PERSIMMON HOMES MIDLANDS

PROPOSED RESIDENTIAL DEVELOPMENT
ON LAND AT FURNACE LANE, NETHER HEYFORD,
NORTHAMPTONSHIRE

TRANSPORT APPRAISAL

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<table>
<thead>
<tr>
<th>version</th>
<th>date</th>
<th>author</th>
<th>comments</th>
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</thead>
<tbody>
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<td>1</td>
<td>27/04/2015</td>
<td>Rebecca Leconte</td>
<td>draft issued to Client team</td>
</tr>
<tr>
<td>2</td>
<td>07/05/2015</td>
<td>Rebecca Leconte</td>
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1.0 INTRODUCTION

1.1 Persimmon Homes Midlands commissioned ADC Infrastructure Ltd to provide transport and highways advice on the potential development of up to 70 residential dwellings on land off Furnace Lane, in Nether Heyford, Northamptonshire. The general and detailed site locations are shown in Figures 1 and 2, and an aerial photograph is shown in Figure 3.
1.2 This Transport Appraisal has therefore been prepared as part of the promotion of the site, and is structured as follows:

- Section 2 describes the existing conditions in the vicinity of the site, including the local highway network, and the opportunities for travel to the site by foot, cycle, and public transport.
- Section 3 outlines the development proposals, and provides advice on the parking provision, the vehicular access, and the sustainable travel infrastructure that would need to be provided to encourage the use of sustainable modes.
- Section 4 summarises the potential trip generation of the residential development using trip rates from the TRICS 7.1.2 database and the modal split from the 2011 Census.
- Section 5 presents the likely distribution pattern and assignment of development traffic on the local highway network, and examines the likely highway impact and whether mitigation measures may be required.
- Section 6 presents the summary and conclusions.

1.3 This Transport Appraisal has been produced in accordance with Guidance on Transport Assessment\(^1\), and Travel plans, transport assessments and statements in decision-taking\(^2\).

1.4 It also examines the transport implications of any development at the site taking into account the following objectives from paragraph 32 of the National Planning Policy Framework (NPPF):

- “the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure
- safe and suitable access to the site can be achieved for all people, and
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.”

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\(^1\) Guidance on Transport Assessment, Department for Transport, March 2007
\(^2\) Travel plans, transport assessments and statements in decision-taking, National Planning Practice Guidance, March 2014
1.5 Persimmon Homes Midlands are seeking to have the site allocated in the Local Plan. This report has been produced to support that aim. If the proposals are progressed and a planning application is subsequently submitted, a Transport Statement will need to be prepared. This Transport Appraisal can be used as a base for the Transport Statement, and to start discussions with Northamptonshire County Council (NCC) as the local highway authority and Highways England (HE), formerly the Highways Agency.

2.0 EXISTING CONDITIONS

Site location and existing use

2.1 As shown in Figure 2, the development site is located on the southern edge of Nether Heyford. It is bordered by dwellings fronting South View to the north, fields to the east and south, and Furnace Lane to the west.

2.2 As shown in Figure 3, the site is an agricultural field and, for the purposes of this assessment, has no existing use. There are gated fields accesses into the field from South View to the north and Furnace Lane to the west.

Nearby development

2.3 As shown in Figure 4, an outline application for up to 99 dwellings on land off Weedon Road was refused in July 2014 (application reference S/2014/0602/MAO), and an appeal was submitted but subsequently withdrawn. There were several reasons for refusal but one stated that “on the basis of the information submitted the applicant has failed to demonstrate that the development will not have an adverse and severe effect on the local highway network.”, whilst another states that “the proposal fails to provide adequate mitigation for the adverse and potentially severe effects and implications for highway safety…” Nevertheless, this report uses some of the information contained within the Transport Assessment prepared for that scheme.

