Station Road, Hubbert's Bridge, Boston


Transport Statement

February, 2024
Articulated Vehicle Update

Turvey Gonsultancy Limited

# Station Road, Hubbert's Bridge, Boston <br> Transport Statement 

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# Station Road, Hubbert's Bridge, Boston <br> Transport Statement 

## Introduction

This Transport Statement (TS) is in support of proposed alterations to existing commercial premises to form individual Industrial Units and Office Space at the former Kings Road Tyre Depot, Hubbert's Bridge, Boston and change of use to include B1, B2 and B8 land uses.

Figure: Site Location


The former site and buildings amount to a gross area of $3,151 \mathrm{~m}^{2}$ and will be unchanged by the current proposals.

The site is no longer in use but a typical slow fit garage operation of the same characteristics is detailed in TRICS as yielding around two hundred trips per day and some 24 trips in the busiest weekday periods.

Around four HGV movements would be expected per day and with the site traffic exhibiting the following distribution of arrivals/departures through the day.

The TRICS data is at Annex 3.

Figure: Trips at Tyre Distribution/Fitting Facilities

| Tyre Fitting |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scale | 1,704 | $\mathrm{m}^{2} \mathrm{gfa}$ | facind |  |  |  |
|  |  | Trip Rate |  |  | TRIPS |  |
| Vehicles | Inbound | Outbound | Total | Inbound | Outbound | Total |
| Morning Peak Hour | 0.924 | 0.158 | 1.082 | 16 | 3 | 18 |
| Evening Peak Hour | 0.555 | 0.871 | 1.426 | 9 | 15 | 24 |
| Daily | 6.130 | 6.088 | 12.218 | 104 | 104 | 208 |
| Mode |  |  |  |  |  |  |
| HGV's | 0.135 | 0.118 | 0.253 | 2 | 2 | 4 |



## Proposed Development

The proposed building footprint for B1/B2/B* Industrial Unit uses, has a gross floor area of $1,704 \mathrm{~m}^{2}$ and is forecast to produce up to 15 trips in the busiest weekday periods and just over one hundred trips in total per day.

These forecasts are derived from the national TRICS trip rate database (v7.6.3 (2019b)) and compare similarly with the previous use with around four HGV trips per day expected and focused on rigid wheelbase vehicles and refuse carts.

The Site Plans are at Annex 1 and the TRICS information is at Annex 3.

Table: Proposed Trips

| Industrial Units |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scale | 1,704 | $\mathrm{m}^{2} \mathrm{gfa}$ | facind |  |  |  |
|  | Trip Rate |  |  |  | TRIPS |  |
| Vehicles | Inbound | Outbound | Total | Inbound | Outbound | Total |
| Morning Peak Hour | 0.853 | 0.050 | 0.903 | 15 | 1 | 15 |
| Evening Peak Hour | 0.050 | 0.669 | 0.719 | 1 | 11 | 12 |
| Daily | 3.211 | 3.077 | 6.288 | 55 | 52 | 107 |
| Mode |  |  |  |  |  |  |
| HGV's | 0.135 | 0.118 | 0.253 | 2 | 2 | 4 |



The comparison of former and proposed use shows some variation but in general less daily traffic and with the same volume of heavy traffic.

Figure: Daily Traffic


## Site Access

In late October 2019 the Highway Authority responded to Planning Application B/19/0428 to request information in the following manner,
........... for the Highway Authority to fully consider and assess the potential cumulative impact of this proposal upon the existing highway network, we will require the applicant to submit a Transport Statement, specifically outlining the proposed hours of operation, expected vehicle types and numbers of vehicle trips generated during a typical working day, on a weekly basis for each unit and consideration of turning areas within the site to allow calling vehicles to enter and leave in a forward gear, in the interests of highway safety. Additionally, we would also ask the applicant to submit further details of the existing access to include dimensions of width, radii and visibility splays in accordance with Manual for Streets and any gates to be set back from the existing highway

In response, the information requested relates to three aspects.

First, the amount of traffic.

It is forecast that the Industrial units would on average generate just over 100 trips in a weekday and have a site operation, similar to the previous uses between 7 am and 7 pm daily.

