14	2	1	0	0	0	70
08:30	58	14	2	1	1	0	0	76	51	15	3	1	1	0	0	71
08:45	33	13	2	2	1	0	0	51	45	18	3	0	0	0	0	66
H/TOT	174	50	8	4	4	0	0	240	199	60	11	2	2	0	0	274
P/TOT	328	110	13	8	5	0	0	464	408	117	25	5	3	4	1	563

TIME	D - C FROM A635 (E) TO A1 (M) DONCASTER BYPASS (S)								D - B FROM A635 (E) TO A635 (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	29	3	0	1	0	0	0	33	60	11	5	1	0	1	0	78
15:15	38	12	0	2	0	0	0	52	53	15	2	0	0	0	0	70
15:30	20	2	0	2	0	0	0	24	69	19	1	0	3	1	0	93
15:45	28	7	5	2	0	0	0	42	57	10	0	0	1	1	0	69
H/TOT	115	24	5	7	0	0	0	151	239	55	8	1	4	3	0	310
16:00	32	7	1	1	0	0	0	41	54	20	1	1	0	0	0	76
16:15	19	6	0	0	0	1	0	26	74	18	1	0	0	1	0	94
16:30	28	5	3	0	0	0	0	36	72	8	2	0	1	3	0	86
16:45	35	3	2	1	0	0	0	41	53	13	2	1	0	0	0	69
H/TOT	114	21	6	2	0	1	0	144	253	59	6	2	1	4	0	325
17:00	41	7	2	1	0	0	0	51	76	11	0	0	1	0	0	88
17:15	39	3	2	1	0	0	0	45	68	3	2	0	0	0	0	73
17:30	47	8	2	0	0	0	0	57	64	4	1	0	1	2	0	72
17:45	22	4	3	0	0	0	0	29	55	6	1	2	0	1	0	65
H/TOT	149	22	9	2	0	0	0	182	263	24	4	2	2	3	0	298
P/TOT	378	67	20	11	0	1	0	477	755	138	18	5	7	10	0	933

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	D - A FROM A635 (E) TO A1 (M) DONCASTER BYPASS (N)								D - D FROM A635 (E) TO A635 (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	22	8	2	0	0	0	0	32	0	0	0	0	0	0	0	0
07:15	39	13	1	3	0	0	0	56	0	0	0	0	0	0	0	0
07:30	28	20	7	0	0	0	0	55	0	0	0	0	0	0	0	0
07:45	26	12	2	2	0	0	0	42	0	0	0	0	0	0	0	0
H/TOT	115	53	12	5	0	0	0	185	0	0	0	0	0	0	0	0
08:00	30	15	1	1	0	0	0	47	0	0	0	0	0	0	0	0
08:15	24	11	1	2	0	0	0	38	0	0	0	0	0	0	0	0
08:30	27	4	2	0	0	0	0	33	0	0	0	0	0	0	0	0
08:45	19	5	3	4	0	0	0	31	0	0	0	0	0	0	0	0
H/TOT	100	35	7	7	0	0	0	149	0	0	0	0	0	0	0	0
P/TOT	215	88	19	12	0	0	0	334	0	0	0	0	0	0	0	0

TIME	D - A FROM A635 (E) TO A1 (M) DONCASTER BYPASS (N)								D - D FROM A635 (E) TO A635 (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	25	8	2	2	0	0	0	37	0	0	0	0	0	0	0	0
15:15	20	4	3	2	0	0	0	29	0	0	0	0	0	0	0	0
15:30	24	9	0	2	1	0	0	36	0	0	0	0	0	0	0	0
15:45	26	3	1	1	0	0	0	31	0	0	0	0	0	0	0	0
H/TOT	95	24	6	7	1	0	0	133	0	0	0	0	0	0	0	0
16:00	28	8	1	0	0	1	0	38	0	0	0	0	0	0	0	0
16:15	23	5	0	2	0	0	0	30	0	0	0	0	0	0	0	0
16:30	35	4	0	2	0	1	0	42	0	0	0	0	0	0	0	0
16:45	34	3	0	2	0	0	0	39	0	0	0	0	0	0	0	0
H/TOT	120	20	1	6	0	2	0	149	0	0	0	0	0	0	0	0
17:00	31	3	1	0	0	0	0	35	0	0	0	0	0	0	0	0
17:15	29	2	0	1	0	1	0	33	0	0	0	0	0	0	0	0
17:30	39	7	1	0	0	0	0	47	0	0	0	0	0	0	0	0
17:45	34	3	1	1	0	1	0	40	0	0	0	0	0	0	0	0
H/TOT	133	15	3	2	0	2	0	155	0	0	0	0	0	0	0	0
P/TOT	348	59	10	15	1	4	0	437	0	0	0	0	0	0	0	0

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	TO ARM A A1 (M) DONCASTER BYPASS (N)								FROM ARM A A1 (M) DONCASTER BYPASS (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	51	23	4	4	0	0	0	82	29	17	7	7	0	0	0	60
07:15	60	25	3	6	0	1	0	95	45	11	6	4	0	0	0	66
07:30	48	38	10	2	0	0	0	98	30	10	3	9	0	0	0	52
07:45	41	25	5	18	0	1	0	90	45	11	4	6	0	0	0	66
H/TOT	200	111	22	30	0	2	0	365	149	49	20	26	0	0	0	244
08:00	49	25	5	8	0	0	0	87	53	16	4	7	0	0	0	80
08:15	37	15	2	10	0	1	0	65	49	16	3	7	1	0	0	76
08:30	42	14	8	17	0	0	0	81	53	21	2	15	0	0	0	91
08:45	34	14	6	16	0	0	0	70	47	18	5	18	0	0	0	88
H/TOT	162	68	21	51	0	1	0	303	202	71	14	47	1	0	0	335
P/TOT	362	179	43	81	0	3	0	668	351	120	34	73	1	0	0	579