2.4 If the proposals for the residential development at Furnace Lane are progressed, the Transport Statement that will be prepared as part of the planning application will address the issues/deficiencies raised by NCC as part of the Gladman Transport Assessment.
2.5 Furnace Lane runs between the A5 to the south-west, and the junction with Weedon Road/Bugbrooke Road/Church Street within the centre of Nether Heyford to the north-east. It measures approximately 5.4 metres in width, and is subject to a 30mph speed limit. There are no parking restrictions and some on-street parking occurs.

2.6 To the west of the site, Furnace Lane routes over a humped back bridge with restricted forward visibility. However, a review of the Crashmap database (www.crashmap.co.uk) confirms that there have been no recorded accidents in this location in the last consecutive three year period\(^3\).

2.7 Furnace Lane then routes onwards under a railway bridge with a 9’9” height restriction to the A5/Furnace Lane/Main Street staggered crossroads junction. This stretch of Furnace Lane (to the west of the railway bridge) and the A5 are subject to the national speed limit. There are ghost island right turn lanes on the A5 for both minor arms. Visibility is good in both directions along the A5 from Furnace Lane, although one accident has been recorded in the last consecutive three year period.

2.8 The A5 forms part of the Strategic Road Network managed by the HE. It runs between the M1 Junction 9 to the east, through Dunstable, Bletchley, Milton Keynes and Towcester, across to the M42 and M6 to the west. Furnace Lane is one of two possible routes between the A5 and Nether Heyford. The other route is via Weedon Road/Heyford Lane to the north-west of Nether Heyford. The A5/Heyford Lane junction also includes a ghost island right turn lane.

\(^3\) Crashmap data for the three year period from 2011 to 2013. Data for 2014 will be released in June 2015.
2.9 The Transport Assessment prepared to support the application for 99 dwellings on Weedon Road examined the operation of the A5/Furnace Lane/Main Street junction using traffic flows from a traffic count in 2013 and growthed to 2019 and 2026. The Transport Assessment concluded that the junction operates well below the 85% ratio of flow to capacity and with minimal queuing and delay in all assessment years.

2.10 To the east of the site, Furnace Lane joins Bugbrooke Road, Weedon Road and Church Street at a former crossroads junction, although Furnace Lane and Bugbrooke Road now form the major route with Weedon Road and Church Street on the northern side forming the minor arms. Crashmap confirms that there have been no accidents in this location in the last consecutive three years. The Transport Assessment prepared for the 99 dwellings at Weedon Road provided a qualitative assessment of the operation of the junction, and concluded that it currently operates satisfactorily and would continue to do so in 2019 and 2026.

2.11 To the north of the Church Street, Middle Street runs through Nether Heyford to the A45, which provides a connection to the M1 at Junction 16 to the east and to Daventry to the west.

Opportunities for pedestrian travel

2.12 Guidelines for Providing for Journeys on Foot describe acceptable walking distances for pedestrians without mobility impairment. They suggest that for commuters and school pupils, up to 500 metres is the desirable walking distance, up to 1,000 metres is an acceptable walking distance, and up to 2,000 metres is the preferred maximum walking distance.

2.13 Figure 5 shows the pedestrian catchment area based on a 2,000 metres walking distance from the centre of the site, via footways along the local highway network and via traffic-free public footpaths. As shown, the pedestrian catchment area includes all of Nether Heyford and Upper Stowe, and the associated facilities including the pre-school, primary school, Post Office and shop, butchers, hairdresser, and leisure facilities such as the Olde Sun public house, the village hall and youth club.

2.14 With regards to pedestrian infrastructure, there is a continuous footway on the northern side of Furnace Lane, leading from the humped bridge into Nether Heyford. There is a footway on the southern side of Furnace Lane, extending from directly east of the site into Nether Heyford. There are no formal crossing facilities on Furnace Lane.

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4 Guidelines for Providing for Journeys on Foot, Institution of Highways and Transportation, 2000
Opportunities for cycle travel

2.15 Recent guidance suggests that cyclists are typically prepared to cycle up to 5km for non-leisure journeys, such as those to school or work.