The evidence suggests that the site may also operate up to lunch time on a Saturday as well, leading to around 600 trips per week.

In that time the site would be serviced by just over twenty rigid wheelbase heavy goods vehicles, including refuse vehicles.

Secondly, access geometry.

Station Road is 7.3 m wide at the access which is some 13.1 m wide and set back 2.8 m from the carriageway edge on the north side of Station Road.

The access road narrows to 5.7 m to the west and south of the main buildings.

Figure: Site Access


The site access lies within a 40 mph speed limit and is around 100 m south of the Hubbert's bridge railway level crossing barrier.

In accordance with the Manual for Streets (MfS) requirements the required visibility is calculated by,

Visibility $=$ bonnet length $+\left(\right.$ speed $^{*}$ driver perception reaction time $)+($ speed 2$) /\left(2^{*}\left(\right.\right.$ deceleration $+0.1^{*} \%$ gradient $)$

This equates to a visibility requirement at the access of 2.4 m back from the carriageway by 60 m for cars and 66 m for heavy vehicles.

Visibility splays in excess of 70 m is possible both north and south of the access when measured to the edge of the nearside carriageway.

The visibility splays and access geometry are shown on the plans at Annex 2.

Finally, vehicle tracking.

The ability of heavy vehicles to access the site and manouvre within it to enter and egress the site in forward gear is also shown at Annex 2 for Refuse Vehicles and also large Articulated vehicles.

## Summary

The proposals for the site development to incorporate B1/B2/B8 Industrial Units, have been shown to generate similar levels of traffic as associated with its former use, amounting to around 100 trips daily and 600 trips per week with just over twenty large vehicles in the week.

Some 10 car parking spaces are proposed for a 0.32 Ha site that will be expected to accommodate 15 employees.

The Industrial Units are expected to be operational between 7am and 7pm daily, Monday to Friday and on Saturday mornings.

The site can accommodate large vehicles of fixed wheelbase of 11.2 m length, entering and leaving in forward gear and within a visibility envelope of at least 2.4 m by 70 m in accordance with the requirements of the MfS.

This Transport Statement acknowledges that the Parish Council has not raised an objection to the proposals and that the scheme plans detail the site and access information requested by the Highway Authority.

## Scheme Plans

Neil Dowlman Architecture (2019)

Location
Existing Layout
Proposed Layout
Landscape




# Access Geometry 

Site Access Geometry and Visibility Splays Large Refuse Vehicle Swept Path Plots

Articulated Vehicle Addendum





Annex 3

Trip Rates

TRICS v7.6.3
Industrial Units
Fast Fit Vehicle Services

## TRIP RATE CALCULATI ON SELECTION PARAMETERS:

| Land Use Category VEHI CLES |  | : 02 - EMPLOYMENT |  |
| :---: | :---: | :---: | :---: |
|  |  | : C-INDUSTRIAL UNIT |  |
|  |  |  |  |
| Selected regions and areas: |  |  |  |
| 02 | SOUTH | H EAST |  |
|  | HC | HAMPSHIRE | 1 days |
| 04 | EAST | ANGLIA |  |
|  | SF | SUFFOLK | 1 days |
| 06 | WEST | MI DLANDS |  |
|  | HE | HEREFORDSHIRE | 1 days |

This section displays the number of survey days per TRICS ${ }^{\circledR}$ sub-region in the selected set

## Secondary Filtering selection:

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

| Parameter: | Gross floor area |
| :--- | :--- |
| Actual Range: | 1100 to 3000 (units: sqm) |
| Range Selected by User: | 150 to 5000 (units: sqm) |
| Parking Spaces Range: | All Surveys Included |

Public Transport Provision:
Selection by:
Include all surveys
Date Range: $\quad 01 / 01 / 11$ to $06 / 11 / 18$
This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

| Tuesday | 1 days |
| :--- | :--- |
| Thursday | 1 days |
| Friday | 1 days |

This data displays the number of selected surveys by day of the week.
Selected survey types:
Manual count $\quad 3$ days
Directional ATC Count 0 days
This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

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

Selected Location Sub Categories:
Industrial Zone 2
Commercial Zone 1
This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

## Secondary Filtering selection:



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®.