TIME	TO ARM A A1 (M) DONCASTER BYPASS (N)								FROM ARM A A1 (M) DONCASTER BYPASS (N)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	44	18	6	10	0	2	0	80	36	21	5	6	0	0	0	68
15:15	35	7	3	6	0	0	0	51	61	26	1	4	0	0	0	92
15:30	38	18	2	4	1	0	0	63	53	28	2	4	0	0	0	87
15:45	46	8	2	3	0	0	0	59	50	19	5	8	0	0	0	82
H/TOT	163	51	13	23	1	2	0	253	200	94	13	22	0	0	0	329
16:00	43	18	3	6	0	1	0	71	48	24	5	7	0	3	0	87
16:15	38	8	3	6	0	0	0	55	80	35	5	3	0	4	0	127
16:30	57	10	1	3	0	1	0	72	93	41	4	3	0	1	0	142
16:45	59	15	1	6	0	0	0	81	77	22	4	3	0	0	0	106
H/TOT	197	51	8	21	0	2	0	279	298	122	18	16	0	8	0	462
17:00	56	9	3	0	0	0	0	68	65	27	2	6	0	1	0	101
17:15	63	4	1	3	0	1	0	72	72	26	7	4	0	1	0	110
17:30	70	16	2	1	0	1	0	90	83	23	4	2	0	0	0	112
17:45	55	6	1	1	0	2	0	65	69	24	1	4	0	0	0	98
H/TOT	244	35	7	5	0	4	0	295	289	100	14	16	0	2	0	421
P/TOT	604	137	28	49	1	8	0	827	787	316	45	54	0	10	0	1212

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	TO ARM B A635 (W)								FROM ARM B A635 (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	74	43	8	18	1	1	0	145	164	78	12	18	0	2	0	274
07:15	128	43	13	15	1	3	0	203	180	68	11	13	1	3	0	276
07:30	142	33	10	21	1	1	1	209	131	69	12	11	1	3	0	227
07:45	148	44	9	21	0	0	0	222	153	57	10	24	1	1	0	246
H/TOT	492	163	40	75	3	5	1	779	628	272	45	66	3	9	0	1023
08:00	150	44	10	19	1	0	0	224	148	47	14	17	1	2	0	229
08:15	156	40	8	19	0	0	0	223	129	42	11	19	2	4	0	207
08:30	141	42	10	26	1	0	0	220	112	34	20	30	0	2	0	198
08:45	118	47	11	31	0	0	0	207	102	33	10	27	1	0	0	173
H/TOT	565	173	39	95	2	0	0	874	491	156	55	93	4	8	0	807
P/TOT	1057	336	79	170	5	5	1	1653	1119	428	100	159	7	17	0	1830

TIME	TO ARM B A635 (W)								FROM ARM B A635 (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	119	52	14	21	0	1	0	207	96	34	7	18	1	2	0	158
15:15	134	57	11	18	0	0	0	220	133	30	5	15	1	0	0	184
15:30	155	66	20	15	3	1	0	260	108	33	9	6	1	4	0	161
15:45	149	47	9	19	1	1	0	226	115	27	6	11	0	1	0	160
H/TOT	557	222	54	73	4	3	0	913	452	124	27	50	3	7	0	663
16:00	155	72	11	14	0	3	0	255	104	44	8	17	1	0	0	174
16:15	213	76	12	14	0	5	0	320	114	29	5	14	0	1	0	163
16:30	183	56	9	7	1	4	0	260	119	31	6	8	1	3	0	168
16:45	193	60	10	12	0	0	0	275	140	36	3	12	0	2	0	193
H/TOT	744	264	42	47	1	12	0	1110	477	140	22	51	2	6	0	698
17:00	185	56	4	13	1	2	0	261	142	30	4	4	0	0	0	180
17:15	196	44	11	9	0	2	0	262	165	25	4	10	1	4	0	209
17:30	199	36	5	9	1	3	0	253	149	39	1	7	0	2	0	198
17:45	165	43	5	15	0	2	0	230	107	20	5	8	1	2	0	143
H/TOT	745	179	25	46	2	9	0	1006	563	114	14	29	2	8	0	730
P/TOT	2046	665	121	166	7	24	0	3029	1492	378	63	130	7	21	0	2091

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	TO ARM C A1 (M) DONCASTER BYPASS (S)								FROM ARM C A1 (M) DONCASTER BYPASS (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	110	65	6	13	0	1	0	195	42	24	5	13	1	0	0	85
07:15	133	59	8	12	0	0	0	212	74	25	6	14	1	1	0	121
07:30	111	49	11	9	0	2	0	182	107	27	6	15	0	0	0	155
07:45	120	40	7	6	2	0	0	175	98	29	3	13	0	0	0	143
H/TOT	474	213	32	40	2	3	0	764	321	105	20	55	2	1	0	504
08:00	123	37	9	8	0	2	0	179	90	34	5	13	0	0	0	142
08:15	91	29	11	13	3	0	0	147	107	23	6	15	0	0	0	151
08:30	111	33	10	11	1	2	0	168	97	26	7	10	0	0	0	140
08:45	71	31	7	17	1	0	0	127	72	25	7	17	0	0	0	121
H/TOT	396	130	37	49	5	4	0	621	366	108	25	55	0	0	0	554
P/TOT	870	343	69	89	7	7	0	1385	687	213	45	110	2	1	0	1058