2.16 Figure 6 shows the cycle catchment area based on a 5km distance from the centre of the site. The cycle catchment area includes Nether Heyford, Weedon Bec, Flore and Bugbrooke.

2.17 There are no designated cycle routes in Nether Heyford. However, given the nature of Furnace Lane, cyclists could cycle on the carriageway.
2.18 There are two bus services through Nether Heyford, as indicatively shown in Figure 7. These include:
- service D3 which runs between Northampton and Daventry on an hourly frequency from Monday to Saturday, and two hourly on Sundays.
- service 25 which runs between Northampton and Daventry twice a day from Monday to Friday.

2.19 The nearest bus stops are on Hillside Road, approximately 400 metres walking distance from the site via South View, Rolfe Crescent and Close Road. The bus stops comprise a flag and pole.
Opportunities for train travel

2.20 Northampton railway station is located approximately seven miles to the east of the development site, and has recently been refurbished. The station is served by London Midland’s services between Birmingham New Street and London Euston. In addition, Virgin Trains provide services to Birmingham New Street, Manchester Piccadilly, and Chester, as well as Liverpool Lime Street and Glasgow Central.

2.21 The train station includes 60 secure, sheltered cycle parking, as well as an 813 space car park. Car parking at the station costs £8.50 per day, £33 per week, £124 per month, £260 per quarter, and £875 per year.

Summary

2.22 The site is located on the southern edge of Nether Heyford. It is accessible by all modes of travel, and is therefore well located for residential development.

2.23 There are good connections to the local highway network and Strategic Road Network including the A5, A42 and M1.

2.24 There are good opportunities for pedestrian travel to and from the site. The facilities within Nether Heyford are within acceptable walking distance of the site, and there is good pedestrian infrastructure including footways on the desire lines. However, this could be improved with the provision of a footway on the southern side as part of the development.
2.25 Similarly, given the areas contained within cycling distance, and the nature of the roads through Nether Heyford, there are good opportunities for cycle travel between the site and the local area.

2.26 In addition, there are good opportunities for public transport travel, with an hourly bus service running through the village, and bus stops approximately 400 metres from the site. Northampton train station also provides opportunities for multimodal travel.

3.0 RESIDENTIAL DEVELOPMENT

Development proposals

3.1 The development proposals would comprise 50 to 70 residential dwellings with associated parking. For the purposes of a worst case assessment, this report assumes a development of 70 dwellings.

Car parking

3.2 In accordance with NCC's ‘Northamptonshire Place and Movement Guide’ (November 2008), the proposed development should provide an average of two parking spaces per dwelling.

Access

3.3 Given the potential number of dwellings, the residential development would be served via a single point of access on Furnace Lane.

3.4 As shown in Drawing ADC1229/001, the site access junction includes a 5.5 metres wide carriageway and 10 metre kerb radii. It also includes 2.4x43 metres visibility splays, which is the requirement for a road with a 30mph speed limit.

3.5 Hence the access junction would be designed to the relevant standards and would provide sufficient visibility such that it would be a safe and suitable access for the development.

Internal layout and accessibility

3.6 The internal layout of the development would be designed to ensure that service vehicles can enter, manoeuvre and exit the site in a forward gear. Drawing ADC1229/001 shows that a four axle refuse vehicle can access the site, and appropriate turning heads would be provided within the development.

3.7 In order to encourage pedestrian travel, 2 metres wide footways would be provided on both sides of the site access carriageway, into the site and along the internal road. Away from the main road, footways and shared space environments would be provided in accordance with Manual for Streets.

3.8 A new footway would also be provided on the southern side of Furnace Lane along the site frontage to connect to the existing footway. A pedestrian crossing with dropped kerbs and tactile paving would be provided to facilitate pedestrian movements to and from the footway on the northern side.

