

DATE: 27 April 2023 **CONFIDENTIALITY:** Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

WWHAR - A10 HEADROOM CAPACITY ANALYSIS

This technical note has been produced by WSP on behalf of Norfolk County Council in response to the Local Plan Inspector's comments on the Examination in Public for the Kings Lynn and West Norfolk Borough Council (KLWNBC) Local Plan 2022. It provides a potential methodology that could be used for determining the available residual housing capacity in the A10 corridor at West Winch using a 'Headroom' based approach. This is required to assist with providing an evidence base to support the assumptions on dependent development trigger points for additional transport capacity enhancements by developers as part of the west Winch Housing Access Road.

Example of A10 Headroom Approach at Waterbeach New Town East

The proposed approach is based on a similar methodology to that was used by WSP in relation to Waterbeach New Town East Transport Assessment Addendum work (South Cambridgeshire outline planning application reference S/2075/18/OL). The proposed development of 4500 dwellings at Waterbeach was approved by planning committee in January 2021.

The basic principle involves identifying a trip budget for additional development capacity that could be sustainably tolerated on the A10 without causing a severe impact. Beyond this threshold, additional strategic transport capacity intervention is required.

Analysis of Headroom Capacity at West Winch

This approach requires the existing capacity of the A10 to be verified. Design guidance on theoretical link capacity per lane per hour from the DMRB Volume 5 Section 1 Part 3b TA 79/99 - Traffic capacity of urban roads (including Amendment No.1 dated May 1999) for the assessment and preparation of road schemes has been used to determine the potential link capacity of the A10.

Applying this guidance to the A10 at West Winch, the A10 could be considered to be within the UAP2 or UAP3 category based on the details in Table 1 of TA79/99 (an extract of Table 1 is provided in Appendix A) as it has a speed limit of 40mph through West Winch with some frontage access, and more than 2 side roads per km. There are bus stops at the kerbside and occasional at grade pedestrian crossings. The standard of road improves towards the Hardwick Interchange. Therefore UAP2 has been used for the northern section (north of Willow Drive) and an average of UAP2 and UAP3 for the section between Rectory Road and Chequers Lane.

Table 2 of TA79/99 (extract included in Appendix B) sets out capacities of urban roads in terms of one way flow per lane per hour. The typical road width varies from about 6m-7m along its length through West Winch, with a minimum width of about 6.1m at the pedestrian crossing outside St Mary's church, widening to 6.75m further south.



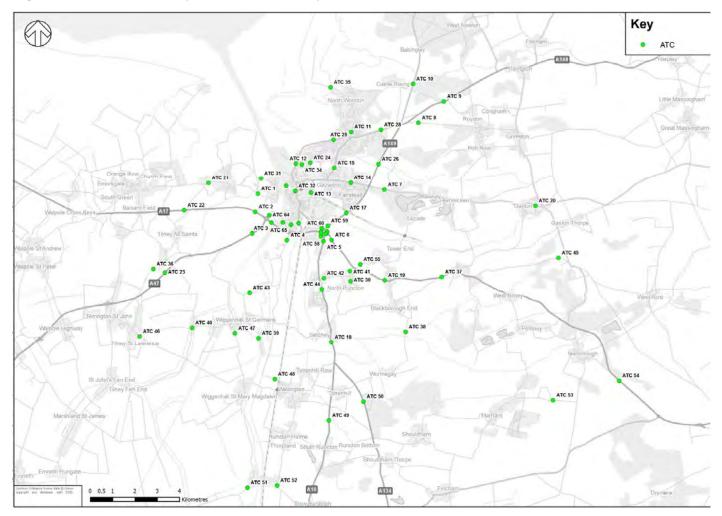
DATE: 27 April 2023 CONFIDENTIALITY: Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

Traffic surveys were carried out in October 2022 at several locations along the A10 to inform the updated traffic modelling for the Outline Business Case. The survey locations are shown below, with ATCs 5 and 44 being most relevant to West Winch as these fall within the section of the A10 that would potentially be alleviated by the WWHAR and in close proximity to where the housing is proposed as part of the West Winch masterplan.