TIME	TO ARM C A1 (M) DONCASTER BYPASS (S)								FROM ARM C A1 (M) DONCASTER BYPASS (S)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	62	20	3	9	0	0	0	94	66	35	10	20	1	0	0	132
15:15	106	34	3	10	1	0	0	154	81	36	9	18	0	0	0	144
15:30	68	22	2	6	1	1	0	100	80	44	19	13	0	0	0	156
15:45	79	21	8	11	0	0	0	119	94	37	7	13	0	1	0	152
H/TOT	315	97	16	36	2	1	0	467	321	152	45	64	1	1	0	584
16:00	85	22	4	11	0	0	0	122	109	49	7	10	0	1	0	176
16:15	70	20	2	10	0	1	0	103	127	56	13	12	0	1	0	209
16:30	94	22	8	7	0	0	0	131	102	40	4	4	0	0	0	150
16:45	103	20	4	7	0	0	0	134	136	54	7	10	0	0	0	207
H/TOT	352	84	18	35	0	1	0	490	474	199	31	36	0	2	0	742
17:00	108	15	5	5	0	0	0	133	118	37	7	8	0	2	0	172
17:15	111	12	4	9	0	0	0	136	134	35	5	6	1	1	0	182
17:30	114	25	2	5	0	1	0	147	135	28	4	9	0	1	0	177
17:45	72	11	3	7	0	1	0	94	122	32	3	11	0	1	0	169
H/TOT	405	63	14	26	0	2	0	510	509	132	19	34	1	5	0	700
P/TOT	1072	244	48	97	2	4	0	1467	1304	483	95	134	2	8	0	2026

MANUAL CLASSIFIED COUNTS

JOB REF: 27267

JOB NAME: GOLDTHORPE

SITE: 8 **DATE:** 21/06/2022

LOCATION: A1 (M) DONCASTER BYPASS / A635 **DAY:** TUESDAY

TIME	TO ARM D A635 (E)								FROM ARM D A635 (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:00	92	28	13	3	0	1	0	137	92	40	7	0	0	1	0	140
07:15	110	23	3	4	1	2	0	143	132	46	4	6	0	2	0	190
07:30	103	33	2	5	1	1	0	145	136	47	12	2	1	1	1	200
07:45	105	25	4	2	0	0	0	136	118	37	8	4	1	0	0	168
H/TOT	410	109	22	14	2	4	0	561	478	170	31	12	2	4	1	698
08:00	104	33	5	3	1	0	0	146	135	42	6	1	1	0	0	185
08:15	106	31	4	3	2	3	0	149	105	34	5	4	2	0	0	150
08:30	104	25	8	3	0	0	0	140	136	33	7	2	2	0	0	180
08:45	95	20	6	4	1	0	0	126	97	36	8	6	1	0	0	148
H/TOT	409	109	23	13	4	3	0	561	473	145	26	13	6	0	0	663
P/TOT	819	218	45	27	6	7	0	1122	951	315	57	25	8	4	1	1361

TIME	TO ARM D A635 (E)								FROM ARM D A635 (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
15:00	87	22	6	8	2	0	0	125	114	22	7	4	0	1	0	148
15:15	111	25	3	7	0	0	0	146	111	31	5	4	0	0	0	151
15:30	93	29	7	2	0	3	0	134	113	30	1	4	4	1	0	153
15:45	96	27	5	2	0	2	0	132	111	20	6	3	1	1	0	142
H/TOT	387	103	21	19	2	5	0	537	449	103	19	15	5	3	0	594
16:00	92	40	5	5	1	1	0	144	114	35	3	2	0	1	0	155
16:15	116	45	7	1	0	2	0	171	116	29	1	2	0	2	0	150
16:30	115	41	1	0	1	3	0	161	135	17	5	2	1	4	0	164
16:45	120	36	3	4	0	2	0	165	122	19	4	4	0	0	0	149
H/TOT	443	162	16	10	2	8	0	641	487	100	13	10	1	7	0	618
17:00	124	35	4	1	0	1	0	165	148	21	3	1	1	0	0	174
17:15	137	34	4	1	2	4	0	182	136	8	4	2	0	1	0	151
17:30	134	32	4	3	0	0	0	173	150	19	4	0	1	2	0	176
17:45	117	29	5	3	1	0	0	155	111	13	5	3	0	2	0	134
H/TOT	512	130	17	8	3	5	0	675	545	61	16	6	2	5	0	635
P/TOT	1342	395	54	37	7	18	0	1853	1481	264	48	31	8	15	0	1847