3.9 A pedestrian connection would also be made through to South View, to facilitate movements to and from the bus stops on Hillside Road.
3.10 Cyclists would be encouraged to cycle on the carriageways throughout the site and it is not necessary to provide designated cycle lanes.

3.11 With regards to bus travel, residents would be able to make use of the existing bus stops and services on Hillside Road. Depending on land availability, these could be improved to include shelters as part of the development.

4.0 TRIP GENERATION

Trip rates and traffic generation

4.1 The forecast traffic generation was calculated using the ‘privately owned houses’ category of the TRICS 7.2.1 database. All sites located in England, with the exception of Greater London, were selected. Only suburban and edge of town sites were selected. Sites with between 20 and 100 dwellings were selected, and all weekend surveys were deselected. The TRICS outputs are contained in Appendix A, and the 85th percentile trip rates and resultant worst case traffic generation based on 70 dwellings are shown in the table below. It is highlighted that, if ultimately the number of dwellings is lower than 70, the forecast traffic generation will be less than detailed below.

<table>
<thead>
<tr>
<th>TRICS trip rates and traffic generation</th>
<th>arrive</th>
<th>depart</th>
<th>two way</th>
</tr>
</thead>
<tbody>
<tr>
<td>trip rates (per dwelling)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AM peak hour</td>
<td>0.225</td>
<td>0.450</td>
<td>0.675</td>
</tr>
<tr>
<td>PM peak hour</td>
<td>0.478</td>
<td>0.261</td>
<td>0.739</td>
</tr>
<tr>
<td>vehicle trips (70 dwellings)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AM peak hour</td>
<td>16</td>
<td>32</td>
<td>48</td>
</tr>
<tr>
<td>PM peak hour</td>
<td>33</td>
<td>18</td>
<td>51</td>
</tr>
</tbody>
</table>

Modal split and person trip generation

4.2 The proportion of trips by each mode was calculated using the 2011 National Census ‘Method of travel to Work’ data (dataset QS701EW) for the Nether Heyford parish. This is appropriate given that new residents at the development would generate similar travel patterns to existing residents in the area. The parish data is more suitable to use than the ward data, as Nether Heyford is located in The Heyfords and Bugbrooke Ward, which also includes the villages of Upper Heyford and Bugbrooke, and thus does not provide comparable travel patterns.

4.3 The resultant peak hour two-way trip generation of 70 houses, based on the worst case traffic generation in the table at paragraph 4.1, is shown in the table below.

<table>
<thead>
<tr>
<th>on foot</th>
<th>bicycle</th>
<th>bus</th>
<th>train</th>
<th>m/cycle</th>
<th>car driver</th>
<th>passenger</th>
<th>taxi</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.6%</td>
<td>0.7%</td>
<td>2.5%</td>
<td>3.4%</td>
<td>0.1%</td>
<td>79.3%</td>
<td>6.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>AM peak hour</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>48</td>
<td>4</td>
<td>0</td>
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<tr>
<td>PM peak hour</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>51</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

Impact of additional person trips on the local infrastructure

4.4 The proposed residential development, with up to 70 dwellings, will generate up to five pedestrian trips, and four public transport trips in the peak hours.

4.5 Section 2 details the existing accessibility of the site, including a description of the existing pedestrian, cycle and public transport infrastructure. Section 3 details the sustainable travel infrastructure that would be provided as part of the development, including new footways throughout the site and along Furnace Lane, a pedestrian crossing on Furnace Lane, pedestrian connection to South View and improved bus stops on Hillside Road. It is therefore concluded
that the existing and proposed infrastructure would have the capacity to accommodate the additional trips, and no further infrastructure would be required as part of the development proposals.