Figure 1 Observed Survey Data - ATC survey locations October 2022



ATC5 was located just north of Willow Drive on A10 close to the Hardwick interchange. The A10 is approximately 7m wide in this location. Taking an average of the capacity for 7.3m and 6.75m widths for the UAP2 road standard, gives a theoretical capacity of 1365 vehicles per lane per hour in this location.

ATC44 was located on A10 at West Winch between Rectory Road and Chequers Lane. The width of the A10 carriageway is approximately 6.75m wide measured at a point equidistant between the two roads. Based on the dimension in Table 2 of TA 79/99 for a 6.75m width of a UAP2 and UAP3 average road, the capacity of a single lane per hour should be about 1185 vehicles per lane per hour.



DATE: 27 April 2023 CONFIDENTIALITY: Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

At ATC5 the maximum hourly flow in each direction was 1244 northbound in the AM peak hour (7:30-8:30am on Tuesday 11 October 2022) and 1223 southbound in the PM peak hour (16:30-17:30 on Wed 19 October 2022).

At ATC44 the maximum observed hourly flows in October 2022 were 1074 vehicles in the northbound direction in the AM peak (7.15am-8.15am on Tuesday 11 October 2022) and 1139 vehicles southbound in the PM peak (16:45-17:45 also on Tuesday 11 October 2022).

Assuming a very modest 2% allowance for general background traffic growth, a 98% threshold has been taken as the maximum peak capacity allocation available with an initial phase of housing at West Winch that would be tolerable prior to strategic intervention. Looking back at census data on population growth locally within Kings Lynn, this was about 4.6% over the 10 years between 2011 and 2021 census (see below). This suggests that about 2.3% natural growth could occur in the next 5 years if this trend was to continue, which is broadly aligned with the 2% proposed.

Taking the observed traffic volumes and subtracting them from the theoretical link capacity at the ATC locations measured, gives a residual capacity as shown below:

Table 1 – A10 Residual Capacity Based on UAP2 Thresholds in

Location	UAP2	98%	Observed	Residual
	Capacity	Threshold		Capacity
ATC5 AM Max	1365	1338	1244	94
ATC5 PM Max	1365	1338	1223	115
ATC44 AM Max	1185	1161	1074	87
ATC44 PM Max	1185	1161	1139	22

The minimum difference between observed flows and the theoretical link capacity flow is 94 vehicles for the AM peak hour in the northbound direction at ATC5 and 22 vehicles in the PM peak hour southbound direction at ATC44. This defines the available headroom capacity for additional development at the northern edge of the A10 corridor.

Previous discussions relating to the KLWNBC Local Plan had been based on an assumed housing capacity of about 300-350 dwellings. The trip rates for residential development from the 2017 Hopkins Home TA for the Hardwick Green development at West Winch have been taken from Table 5-1 of the TA. Section 5-3 of the TA also indicates a broad 70:30 split of traffic movement in the northbound and southbound direction based on journey to work data from 2011 census.



DATE: 27 April 2023 CONFIDENTIALITY: Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

The impact of 300 dwellings on the available headroom capacity of the A10 is set out above is shown below based on the housing trip rates provided by Hopkins Homes in their Transport Assessment, with the proposed distribution assumptions applied. This is broadly consistent with the capacity thresholds specified above. Hence it is expected that the trip generation associated with about 300 dwellings could be accommodated on the A10 at West Winch prior to the need for more significant intervention.

Table 2 – Hopkins Homes TA Proposed Trip Generation and A10 Impacts without WWHAR

Time of	Hopkins TA	A Trip Rates	300 dwell	ings (trips)	Northbound	d 70%	Southbound 30%	
Day	Arrivals	Departures	Total	Total	NB	NB	SB	SB
	per HH	per HH	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
AM Peak	0.152	0.45	45.6	135	32	95	14	41
PM Peak	0.424	0.242	127.2	72.6	38	22	89	51

Sensitivity Testing

Since the trip rates used within the Hopkins Homes Transport Assessment (TA) are vehicle only trip rates from more than five years ago and based on pre-lockdown data, a sensitivity test has been carried out using updated Multi-Modal trip rates from the latest 2023 version of TRICS.