M1 Southbound Off-Slip
WebTRIS Ref: M1/4710L

Report Date	06:00	06:15	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	Total
Wed 01 Jun 2022	55	73	96	136	150	158	188	172	206	182	213	176	158	172	162	137	243	267	281	286	258	267	308	212	175	186	148	130	11115
Thu 02 Jun 2022	33	34	44	42	48	53	61	69	70	74	79	81	91	117	112	130	119	161	134	148	127	119	113	115	100	99	112	90	7240
Fri 03 Jun 2022	15	23	31	29	32	53	51	59	46	55	72	79	78	74	87	109	149	128	146	124	126	129	114	101	105	84	81	72	6696
Sat 04 Jun 2022	21	22	25	25	27	41	35	49	66	67	61	72	64	80	97	118	130	115	100	118	86	141	116	98	100	113	100	90	6772
Sun 05 Jun 2022	15	17	15	8	19	24	40	35	21	43	47	41	51	66	58	89	169	141	109	142	132	135	164	117	106	125	93	102	6533
Mon 06 Jun 2022	46	73	115	157	141	169	218	219	198	238	186	175	160	148	132	107	242	260	288	286	310	334	308	255	200	173	126	117	10392
Tue 07 Jun 2022	44	91	120	137	166	213	212	230	193	223	208	177	172	140	138	122	289	285	296	288	346	335	278	246	217	197	167	138	10861
Wed 08 Jun 2022	49	90	120	153	169	203	191	249	192	240	210	191	156	170	162	138	275	315	329	306	325	335	294	221	206	204	173	127	10626
Thu 09 Jun 2022																													1
Fri 10 Jun 2022	50	65	105	140	160	159	189	237	203	207	219	171	169	164	151	166	269	281	233	271	266	260	218	230	188	167	145	130	11219
Sat 11 Jun 2022	26	34	40	51	39	55	77	63	68	93	99	101	89	110	123	145	141	140	126	129	140	153	122	120	115	97	98	86	7321
Sun 12 Jun 2022	20	23	23	35	29	40	42	44	40	41	49	77	65	70	104	126	132	159	163	139	132	139	135	118	112	90	119	84	7065
Mon 13 Jun 2022	55	81	98	165	165	174	224	217	219	229	219	177	181	139	141	149	252	266	281	327	271	332	285	238	213	203	129	123	10751
Tue 14 Jun 2022	62	89	121	153	156	198	209	212	245	233	228	199	159	149	161	147	262	289	296	309	333	317	318	257	246	222	153	135	11152
Wed 15 Jun 2022	51	86	116	151	168	207	194	246	204	228	202	195	174	165	156	154	243	318	335	287	317	358	307	242	205	188	176	162	11149
Thu 16 Jun 2022	59	91	106	167	172	195	196	235	224	205	218	227	162	150	167	143	262	327	316	289	313	352	263	229	212	213	160	143	11356
Fri 17 Jun 2022	59	65	110	135	159	172	206	215	183	212	187	192	147	169	142	143	261	232	225	219	245	263	200	183	192	149	166	118	11139
Sat 18 Jun 2022	23	36	38	28	43	42	62	59	72	78	96	108	87	115	109	140	151	156	131	115	128	149	120	123	125	120	98	88	7406
Sun 19 Jun 2022	21	17	21	24	29	27	38	42	38	52	67	58	68	79	86	111	126	126	118	145	145	160	160	117	99	120	123	97	7199
Mon 20 Jun 2022	57	67	127	157	154	178	221	277	221	225	210	208	177	140	147	150	267	280	299	322	313	303	286	247	233	172	149	125	10906
Tue 21 Jun 2022	53	80	126	158	167	199	230	272	224	224	230	205	208	206	133	160	196	338	335	329	338	323	299	282	240	192	154	143	11283
Wed 22 Jun 2022	58	88	130	144	191	196	210	233	227	248	232	202	175	199	154	154	296	295	256	349	345	340	292	265	256	205	165	130	11496
Thu 23 Jun 2022	44	77	122	144	179	201	199	258	244	239	243	211	170	182	151	128	227	318	335	271	340	376	258	229	199	194	173	133	11242
Fri 24 Jun 2022	49	61	110	155	161	173	210	227	189	214	185	170	155	149	159	139	290	288	278	269	306	265	289	213	208	183	162	125	11587
Sat 25 Jun 2022	30	36	33	37	50	50	58	74	73	80	102	112	95	91	104	125	139	138	149	177	139	149	149	117	123	113	124	106	7985
Sun 26 Jun 2022	12	18	14	21	22	32	44	49	43	53	61	75	66	75	105	111	143	140	126	166	146	169	142	127	103	112	99	96	7158
Mon 27 Jun 2022	31	79	112	154	150	179	235	225	225	254	206	221	177	131	132	141	250	298	318	329	297	354	303	224	213	179	161	129	10864
Tue 28 Jun 2022	61	83	127	151	168	169	223	234	225	236	201	197	178	160	163	140	266	298	271	328	356	325	285	260	223	220	162	137	11062
Wed 29 Jun 2022	62	85	109	155	146	188	204	237	201	233	182	204	170	191	156	156	297	323	326	317	356	352	325	275	217	207	152	131	11387