## Secondary Filtering selection (Cont.):

Population within 1 mile:

| 1,001 to 5,000 | 1 days |
| :--- | :--- |
| 10,001 to 15,000 | 1 days |
| 20,001 to 25,000 | 1 days |

This data displays the number of selected surveys within stated 1-mile radii of population.
Population within 5 miles:

| 50,001 to 75,000 | 1 days |
| :--- | :--- |
| 75,001 to 100,000 | 1 days |
| 100,001 to 125,000 | 1 days |

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

## 1.1 to $1.5 \quad 3$ days

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

## Travel Plan:

No 3 days
This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Present
3 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 HC-02-C-01 ENGINEERING COMPANY
JAYS CLOSE
BASINGSTOKE
Edge of Town
Industrial Zone
Total Gross floor area: 3000 sqm Survey date: THURSDAY 16/06/16
2 HE-02-C-02
THERMAL PROCESSI NG
COLLEGE ROAD
HEREFORD
BURCOTT
Edge of Town
Commercial Zone
Total Gross floor area: 1880 sqm
Survey date: TUESDAY 22/10/13
3 SF-02-C-01
JOINERY
ANSON ROAD
IPSWICH
MARTLESHAM HEATH
Edge of Town
Industrial Zone
Total Gross floor area: $\begin{array}{lr}\text { Gross floor area: } & 1100 \text { sqm } \\ \text { Survey date: FRIDAY } & 12 / 07 / 13\end{array}$

## HAMPSHI RE

Survey Type: MANUAL HEREFORDSHIRE

Survey Type: MANUAL

## SUFFOLK

Survey Type: MANUAL

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

TRIP RATE for Land Use 02-EMPLOYMENT/C - INDUSTRIAL UNIT
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period


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

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

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## Parameter summary

Trip rate parameter range selected:
1100-3000 (units: sqm)
Survey date date range: 01/01/11-06/11/18
Number of weekdays (Monday-Friday):
3
Number of Saturdays:
0
Number of Sundays:
Surveys automatically removed from selection:
Surveys manually removed from selection:
This section displays a quick summary of some of the data filtering selections made by the TRICS ${ }^{8}$ user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

## TMME

00:00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04:00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00

RATE \% TRIPRATEGRAPH-TOTALS O2-BMPLOMMENT C-INDUSTRIALUNIT VEHICLES
a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 02-EMPLOYMENT/C - INDUSTRIAL UNIT

## OGVS

Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period


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

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## TMME

00:00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04:00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00

RATE \% TRIPRATE GRAPH - TOTALS O2-GMPLOMMENT C-INDUSTRIALUNT OGVS


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

TRIP RATE for Land Use 02-EMPLOYMENT/C - INDUSTRIAL UNIT

## CYCLISTS

Calculation factor: $\mathbf{1 0 0}$ sqm
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 3 | 1993 | 0.151 | 3 | 1993 | 0.000 | 3 | 1993 | 0.151 |
| 08:00-09:00 | 3 | 1993 | 0.017 | 3 | 1993 | 0.000 | 3 | 1993 | 0.017 |
| 09:00-10:00 | 3 | 1993 | 0.017 | 3 | 1993 | 0.000 | 3 | 1993 | 0.017 |
| 10:00-11:00 | 3 | 1993 | 0.000 | 3 | 1993 | 0.000 | 3 | 1993 | 0.000 |
| 11:00-12:00 | 3 | 1993 | 0.000 | 3 | 1993 | 0.000 | 3 | 1993 | 0.000 |
| 12:00-13:00 | 3 | 1993 | 0.000 | 3 | 1993 | 0.017 | 3 | 1993 | 0.017 |
| 13:00-14:00 | 3 | 1993 | 0.017 | 3 | 1993 | 0.017 | 3 | 1993 | 0.034 |
| 14:00-15:00 | 3 | 1993 | 0.000 | 3 | 1993 | 0.050 | 3 | 1993 | 0.050 |
| 15:00-16:00 | 3 | 1993 | 0.000 | 3 | 1993 | 0.017 | 3 | 1993 | 0.017 |
| 16:00-17:00 | 3 | 1993 | 0.000 | 3 | 1993 | 0.100 | 3 | 1993 | 0.100 |
| 17:00-18:00 | 3 | 1993 | 0.000 | 3 | 1993 | 0.017 | 3 | 1993 | 0.017 |
| 18:00-19:00 | 3 | 1993 | 0.000 | 3 | 1993 | 0.017 | 3 | 1993 | 0.017 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 0.202 |  |  | 0.235 |  |  | 0.437 |