The updated TRICS selection included sites in England outside of London for Mixed Private and Non-Private Housing, excluding those in the town centre or edge of town centre locations and restricting the selection to larger sites greater than 100 dwellings. Around 30% of the sample sites selected were located in Norfolk, so it is anticipated the results should be representative of the local area. Approximately 50% of the sites were also surveyed post lockdown, so should be reflective of a post-pandemic traffic situation.

The updated trip rates are slightly lower than those used by Hopkins Homes in their TA. Hence it is evident that there would be a slight reduction in the forecast development impact when the updated 2023 trip rates are applied. This slightly increases the number of houses potentially deliverable prior to needing the new road.

The revised results for 300 homes in terms of arrivals and departures (applying the same directional split as used in Table 2) are shown below in Table 3. This gives a result approximately 16% lower than the results shown in Table 2 above. Therefore, the resulting housing capacity headroom increases to about 350 dwellings, based on the Northbound AM peak flow capacity of 95 trips. However, despite the lower trip rates, the implied housing capacity available in the A10 corridor remains within the range of 300-350 houses previously quoted by the Local Highway Authority. Table 4 shows the resulting peak hour vehicle trips associated with 350 dwellings.

Table 3 – TRICS 2023 Updated A10 Vehicular Trip Generation by Direction (300 homes)



DATE: 27 April 2023 CONFIDENTIALITY: Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

Time of	Hopkins TA	A Trip Rates	300 dwellings (Vehicles)		Northbound 70%		Southbound 30%	
Day	Arrivals	Departures	Total	Total	NB	NB	SB	SB
	per HH	per HH	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
AM Peak	0.148	0.387	44	116	31	81	13	35
PM Peak	0.329	0.162	99	49	30	15	69	34

Table 4 – TRICS 2023 Updated A10 Vehicular Trip Generation by Direction (350 homes)

Time of	Hopkins TA	A Trip Rates	350 dwell	ings (Vehicles)	Northbound	d 70%	Southbound 30%	
Day	Arrivals	Departures	Total	Total	NB	NB	SB	SB
	per HH	per HH	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
AM Peak	0.148	0.387	52	135	36	95	16	41
PM Peak	0.329	0.162	115	57	35	17	81	40

Public Acceptability

For congested network situations, local residents would often be sensitive to any noticeable traffic impacts on the A10 as a result of development and this feedback may be evident from consultation. Hence, it is necessary to demonstrate that additional development traffic would remain within this range. The above observed data indicates that there is a congested highway network prior to development, with less than 10% spare capacity available in the busiest hour.

Whilst there is some variability in the observed data on different days of the week, often a primary road such as the A10 would have daily traffic variation of around +/-10%, so an impact of this magnitude would potentially be tolerable for other road users and local residents. The trip generation results for a 300 home development at West Winch are broadly consistent with this threshold, so should fall within a tolerable limit.

Feedback from public consultation has been obtained by Kings Lynn and West Norfolk Borough Council in relation to the proposed West Winch Masterplan in July 2022. Several respondents indicated existing high traffic levels prevent access to the A10 from existing dwellings with frontage access onto the road in West Winch and several others stated they would not wish to see occupation of any new housing in West Winch prior to the WWHAR opening. It is clear that local residents are concerned about the existing capacity of the A10 corridor and the Hardwick Interchange, and there is sensitivity to bringing forward significant additional development in the A10 corridor prior to the WWHAR would not be palatable to local residents.

Summary and Conclusions

The geometrical constraints on the A10 have been reviewed to understand the theoretical link capacity of the existing network based on DMRB guidance set out within TA 79/99 and observed surveys of traffic



DATE: 27 April 2023 CONFIDENTIALITY: Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

flows on the A10 at peak times collected in October 2022. This indicates that there is peak hour capacity available of around 95 trips in the Northbound direction in the AM peak hour.

A range of trip rates have been considered based on the Hopkins Homes development assumptions in their submitted planning application from the TA dated 2017. These trip rates were calculated on pre-pandemic traffic survey data and indicate development capacity in the region of 300 dwellings could be delivered prior to strategic intervention is required in the A10 corridor. A sensitivity test has been carried out using more recent data from the TRICS database for site selections available in 2023, indicates that there may be a slight increase in capacity for non-dependent development of up to 350 dwellings.