M1 Northbound Off-Slip
WebTRIS Ref: M1/4704J

Report Date	06:00	06:15	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	Total
Wed 01 Jun 2022	52	55	70	98	90	145	163	148	133	139	134	126	98	85	80	97	285	247	273	272	272	308	245	208	185	169	133	141	10135
Thu 02 Jun 2022	40	23	28	33	42	40	48	56	45	40	56	42	43	62	72	59	147	131	128	139	153	129	116	119	111	76	89	75	6326
Fri 03 Jun 2022	16	18	25	31	40	29	49	39	37	28	31	45	37	49	53	59	123	133	105	120	104	109	98	108	94	104	70	98	5639
Sat 04 Jun 2022	20	20	22	23	18	24	30	24	33	39	45	52	38	56	47	59	98	124	122	120	82	97	125	88	81	105	79	89	5447
Sun 05 Jun 2022	14	8	12	12	10	12	24	25	18	11	19	27	17	38	38	44	117	133	125	129	117	125	97	83	92	74	62	63	5037
Mon 06 Jun 2022	34	62	60	117	105	138	134	138	136	146	152	132	128	84	87	111	220	239	250	251	263	254	223	195	198	148	114	113	8770
Tue 07 Jun 2022	38	69	74	121	127	136	137	155	154	133	137	144	133	120	115	117	224	271	234	257	271	244	214	213	178	183	136	141	8999
Wed 08 Jun 2022	43	56	89	127	116	160	158	144	144	141	124	141	147	124	109	100	256	271	279	269	234	270	301	262	224	190	151	139	9719
Thu 09 Jun 2022																													54
Fri 10 Jun 2022	52	47	95	121	134	149	177	129	137	133	123	115	102	109	125	106	239	247	281	246	178	265	250	230	188	203	150	130	10737
Sat 11 Jun 2022	22	19	38	38	39	42	38	55	38	42	56	57	62	79	64	85	118	131	124	113	115	127	115	104	99	125	93	97	6396
Sun 12 Jun 2022	23	16	13	19	10	19	22	35	20	27	32	40	39	51	44	63	109	97	121	108	123	120	101	99	65	88	79	87	5358
Mon 13 Jun 2022	42	55	81	102	114	177	147	164	176	144	130	123	128	110	101	111	209	248	230	272	250	244	236	198	196	177	126	105	9043
Tue 14 Jun 2022	52	61	96	109	120	175	151	151	154	140	147	140	117	98	107	90	230	280	267	268	269	276	201	211	175	204	141	140	9337
Wed 15 Jun 2022	50	55	77	113	97	132	158	178	152	149	144	137	134	122	115	109	244	257	253	300	258	273	252	209	192	193	150	103	9733
Thu 16 Jun 2022	49	66	100	118	134	164	166	153	151	163	139	153	133	116	102	94	253	262	269	290	238	263	267	220	192	186	134	112	9764
Fri 17 Jun 2022	54	48	100	99	127	149	159	143	163	147	117	124	101	84	102	125	280	269	238	237	223	207	193	168	136	136	138	107	9870
Sat 18 Jun 2022	16	22	21	32	37	33	46	59	48	50	47	62	51	73	59	89	141	132	139	139	121	122	137	121	106	120	102	75	6410
Sun 19 Jun 2022	18	13	11	13	31	16	27	28	24	21	23	41	27	50	48	56	112	137	136	123	136	133	110	112	94	81	78	91	5535
Mon 20 Jun 2022	47	56	85	136	118	142	177	173	162	132	138	145	128	94	99	58	220	255	280	290	289	256	213	200	174	166	128	123	8997
Tue 21 Jun 2022	50	61	90	142	120	141	166	165	146	179	170	147	131	129	112	94	224	259	279	279	236	271	262	207	221	165	133	110	9366
Wed 22 Jun 2022	53	64	86	137	137	154	185	160	158	152	191	161	122	121	123	144	233	249	280	305	312	274	296	213	230	231	159	144	10158
Thu 23 Jun 2022	50	63	79	136	127	157	149	166	161	161	154	140	126	106	118	121	240	242	247	252	276	226	237	228	167	186	138	114	9375
Fri 24 Jun 2022	49	59	77	109	126	152	178	163	138	125	127	124	92	116	112	111	259	225	229	246	259	214	210	197	177	156	152	119	10307
Sat 25 Jun 2022	27	20	24	30	34	39	37	49	48	52	59	65	54	80	84	81	107	144	131	125	117	163	161	137	128	120	106	110	6764
Sun 26 Jun 2022	16	9	17	15	16	24	34	29	24	34	23	32	51	42	55	56	120	115	115	114	107	142	92	88	102	99	90	89	5546
Mon 27 Jun 2022	40	50	98	118	134	142	134	161	170	164	123	133	85	110	80	100	204	264	282	287	283	259	214	196	190	153	142	118	9163
Tue 28 Jun 2022	50	70	88	111	108	150	166	151	159	183	135	158	136	126	101	105	236	236	229	237	295	204	130	135	216	174	130	114	9158
Wed 29 Jun 2022	53	56	84	117	117	139	149	147	150	153	147	139	121	118	105	92	235	239	248	257	263	282	268	260	212	199	132	135	9442