5.0 VEHICLE TRIP DISTRIBUTION AND ASSIGNMENT, AND HIGHWAY IMPACT

Distribution and assignment

5.1 In order to determine the likely distribution pattern of the residential development traffic shown in the table at paragraph 4.1, reference was made to the observed passing flows on Furnace Lane. These are taken from the 2013 base flows included in Figures 3 and 4 of the Transport Assessment prepared in support of the proposed 99 dwellings on Weedon Road.

5.2 The following traffic flows were observed on Furnace Lane at the A5/Furnace Lane T-junction:

<table>
<thead>
<tr>
<th>Time</th>
<th>Northbound</th>
<th>Southbound</th>
<th>Two Way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM peak hour</td>
<td>60</td>
<td>89</td>
<td>149</td>
</tr>
<tr>
<td>PM peak hour</td>
<td>68</td>
<td>65</td>
<td>133</td>
</tr>
</tbody>
</table>

5.3 Therefore, approximately 60% of traffic travels southbound in the morning peak hour whilst 40% travels northbound, but the flows are approximately 50/50 in the evening peak hour. Therefore, assuming that traffic splits equally at the development, the following distribution pattern would occur at the site access:

5.4 Distributing the development traffic flows in the table at paragraph 4.1 gives the following traffic assignment at the site access junction:
Highway impact

5.5 Guidance on Transport Assessment suggests 30 or more two-way traffic movements in a peak hour as being an appropriate threshold for beginning to consider whether a development will have an adverse impact on the local highway network. That is because traffic flows less than this threshold are unlikely to materially increase the existing traffic flows.

5.6 As shown above, the residential development will result in an increase of less than 30 two-way trips to the north-east and south-west of the site respectively. Through Nether Heyford, there would be an increase of 21 and 19 two-way trips in the morning and evening peak hours respectively, or one vehicle every three minutes (based on a worst case assessment of 70 dwellings at the site). Therefore, the impact within Nether Heyford will be minimal.

5.7 As part of any subsequent planning application for the site, a Transport Statement will need to be prepared. NCC may request that this examines the impact of the development’s traffic at the junctions on Weedon Road within Nether Heyford (for example the Furnace Lane/Weedon Road/Church Street junction). However, given the minimal increase in traffic as a result of the development, no significant highway works should be required and this would not be a barrier to the development of the site.

5.8 To the west of the site access, the increase will be 24 two-way trips in the morning peak hour and 26 two-way trips in the evening peak hour (based on a worst case assessment of 70 dwellings at the site). This increase in unlikely to have any impact on the operation or safety of the A5/Furnace Lane junction, which has a ghost island right turn lane and good visibility.
5.9 The HE may request that any Transport Statement prepared as part of a subsequent planning application examines the impact of the development’s traffic at the A5/Furnace Lane junction, because they would require any detrimental impact to be addressed. However, given the size of the junction, the existing traffic flows, and the minimal increase in traffic as a result of the development, no significant highway works should be required and this would not be a barrier to the development of the site.

6.0 SUMMARY AND CONCLUSIONS

6.1 Persimmon Homes Midlands commissioned ADC Infrastructure Ltd to provide transport and highways advice in support of the potential residential development of up to 70 dwellings on land off Furnace Lane, in Nether Heyford, Northamptonshire. The aim is for the site to be allocated in the Local Plan.

6.2 This Transport Appraisal demonstrates that the site is accessible by all modes of transport and is therefore well located for residential development.

6.3 The facilities within Nether Heyford are within acceptable walking distance of the site, and given the existing pedestrian infrastructure, there are good opportunities for pedestrian travel. Similarly, given the areas contained within cycling distance and the nature of the local highway network, there are good opportunities for cycle travel between the development and the local area. There are also good opportunities for public transport travel, with an hourly bus service through the village and opportunities for multi-modal train travel.

6.4 The residential development would be accessed via a new simple T-junction on Furnace Lane, designed in accordance with the standards and to include 2.4x43 metres visibility splays. Hence, safe and suitable access can be achieved.