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

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## TMME

00: 00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04:00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00

RATE \% TRIPRATEGRAPH-TOTALS O2-EMPLOMMENT C-INDUSTRIALUNT CYCLSTS


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

TRIP RATE for Land Use 02-EMPLOYMENT/C - INDUSTRIAL UNIT
CARS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period


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

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## TMME

00:00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04:00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00

RATE \% TRIPRATE GRAPH - TOTALSFOR SITE: HC-02-C-01 CARS


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

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period


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

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## TMME

00:00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04:00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00

RATE \% TRIPRATE GRAPH-TOTALS O2-GMPLOMMENT C-INDUSTRIALUNT LGVS


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

TRIP RATE for Land Use 02-EMPLOYMENT/C - INDUSTRIAL UNIT
MOTOR CYCLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period


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

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## TMME

00:00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04:00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00

RATE \% TRIPRATEGRAPH-TOTALS O2-EMPLOMMENT C-INDUSTRIAL UNIT MOTOR CYCLES


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

## TRIP RATE CALCULATI ON SELECTI ON PARAMETERS:

```
Land Use : 15-VEHICLE SERVICES
Category : B - MOTORIST CENTRE (FAST FIT)
VEHICLES
```

Selected regions and areas:
03 SOUTH WEST
DV DEVON
1 days
05 EAST MI DLANDS
NR NORTHAMPTONSHIRE 1 days
07 YORKSHIRE \& NORTH LI NCOLNSHIRE
$\begin{array}{lll}\text { NO } & \text { NORTH LINCOLNSHIRE } & 1 \text { days } \\ \text { NY } & \text { NORTH YORKSHIRE } & 2 \text { days }\end{array}$
$\begin{array}{lll}\text { NO NORTH LINCOLNSHIRE } & 1 \text { days } \\ \text { NY } & 2 \text { days }\end{array}$

This section displays the number of survey days per TRICS $\circledR^{\circledR}$ sub-region in the selected set

## Secondary Filtering selection:

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

| Parameter: | Gross floor area |
| :--- | :--- |
| Actual Range: | 336 to 1878 (units: sqm) |
| Range Selected by User: | 150 to 1878 (units: sqm) |
| Parking Spaces Range: | All Surveys Included |

Public Transport Provision:
Selection by: Include all surveys
Date Range: $\quad 01 / 01 / 11$ to $14 / 11 / 15$
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 | 1 days |
| :--- | :--- |
| Wednesday | 2 days |
| Thursday | 2 days |

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

| Selected survey types: |  |
| :--- | :--- |
| Manual count | 5 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:
Edge of Town Centre 2
Suburban Area (PPS6 Out of Centre) 2
Neighbourhood Centre (PPS6 Local Centre) 1
This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

## Selected Location Sub Categories:

Industrial Zone 1
Residential Zone 3
Built-Up Zone 1
This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

## Secondary Filtering selection:

Use Class:
Not Known
5 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 ${ }^{\circledR}$.

Population within 1 mile:

| 5,001 to 10,000 | 2 days |
| :--- | :--- |
| 10,001 to 15,000 | 1 days |
| 20,001 to 25,000 | 1 days |
| 25,001 to 50,000 | 1 days |

This data displays the number of selected surveys within stated 1-mile radii of population.
Population within 5 miles:

|  | 1 days |
| :--- | :--- |
| 5,001 to 25,000 | 1 days |
| 25,001 to 50,000 | 2 days |
| 75,001 to 100,000 | 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 | 1 days |
| 1.1 to 1.5 | 4 days |

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

## Travel Plan:

No 5 days
This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:
No PTAL Present
5 days
This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters
1 DV-15-B-02 KWIK FIT
MARSH BARTON ROAD
EXETER
MARSH BARTON
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 1878 sqm
Survey date: THURSDAY 28/11/13
2 NO-15-B-01 KWIK FIT 28/11/13