However, it is clear from public consultation feedback obtained by KLWNBC in July 2022 in relation to the masterplan that there is concern from local residents regarding additional development in West Winch due to the existing capacity issues on A10 and increased pressure on the Hardwick Interchange. Therefore, it is recommended that the lower bound total of 300 dwellings should be used as a robust trigger point for strategic intervention within the Kings Lynn and West Norfolk Local Plan.



DATE: 27 April 2023 CONFIDENTIALITY: Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

Appendix A - TA79/99 Table 1

Volume 5 Section 1 Part 3 TA 79/99 Amendment No 1 Chapter 2 General Principles

Feature	ROAD TYPE										
	Urban Motorway		Urban All-purpose								
	UM	UAP1	UAP2	UAP3	UAP4						
General Description	Through route with grade separated junctions, hardshoulders or hardstrips, and motorway restrictions.	High standard single/dual carriageway road carrying predominantly through traffic with limited access.	Good standard single/dual carriageway road with frontage access and more than two side roads per km.	Variable standard road carrying mixed traffic with frontage access, side roads, bus stops and at- grade pedestrian crossings.	Busy high street carrying predominantly local traffic with frontage activity including loading and unloading.						
Speed Limit	60mph or less	40 to 60 mph for dual, & generally 40mph for single carriageway	Generally 40 mph	30 mph to 40 mph	30mph						
Side Roads	None	0 to 2 per km	more than 2 per km	more than 2 per km	more than 2 per km						
Access to roadside development	None. Grade separated for major only.	limited access	access to residential properties	frontage access	unlimited access to houses, shops & businesses						
Parking and loading	none	restricted	restricted	unrestricted	unrestricted						
Pedestrian crossings	grade separated	mostly grade separated	some at-grade	some at-grade	frequent at-grade						
Bus stops	none	in lay-bys	at kerbside	at kerbside	at kerbside						

Table 1 Types of Urban roads and the features that distinguish them



DATE: 27 April 2023 CONFIDENTIALITY: Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

Appendix B - TA 79/99 Table 2

Volume 5 Section 1 Chapter 3
Part 3 TA 79/99 Amendment No 1 Determination of Urban Road Capacity

		- 1	Two-way Single Carriageway- Busiest direction flow (Assumes a 60/40 directional split)										Dual Carriageway			
			Total number of Lanes									Number of Lanes in each direction				
			2	2		2-3	3	3-4	4	4+		2	3	4		
Carriageway width		6.1m	6.75m	7.3m	9.0m	10.0m	12.3m	13.5m	14.6m	6m 18.0m 6.75m 7.3m	11.0m	14.6m				
	UM	Not applicable								4000	5600	7200				
	UAP1	1020	1320	1590	1860	2010	2550	2800	3050	3300	3350	3600	5200	*		
Road type	UAP2	1020	1260	1470	1550	1650	1700	1900	2100	2700	2950	3200	4800	*		
	UAP3	900	1110	1300	1530	1620	*	*	*	*	2300	2600	3300	*		
	UAP4	750	900	1140	1320	1410	排	*	冰	*	*	2)t	*	*		

Table 2 Capacities of Urban Roads One-way hourly flows in each direction



DATE: 27 April 2023 **CONFIDENTIALITY**: Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

Appendix C - Hopkins TA Trip Rates

5. Trip Generation and Distribution

This section of the report details the number of person and vehicular trips predicted to be generated by the development which have been assessed using the TRICS V6.9.2 database. Analysis of 2011 Census Travel to Work Origin and Destination data for King's Lynn has also been used to predict the distribution of the generated vehicle trips. This approach and the subsequent trip generation rates were agreed with NCC and Highways England at the scoping stage in 2012 and confirmed with NCC at the scoping stage in 2016.