6.5 Sustainable travel infrastructure should be provided, including new footways through the development and on the southern side of Furnace Lane along the site frontage, a new pedestrian crossing on Furnace Lane, pedestrian connections to South View and improved bus stops on Hillside Road.

6.6 The development could generate 51 two-way vehicle trips in the evening peak hour. This would split equally northbound and southbound, and hence there would not be a material traffic increase in Nether Heyford to the north or at the A5 junction to the south. This would need to be examined more thoroughly in any subsequent Transport Statement prepared to support a planning application, and with discussion and agreement with NCC and the HE.

6.7 Overall, therefore, the development of up to 70 dwellings at the site would accord with the aims of the NPPF, and it would be unreasonable to prevent the allocation of the development on transport grounds.
APPENDIX A

TRICS OUTPUTS
TRI P RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL
Category: A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

02 SOUTH EAST
   ES EAST SUSSEX 1 days
   SC SURREY 1 days

03 SOUTH WEST
   CW CORNWALL 1 days
   DC DORSET 2 days

04 EAST ANGLIA
   NF NORFOLK 2 days
   SF SUFFOLK 1 days

05 EAST MIDLANDS
   LN LINCOLNSHIRE 1 days

06 WEST MIDLANDS
   SH SHROPSHIRE 1 days
   WM WEST MIDLANDS 1 days

07 YORKSHIRE & NORTH LINCOLNSHIRE
   NY NORTH YORKSHIRE 5 days
   SY SOUTH YORKSHIRE 1 days

08 NORTH WEST
   GM GREATER MANCHESTER 1 days

09 NORTH
   CB CUMBRIA 2 days

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

Filtering Stage 2 selection:

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

Parameter: Number of dwellings
Actual Range: 21 to 98 (units: )
Range Selected by User: 20 to 100 (units: )

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/07 to 24/03/14

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

Selected survey days:
Monday 5 days
Tuesday 5 days
Wednesday 5 days
Thursday 3 days
Friday 2 days

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

Selected survey types:
Manual count 20 days
Directional ATC Count 0 days

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

Selected Locations:
Suburban Area (PPS6 Out of Centre) 9
Edge of Town 11

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

Filtering Stage 3 selection:

**Use Class:**

<table>
<thead>
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<th>Use Class</th>
<th>Days</th>
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</thead>
<tbody>
<tr>
<td>C1</td>
<td>1</td>
</tr>
<tr>
<td>C3</td>
<td>19</td>
</tr>
</tbody>
</table>

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

**Population within 1 mile:**

<table>
<thead>
<tr>
<th>Population Range</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,001 to 5,000</td>
<td>4</td>
</tr>
<tr>
<td>5,001 to 10,000</td>
<td>6</td>
</tr>
<tr>
<td>10,001 to 15,000</td>
<td>3</td>
</tr>
<tr>
<td>15,001 to 20,000</td>
<td>4</td>
</tr>
<tr>
<td>20,001 to 25,000</td>
<td>1</td>
</tr>
<tr>
<td>25,001 to 50,000</td>
<td>2</td>
</tr>
</tbody>
</table>

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

**Population within 5 miles:**

<table>
<thead>
<tr>
<th>Population Range</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,001 to 25,000</td>
<td>2</td>
</tr>
<tr>
<td>25,001 to 50,000</td>
<td>3</td>
</tr>
<tr>
<td>50,001 to 75,000</td>
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</tr>
<tr>
<td>75,001 to 100,000</td>
<td>5</td>
</tr>
<tr>
<td>100,001 to 125,000</td>
<td>1</td>
</tr>
<tr>
<td>125,001 to 250,000</td>
<td>3</td>
</tr>
<tr>
<td>250,001 to 500,000</td>
<td>4</td>
</tr>
<tr>
<td>500,001 or More</td>
<td>1</td>
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</tbody>
</table>