M1 Northbound On-Slip
WebTRIS Ref: M1/4710K

Report Date	06:00	06:15	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	Total
Wed 01 Jun 2022	143	194	235	269	267	263	276	228	238	231	239	183	171	184	177	194	224	209	198	191	178	211	172	198	137	147	123	120	11397
Thu 02 Jun 2022	47	50	72	75	79	75	85	86	77	100	123	96	112	138	156	167	118	135	128	129	128	131	124	116	96	102	99	103	7629
Fri 03 Jun 2022	34	36	59	39	48	58	63	57	69	68	68	79	88	130	117	129	107	120	103	94	129	114	96	103	91	98	93	84	6994
Sat 04 Jun 2022	28	35	42	40	41	57	58	49	67	69	89	83	85	109	111	120	122	116	107	105	127	107	117	91	100	82	85	85	6663
Sun 05 Jun 2022	21	23	26	43	30	25	44	35	35	33	54	57	53	60	89	110	114	152	99	97	87	96	95	93	101	88	76	63	5909
Mon 06 Jun 2022	141	201	246	291	301	282	258	275	302	250	222	198	197	173	129	149	211	209	232	205	208	162	191	139	135	114	120	117	10463
Tue 07 Jun 2022	145	208	295	315	332	317	338	287	310	279	263	216	193	158	155	126	207	199	234	214	220	196	174	163	167	151	119	102	10965
Wed 08 Jun 2022	141	216	262	310	332	337	312	308	298	309	267	204	180	170	148	144	229	228	219	196	207	218	193	162	150	149	142	109	11034
Thu 09 Jun 2022																													36
Fri 10 Jun 2022	154	215	221	284	275	298	272	308	272	270	238	194	162	178	179	162	213	194	215	187	211	192	179	162	144	149	150	121	11526
Sat 11 Jun 2022	42	72	66	74	65	72	86	81	103	100	113	121	113	116	137	171	154	153	134	112	117	106	98	109	107	87	97	88	7892
Sun 12 Jun 2022	18	25	47	40	38	40	48	62	38	67	65	62	93	99	112	116	135	134	141	116	132	127	141	93	121	130	124	115	6930
Mon 13 Jun 2022	133	213	276	295	330	315	307	294	289	301	253	222	173	166	163	136	202	211	244	183	238	196	179	163	149	146	109	103	10898
Tue 14 Jun 2022	153	195	282	290	328	337	348	312	310	280	281	209	202	194	149	133	223	226	210	186	199	209	207	151	171	152	131	126	11147
Wed 15 Jun 2022	155	196	272	243	346	361	313	288	333	309	270	208	198	186	188	152	214	200	187	205	201	175	170	192	138	133	105	110	11195
Thu 16 Jun 2022	157	191	278	291	304	296	304	317	312	286	252	224	186	208	186	156	204	218	215	206	223	189	210	169	133	161	136	103	11256
Fri 17 Jun 2022	141	204	253	290	320	270	288	270	256	283	216	207	177	175	150	137	173	152	179	168	166	167	140	147	146	156	117	110	11277
Sat 18 Jun 2022	49	48	59	67	61	82	82	86	97	109	121	137	118	124	141	159	113	123	132	145	129	123	134	101	109	109	98	78	7808
Sun 19 Jun 2022	24	20	30	39	39	37	52	50	49	37	71	67	91	126	111	132	159	141	132	149	143	126	105	133	108	129	92	101	7046
Mon 20 Jun 2022	136	195	263	317	330	327	324	282	267	294	296	172	192	173	154	159	225	211	223	193	193	205	181	155	138	131	119	109	10925
Tue 21 Jun 2022	158	224	283	341	322	320	314	341	306	287	273	229	194	170	178	129	216	251	198	202	198	192	204	163	155	157	146	122	11591
Wed 22 Jun 2022	145	222	274	300	356	319	305	308	300	284	243	174	200	160	174	148	212	228	218	200	231	210	153	157	149	141	118	120	11296
Thu 23 Jun 2022	164	200	251	303	303	314	307	307	313	266	295	219	199	191	191	158	204	237	241	241	218	213	155	160	158	140	116	95	11424
Fri 24 Jun 2022	158	196	208	277	265	305	266	303	278	267	251	187	193	195	165	157	210	223	222	208	212	184	136	192	193	166	154	116	11668
Sat 25 Jun 2022	35	59	62	71	69	84	74	109	132	134	149	150	138	158	185	161	144	147	154	140	131	130	123	129	108	114	127	84	8567
Sun 26 Jun 2022	27	34	32	40	50	38	42	45	47	54	79	89	93	124	115	120	149	131	130	131	104	120	143	115	102	91	96	71	6854
Mon 27 Jun 2022	141	203	256	280	288	336	315	319	276	262	240	197	182	183	165	154	210	225	212	180	225	240	191	160	138	140	95	102	10880
Tue 28 Jun 2022	164	209	265	303	320	342	345	320	315	227	277	267	197	177	140	169	211	205	220	203	167	144	150	163	196	129	124	107	11174
Wed 29 Jun 2022	136	204	274	285	326	308	292	322	288	304	242	202	204	187	162	135	245	245	219	203	216	198	203	170	173	166	135	123	11265