BRUMBY WOOD LANE
SCUNTHORPE
Edge of Town Centre
Residential Zone
Total Gross floor area: $\quad 850$ sqm
Survey date: THURSDAY 20/12/12
3 NR-15-B-01
NATI ONAL TYRES
OXFORD STREET
WELLINGBOROUGH
Neighbourhood Centre (PPS6 Local Centre)
Built-Up Zone
Total Gross floor area:
336 sqm
26/09/12
Survey Type: MANUAL
4 NY-15-B-04 KWIK FIT
LONG STREET
THIRSK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area:
363 sqm
Survey date: MONDAY 17/10/11
5 NY-15-B-05 KWIK FIT
LOW SKELLGATE
RIPON
Edge of Town Centre
Residential Zone
Total Gross floor area:
360 sqm Survey date: WEDNESDAY 25/09/13

## DEVON

28/11/13
Survey Type: MANUAL NORTH LI NCOLNSHI RE

Survey Type: MANUAL NORTHAMPTONSHIRE NORTH YORKSHIRE

Survey Type: MANUAL NORTH YORKSHIRE

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

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)
VEHI CLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

|  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Range | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 4 | 856 | 0.321 | 4 | 856 | 0.029 | 4 | 856 | 0.350 |
| 08:00-09:00 | 5 | 757 | 0.924 | 5 | 757 | 0.158 | 5 | 757 | 1.082 |
| 09:00-10:00 | 5 | 757 | 0.739 | 5 | 757 | 0.581 | 5 | 757 | 1.320 |
| 10:00-11:00 | 5 | 757 | 0.607 | 5 | 757 | 0.555 | 5 | 757 | 1.162 |
| 11:00-12:00 | 5 | 757 | 0.713 | 5 | 757 | 0.528 | 5 | 757 | 1.241 |
| 12:00-13:00 | 5 | 757 | 0.422 | 5 | 757 | 0.607 | 5 | 757 | 1.029 |
| 13:00-14:00 | 5 | 757 | 0.528 | 5 | 757 | 0.660 | 5 | 757 | 1.188 |
| 14:00-15:00 | 5 | 757 | 0.502 | 5 | 757 | 0.634 | 5 | 757 | 1.136 |
| 15:00-16:00 | 5 | 757 | 0.581 | 5 | 757 | 0.607 | 5 | 757 | 1.188 |
| 16:00-17:00 | 5 | 757 | 0.555 | 5 | 757 | 0.871 | 5 | 757 | 1.426 |
| 17:00-18:00 | 5 | 757 | 0.238 | 5 | 757 | 0.449 | 5 | 757 | 0.687 |
| 18:00-19:00 | 4 | 856 | 0.000 | 4 | 856 | 0.409 | 4 | 856 | 0.409 |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |
| Total Rates: |  |  | 6.130 |  |  | 6.088 |  |  | 12.218 |

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

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

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## Parameter summary

Trip rate parameter range selected: Survey date date range:
Number of weekdays (Monday-Friday):
Number of Saturdays:
Number of Sundays:
Surveys automatically removed from selection:
Surveys manually removed from selection:

336-1878 (units: sqm)
01/01/11-14/11/15
5
0
0
0
0
0

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

## TME

00:00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04: 00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00

RATE \% TRIPRATE GRAPH - TOTALS 15 - VEHCLE SERVICES B - MOTORIST CENTRE (FASTFIT) VEMCLES


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

TRIP RATE for Land Use 15 - VEHICLE SERVICES/B - MOTORIST CENTRE (FAST FIT)

## OGVS

Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period


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TIME
00:00-01:00 01:00-02:00 02:00-03:00 03:00-04:00 04:00-05:00 05:00-06:00 06:00-07:00 07:00-08:00 08:00-09:00 09:00-10:00 10:00-11:00 11:00-12:00 12:00-13:00 13:00-14:00 14:00-15:00 15:00-16:00 16:00-17:00 17:00-18:00 18:00-19:00 19:00-20:00 20:00-21:00 21:00-22:00 22:00-23:00 23:00-24:00

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