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

**Car ownership within 5 miles:**

<table>
<thead>
<tr>
<th>Car Ownership Range</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.6 to 1.0</td>
<td>6</td>
</tr>
<tr>
<td>1.1 to 1.5</td>
<td>14</td>
</tr>
</tbody>
</table>

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

**Travel Plan:**

<table>
<thead>
<tr>
<th>Travel Plan</th>
<th>Days</th>
</tr>
</thead>
<tbody>
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<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
</tr>
</tbody>
</table>

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.
## Rank Order for Land Use 03 - Residential/A - Houses Privately Owned

### Vehicle

**Ranking Type:** TOTALS  
**Time Range:** 08:00-09:00

<table>
<thead>
<tr>
<th>15th Percentile</th>
<th>85th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 17 LN-03-A-03 Tot: 0.409</td>
<td>No. 4 CB-03-A-03 Tot: 0.675</td>
</tr>
</tbody>
</table>

### Median Values

- **Arrivals:** 0.084
- **Departures:** 0.398
- **Totals:** 0.482

### Mean Values

- **Arrivals:** 0.128
- **Departures:** 0.387
- **Totals:** 0.515

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<th>Date</th>
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<td>Mon</td>
<td>24/03/14</td>
<td>0.179</td>
<td>0.143</td>
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</tbody>
</table>

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself). The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m² GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.
TRI P RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

02 SOUTH EAST
  ES EAST SUSSEX 1 days
  SC SURREY 1 days

03 SOUTH WEST
  CW CORNWALL 1 days
  DC DORSET 2 days

04 EAST ANGLIA
  NF NORFOLK 2 days
  SF SUFFOLK 1 days

05 EAST MIDLANDS
  LN LINCOLNSHIRE 1 days

06 WEST MIDLANDS
  SH SHROPSHIRE 1 days
  WM WEST MIDLANDS 1 days

07 YORKSHIRE & NORTH LINCOLNSHIRE
  NY NORTH YORKSHIRE 5 days
  SY SOUTH YORKSHIRE 1 days

08 NORTH WEST
  GM GREATER MANCHESTER 1 days

09 NORTH
  CB CUMBRIA 2 days

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

Filtering Stage 2 selection:

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

Parameter: Number of dwellings
Actual Range: 21 to 98 (units: )
Range Selected by User: 20 to 100 (units: )

Public Transport Provision:
Selection by: Include all surveys
Date Range: 01/01/07 to 24/03/14

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

Selected survey days:
Monday 5 days
Tuesday 5 days
Wednesday 5 days
Thursday 3 days
Friday 2 days

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

Selected survey types:
Manual count 20 days
Directional ATC Count 0 days

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

Selected Locations:
Suburban Area (PPS6 Out of Centre) 9
Edge of Town 11

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

Filtering Stage 3 selection:

**Use Class:**
- C1: 1 days
- C3: 19 days

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

**Population within 1 mile:**
- 1,001 to 5,000: 4 days
- 5,001 to 10,000: 6 days
- 10,001 to 15,000: 3 days
- 15,001 to 20,000: 4 days
- 20,001 to 25,000: 1 days
- 25,001 to 50,000: 2 days

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

**Population within 5 miles:**
- 5,001 to 25,000: 2 days
- 25,001 to 50,000: 3 days
- 50,001 to 75,000: 1 days
- 75,001 to 100,000: 5 days
- 100,001 to 125,000: 1 days
- 125,001 to 250,000: 3 days
- 250,001 to 500,000: 4 days
- 500,001 or More: 1 days

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

**Car ownership within 5 miles:**
- 0.6 to 1.0: 6 days
- 1.1 to 1.5: 14 days

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

**Travel Plan:**
- Yes: 1 days
- No: 19 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.
### RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

#### VEHICLES

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<th>Description</th>
<th>Town/Qty</th>
<th>Area</th>
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<th>Day</th>
<th>Date</th>
<th>Trip Rate (Sorted by Totals)</th>
<th>Park Spaces Per Dwelling</th>
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This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

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