M1 Northbound On-Slip
WebTRIS Ref: M1/4705M

Report Date	06:00	06:15	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	Total
Wed 01 Jun 2022	103	125	185	167	214	216	206	177	190	194	168	147	152	145	131	141	145	173	175	160	159	173	144	123	128	119	119	105	9165
Thu 02 Jun 2022	38	47	71	50	68	65	77	58	75	82	83	95	94	128	125	130	107	104	91	81	106	114	91	83	105	94	70	45	6288
Fri 03 Jun 2022	23	41	50	40	42	46	42	32	54	60	78	77	59	107	104	117	105	89	83	76	94	105	72	69	60	62	76	56	5553
Sat 04 Jun 2022	24	32	34	29	38	56	57	65	90	67	85	70	90	96	119	98	91	105	84	79	76	80	75	82	77	74	88	64	5457
Sun 05 Jun 2022	24	21	27	23	22	32	31	47	44	32	42	36	34	55	76	68	90	84	76	82	91	80	78	72	71	86	57	41	4850
Mon 06 Jun 2022	107	148	169	193	223	226	239	223	215	227	153	164	144	138	139	147	135	143	165	131	143	141	137	108	93	98	77	71	8621
Tue 07 Jun 2022	102	156	179	202	228	248	240	225	215	208	202	147	186	165	132	135	154	166	209	141	160	151	146	116	116	127	94	82	8825
Wed 08 Jun 2022	103	130	208	191	221	264	257	229	204	221	199	166	155	149	145	141	182	178	130	156	164	142	143	121	109	119	87	84	9548
Thu 09 Jun 2022																													164
Fri 10 Jun 2022	113	135	169	174	213	232	248	206	205	199	178	165	165	174	148	153	152	179	158	155	154	158	140	139	134	131	96	101	9458
Sat 11 Jun 2022	35	52	47	42	62	70	74	77	76	107	119	112	108	113	135	119	91	100	70	90	99	85	84	76	78	97	102	76	6412
Sun 12 Jun 2022	26	36	34	45	28	45	48	34	45	57	67	66	66	63	81	70	96	83	113	74	80	69	61	64	64	61	72	57	5257
Mon 13 Jun 2022	138	121	194	183	243	251	213	239	201	215	175	167	168	141	134	143	175	179	174	154	154	138	146	131	122	118	95	58	8950
Tue 14 Jun 2022	118	138	179	194	229	257	238	231	238	225	213	165	167	150	170	121	199	170	170	161	167	169	167	131	117	106	104	73	9016
Wed 15 Jun 2022	119	160	179	134	214	247	252	247	224	209	210	190	179	160	139	126	172	178	167	127	176	169	149	133	124	136	104	126	9312
Thu 16 Jun 2022	139	146	194	194	239	258	246	230	211	211	191	161	144	168	158	147	153	161	162	157	183	137	141	121	113	120	88	87	9014
Fri 17 Jun 2022	108	138	158	169	232	238	236	206	199	192	169	158	144	160	165	141	150	168	172	144	155	137	134	101	121	113	81	90	8925
Sat 18 Jun 2022	52	49	41	39	49	68	92	71	89	82	104	88	97	113	126	134	90	105	117	93	81	80	91	102	94	91	76	64	6486
Sun 19 Jun 2022	17	42	24	23	24	38	43	32	47	43	60	58	67	77	102	77	93	85	78	87	88	82	85	77	72	72	61	53	5458
Mon 20 Jun 2022	120	135	202	202	223	249	254	204	220	210	179	143	176	162	143	138	169	150	175	140	155	139	129	130	100	104	87	75	8838
Tue 21 Jun 2022	118	114	195	184	244	277	239	222	230	212	203	162	154	196	158	138	153	174	148	178	169	152	156	129	138	116	106	73	9003
Wed 22 Jun 2022	123	160	216	181	247	242	261	226	241	224	195	176	179	199	146	105	173	152	155	158	139	183	152	153	118	110	96	88	9107
Thu 23 Jun 2022	109	139	173	185	243	246	238	228	221	214	220	149	171	180	125	138	147	190	177	174	152	163	141	106	115	110	101	88	8873
Fri 24 Jun 2022	119	129	164	177	208	262	215	210	213	202	184	159	155	166	150	118	150	148	180	135	145	158	139	130	122	136	130	101	9169
Sat 25 Jun 2022	51	54	48	52	58	74	68	83	85	102	99	98	130	120	146	110	125	116	114	96	113	111	94	90	115	87	72	58	6969
Sun 26 Jun 2022	17	33	38	25	38	39	51	43	42	46	69	70	63	77	67	108	89	94	66	76	85	81	77	72	86	76	73	80	5591
Mon 27 Jun 2022	132	146	192	177	221	260	255	223	220	208	196	150	163	165	158	120	156	156	135	159	143	185	144	121	110	115	88	65	8832
Tue 28 Jun 2022	137	140	170	223	264	233	254	236	235	205	192	182	152	164	145	149	171	167	190	173	163	89	126	137	163	106	111	77	9065
Wed 29 Jun 2022	118	149	198	187	224	274	252	217	230	199	209	147	144	153	133	122	149	143	190	141	187	156	191	117	127	132	120	78	9092

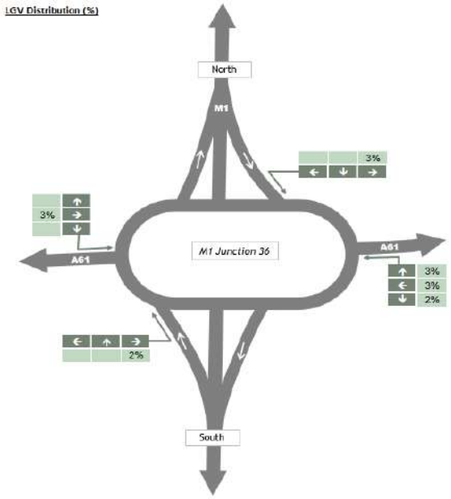
Appendix F

M1 Junction 36 Traffic Flow Diagrams

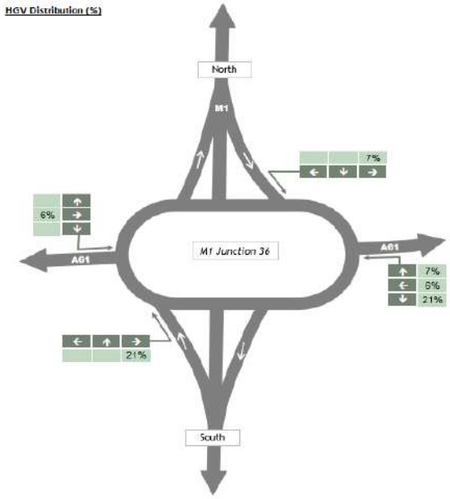
% Trip Distribution

N

LGV Distribution (%)