5.1. Vehicle Trip Generation

5.1.1. Residential Trip Generation

The predicted vehicle trip generation of the proposed development has been assessed with reference to the TRICS database. The TRICS V6.9.2 database has been interrogated to select residential sites with similar characteristics. The TRICS sites have been filtered using the following criteria:

- Category Houses Privately Owned. This category provides the largest survey set and provides a
 robust set of vehicle trip rates as this category excludes sites with flats and affordable housing which
 generate lower trip rates than privately owned house. In reality the site will not just include for privately
 owned houses and will therefore generate fewer trips than calculated here;
- Vehicle Trip Rates: Vehicle only survey sites have been selected to maximise the sample of sites;
- Regions: Sites in Scotland, Wales, Ireland and London have been excluded;
- Survey Day: All weekend surveys have been excluded;
- **Development Size:** All sites with more than 100 dwellings have been included (TRICS has a very low number of sites with 500+ homes due to the difficulty of surveying such sites);
- Development Location: Only edge of town sites have been included;
- Survey date: Sites with counts undertaken prior to 2004 have been excluded;
- Manual removal: Site LC_03-A_09 has been manually removed due to its proximity to a college; and
- Sample Size: The above filtering has left 7 sites to be analysed.

The selection criteria is considered to provide a robust set of vehicle trip rates, taking into consideration the location, accessibility and scale of the proposed development. Whilst the proposed development site would contain an element of affordable homes the selection criteria, based on 100% houses privately owned, will provide the most robust assessment in terms of vehicle trips. The selected sites have been audited to ensure that weighting factors have not skewed the predicted vehicle trip rates.

Furthermore, to validate these trip rates, Atkins commissioned a survey of trips in and out of a housing development located on the edge of King's Lynn – the Langland and Elvington estate which includes 361 dwellings accessed from one access off Gayton Road. The characteristics of this development are similar to those of the proposed Hardwick Green site. The survey was undertaken on Thursday 12th July 2012. The results of this survey produced trip rates slightly lower than those derived from TRICS, and hence support the robustness and therefore the use of the proposed TRICS trip rates. The raw survey data and associated trip rates are provided in Appendix G.

The predicted vehicle trip rates derived from TRICS, as agreed with NCC, are provided in Table 5-1. The TRICS output files are provided in Appendix H.

Table 5-1 Proposed Residential Vehicle Trip Rates

	AM Peak Hour (08:00- 09:00)			PM Pe	ak Hour (18:00)	17:00-	12 Hour (07:00-19:00)			
	Arrive	Depart	Total	Arrive	Depart	Total	Arrive	Depart	Total	
Vehicle trip rate per private dwelling	0.152	0.450	0.602	0.424	0.242	0.666	2.669	2.794	5.493	
Vehicle Trips 1,110 homes	169	500	668	471	269	739	2,963	3, 101	6,097	



DATE: 27 April 2023 **CONFIDENTIALITY**: Public

SUBJECT: West Winch A10 Headroom Analysis

PROJECT: 70100518 AUTHOR: UKPJC007

Appendix D - TRICS 2023 Updated Trip Rates

WSP GROUP STREET NAME TOWN/CITY Licence No: 100314

Calculation Reference: AUDIT-100314-230306-0319

Monday 06/03/23

Page 1

TRIP RATE CALCULATION SELECTION PARAMETERS:

: 03 - RESIDENTIAL Land Use

: M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOU	TH EAST	
	ES	EAST SUSSEX	5 days
	HC	HAMPSHIRE	5 days
	KC	KENT	2 days
	OX	OXFORDSHIRE	2 days
	SC	SURREY	2 days
	SP	SOUTHAMPTON	1 days
	WS	WEST SUSSEX	6 days
03	SOU	TH WEST	
	SM	SOMERSET	1 days
	WL	WILTSHIRE	1 days
04	EAST	ANGLIA	
	NF	NORFOLK	11 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings Actual Range: 100 to 544 (units:) Range Selected by User: 100 to 1412 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 29/09/22

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 5 days Wednesday 18 days Thursday 13 days

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

<u>Selected survey types:</u>

Manual count 36 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) 3 Edge of Town 23 Neighbourhood Centre (PPS6 Local Centre) 10

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.

1

Selected Location Sub Categories:

Industrial Zone Residential Zone 20 WSP GROUP STREET NAME TOWN/CITY Licence No: 100314

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 15 days - Selected Servicing vehicles Excluded 28 days - Selected

Secondary Filtering selection:

Use Class:

C3 36 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	9 days
5,001 to 10,000	11 days
10,001 to 15,000	9 days
15,001 to 20,000	3 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	3 days
25,001 to 50,000	7 days
50,001 to 75,000	8 days
75,001 to 100,000	5 days
125,001 to 250,000	12 days
250,001 to 500,000	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	2 days
1.1 to 1.5	30 days
1.6 to 2.0	4 davs

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	34 days
No	2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 36 days

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

Covid-19 Restrictions

Yes

At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

WSP GROUP STREET NAME TOWN/CITY Licence No: 100314

LIST OF SITES relevant to selection parameters

1 ES-03-M-07 MIXED HOUSING EAST SUSSEX

SOUTH COAST ROAD

PEACEHAVEN

Edge of Town Residential Zone

Total No of Dwellings: 188

Survey date: THURSDAY 12/11/15 Survey Type: MANUAL

ES-03-M-11 MI XED HOUSES & FLATS EAST SUSSEX

HEMPSTEAD LANE

HAILSHAM

UPPER HORSEBRIDGE

Edge of Town Residential Zone

Total No of Dwellings: 354

Survey date: WEDNESDAY 13/07/16 Survey Type: MANUAL

3 ES-03-M-14 MI XED HOUSES & FLATS EAST SÚSSÉX

KINGS DRIVE EASTBOURNE UPPERTON Edge of Town

Residential Zone Total No of Dwellings:

Total No of Dwellings: 119
Survey date: THURSDAY 15/11/18 Survey Type: MANUAL

4 ES-03-M-16 MIXED HOUSES & FLATS EAST SUSSEX

BARNHORN ROAD

BEXHILL

LITTLE COMMON Edge of Town Residential Zone

Total No of Dwellings: 119

Survey date: WEDNESDAY 10/07/19 Survey Type: MANUAL

5 ES-03-M-19 MI XED HOUSES & FLATS EAST SUSSEX

PARK ROAD HAILSHAM

Edge of Town Residential Zone

Total No of Dwellings: 149

Survey date: THURSDAY 17/06/21 Survey Type: MANUAL

6 HC-03-M-06 HOUSES & FLATS HAMPSHIRE

HUNTS POND ROAD NEAR FAREHAM TITCHFIELD Edge of Town Residential Zone

Total No of Dwellings: 328

Survey date: WEDNESDAY 04/11/15 Survey Type: MANUAL

7 HC-03-M-11 MIXED HOUSES & FLATS HAMPSHIRE

ALDERMASTON ROAD BASINGSTOKE

Edge of Town No Sub Category

Total No of Dwellings: 238

Survey date: THURSDAY 07/03/19 Survey Type: MANUAL

Monday 06/03/23 Page 4

WSP GROUP STREET NAME TOWN/CITY Licence No: 100314

LIST OF SITES relevant to selection parameters (Cont.)

8 HC-03-M-13 MI XED HOUSES & FLATS HAMPSHIRE

COOMBE ROAD YATELEY

Edge of Town Residential Zone

Total No of Dwellings: 106

Survey date: TUESDAY 08/06/21 Survey Type: MANUAL

9 HC-03-M-14 MI XED HOUSES & FLATS HAMPSHIRE

ROMSEY ROAD WINCHESTER STANMORE Edge of Town Residential Zone

Total No of Dwellings: 200

Survey date: WEDNESDAY 26/05/21 Survey Type: MANUAL

10 HC-03-M-16 MI XED HOUSES & FLATS HAMPSHI RE

RAWLINGS LANE

ALTON

Edge of Town Residential Zone

Total No of Dwellings: 275

Survey date: WEDNESDAY 10/11/21 Survey Type: MANUAL

11 KC-03-M-03 MIXED HOUSES & FLATS KENT

BUNYARD WAY MAIDSTONE ALLINGTON Edge of Town Residential Zone

Total No of Dwellings: 140

Survey date: TUESDAY 22/05/18 Survey Type: MANUAL

12 KC-03-M-04 MI XED HOUSES AND FLATS KENT

HERMITAGE LANE
MAIDSTONE
BARMING
Edge of Town
No Sub Category

Total No of Dwellings: 250

Survey date: THURSDAY 10/06/21 Survey Type: MANUAL

13 NF-03-M-02 MI XED HOUSES NORFOLK

CAWSTON ROAD AYLSHAM

Edge of Town

Out of Town
Total No of Dwellings:

Total No of Dwellings: 250

Survey datē: TUESDAY 17/09/19 Survey Type: MANUAL

14 NF-03-M-14 MI XED HOUSES & FLATS NORFOLK

NORWICH COMMON WYMONDHAM

Edge of Town Residential Zone

Total No of Dwellings: 321

Survey date: THURSDAY 19/09/19 Survey Type: MANUAL

15 NF-03-M-42 MI XED HOUSES NORFOLK

STALHAM ROAD HOVETON

Neighbourhood Centre (PPS6 Local Centre)

Village

Total No of Dwellings: 120

Survey date: THURSDAY 16/09/21 Survey Type: MANUAL

WSP GROUP STREET NAME TOWN/CITY Licence No: 100314

LIST OF SITES relevant to selection parameters (Cont.)

NORFOLK NF-03-M-43 MI XED HOUSES

PIGOT LANE **NEAR NORWICH** FRAMINGHAM EARL

Neighbourhood Centre (PPS6 Local Centre)

Village

Total No of Dwellings: 100

Survey date: TUESDAY 21/09/21 Survey Type: MANUAL

NF-03-M-46 MIXED HOUSES & FLATS NORFOLK

DEREHAM ROAD NORWICH

> Edge of Town No Sub Category

Total No of Dwellings: 338

Survey date: WEDNESDAY 15/09/21 Survey Type: MANUAL

NF-03-M-51 NORFOLK 18 MI XED HOUSES

MENDHAM LANE HARLESTON

Edge of Town Residential Zone

Total No of Dwellings: 120

> Survey date: WEDNESDAY 29/09/21 Survey Type: MANUAL

NF-03-M-55 MIXED HOUSES NORFOLK

CAISTOR LANE **NEAR NORWICH PORINGLAND**

Neighbourhood Centre (PPS6 Local Centre)

Village

Total No of Dwellings: 150

Survey date: WEDNESDAY 28/09/22 Survey Type: MANUAL

20 NF-03-M-59 MIXED HOUSES NORFOLK

NORWICH COMMON **WYMONDHAM**

Edge of Town Residential Zone Total No of Dwellings:

153

Survey date: THURSDAY 29/09/22 Survey Type: MANUAL

NF-03-M-61 MIXED HOUSES & FLATS NORFOLK 21

LONG LANE **NEAR NORWICH MULBARTON** Neighbourhood Centre (PPS6 Local Centre)

Village Total No of Dwellings: 180

Survey date: WEDNESDAY 28/09/22

Survey Type: MANUAL 22 NF-03-M-62 MI XED HOUSES NORFOLK

CAWSTON ROAD AYLSHAM

Edge of Town Out of Town

Total No of Dwellings: 250

Survey date: WEDNESDAY 21/09/22 Survey Type: MANUAL WSP GROUP STREET NAME TOWN/CITY Licence No: 100314

LIST OF SITES relevant to selection parameters (Cont.)

23 NF-03-M-63 MIXED HOUSES NORFOLK

NORTH WALSHAM ROAD NORTH WALSHAM

Edge of Town Residential Zone

Total No of Dwellings: 100

Survey date: WEDNESDAY 21/09/22 Survey Type: MANUAL

24 OX-03-M-01 MIXED HOUSES OXFORDSHIRE

WENMAN ROAD

THAME

Edge of Town Industrial Zone

Total No of Dwellings: 100

Survey date: THURSDAY 28/06/18 Survey Type: MANUAL

25 OX-03-M-02 MIXED HOUSES & FLATS OXFORDSHIRE

GODSTOW ROAD OXFORD

WOLVERCOTE

Neighbourhood Centre (PPS6 Local Centre)

Village

Total No of Dwellings: 117

Survey date: WEDNESDAY 20/10/21 Survey Type: MANUAL

26 SC-03-M-08 MIXED HOUSES & FLATS SURREY

CHOBHAM LANE LONGCROSS

Neighbourhood Centre (PPS6 Local Centre)

Village

Total No of Dwellings: 107

Survey date: TUESDAY 12/11/19 Survey Type: MANUAL

P7 SC-03-M-10 MI XED HOUSES & FLATS SURREY

AARONS HILL GODALMING

Edge of Town Residential Zone

Total No of Dwellings: 108

Survey date: THURSDAY 09/06/22 Survey Type: MANUAL

28 SM-03-M-01 DETACHED & TERRACED HOUSES SOMERSET

MILTON HILL TAUNTON

MONKTON HEATHFIELD

Neighbourhood Centre (PPS6 Local Centre)