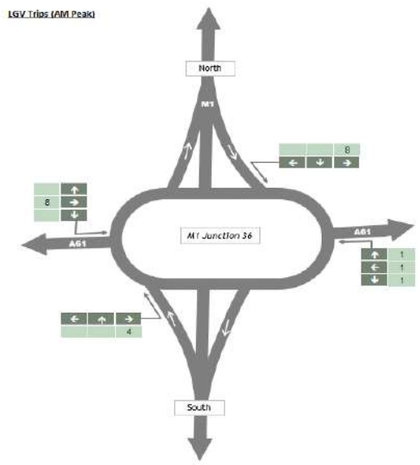


HGV Distribution (%)

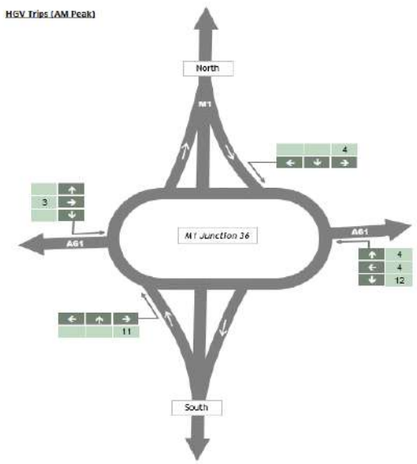


Weekday AM Peak Hour Trips

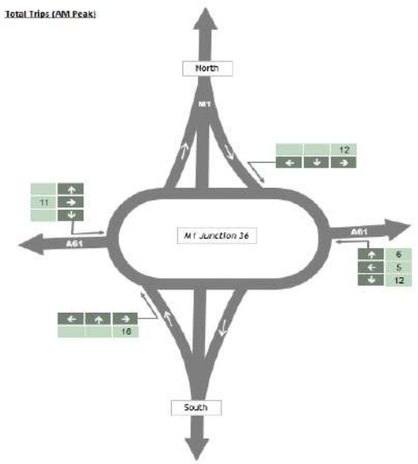
LGV Trips (AM Peak)



HGV Trips (AM Peak)

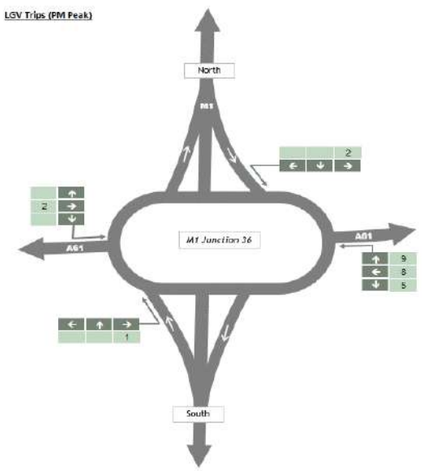


Total Trips (AM Peak)

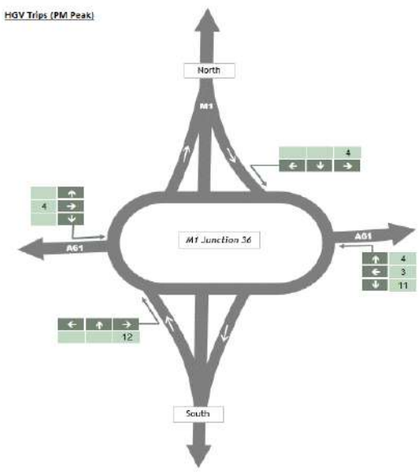


Weekday PM Peak Hour Trips

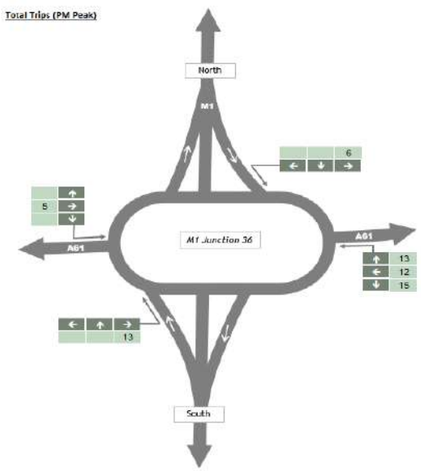
LGV Trips (PM Peak)



HGV Trips (PM Peak)



Total Trips (PM Peak)



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Client:
Equites Newlands (Goldthorpe) Ltd

Project:
Land South of Dearne Valley Parkway, Goldthorpe

Figure Title:
Vehicle Trip Distribution

Scale:
Not to scale

Figure Status:
Issue

Job Number:
3465

Figure Number:
Figure 1

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