Village

Total No of Dwellings: 135

Survey date: WEDNESDAY 26/09/18 Survey Type: MANUAL

29 SP-03-M-02 MI XED HOUSES & FLATS SOUTHAMPTON

BARNFIELD WAY NEAR SOUTHAMPTON

HEDGE END Edge of Town Out of Town

Total No of Dwellings: 181

Survey date: WEDNESDAY 23/10/19 Survey Type: MANUAL

WSP GROUP STREET NAME TOWN/CITY Licence No: 100314

LIST OF SITES relevant to selection parameters (Cont.)

30 WL-03-M-04 MIXED HOUSES & FLATS WILTSHIRE

WARNEFORD CRESCENT NEAR SALISBURY

LONGHEDGE

Neighbourhood Centre (PPS6 Local Centre)

Village

Total No of Dwellings: 544

Survey date: THURSDAY 18/11/21 Survey Type: MANUAL

31 WS-03-M-04 HOUSES & FLATS WEST SUSSEX

SUMMERSDALE ROAD

CHICHESTER

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 214

Survey date: THURSDAY 08/05/14 Survey Type: MANUAL

32 WS-03-M-12 HOUSES & FLATS WEST SUSSEX

UPPER SHOREHAM ROAD SHOREHAM BY SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 192

Survey date: WEDNESDAY 27/04/16 Survey Type: MANUAL

33 WS-03-M-16 MI XED FLATS & HOUSES WEST SÚSSÉX

BROYLE ROAD CHICHESTER

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 252

Survey date: WEDNESDAY 21/03/18 Survey Type: MANUAL

34 WS-03-M-20 MI XED HOUSES & FLATS WEST SUSSEX

OLD GUILDFORD ROAD

HORSHAM

BROADBRIDGE HEATH

Neighbourhood Centre (PPS6 Local Centre)

Residential Zone

Total No of Dwellings: 121

Survey date: THURSDAY 24/10/19 Survey Type: MANUAL

35 WS-03-M-25 MI XED HOUSES WEST SUSSEX

CLAPPERS LANE BRACKLESHAM BAY

Edge of Town Residential Zone

Total No of Dwellings: 110

Survey date: WEDNESDAY 24/11/21 Survey Type: MANUAL

36 WS-03-M-26 MI XED HOUSES & FLATS WEST SUSSEX

MILL STRAIGHT SOUTHWATER

Neighbourhood Centre (PPS6 Local Centre)

Village

Total No of Dwellings: 193

Survey date: WEDNESDAY 16/03/22 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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.76

		ARRIVALS		[DEPARTURES			TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.081	36	192	0.317	36	192	0.398
08:00 - 09:00	36	192	0.148	36	192	0.387	36	192	0.535
09:00 - 10:00	36	192	0.140	36	192	0.156	36	192	0.296
10:00 - 11:00	36	192	0.117	36	192	0.140	36	192	0.257
11:00 - 12:00	36	192	0.121	36	192	0.129	36	192	0.250
12:00 - 13:00	36	192	0.143	36	192	0.132	36	192	0.275
13:00 - 14:00	36	192	0.140	36	192	0.141	36	192	0.281
14:00 - 15:00	36	192	0.140	36	192	0.182	36	192	0.322
15:00 - 16:00	36	192	0.273	36	192	0.166	36	192	0.439
16:00 - 17:00	36	192	0.278	36	192	0.162	36	192	0.440
17:00 - 18:00	36	192	0.329	36	192	0.162	36	192	0.491
18:00 - 19:00	36	192	0.281	36	192	0.162	36	192	0.443
19:00 - 20:00	1	119	0.126	1	119	0.008	1	119	0.134
20:00 - 21:00	1	119	0.101	1	119	0.017	1	119	0.118
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.418			2.261			4.679

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected: 100 - 544 (units:)
Survey date date range: 01/01/14 - 29/09/22

Number of weekdays (Monday-Friday): 36
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 7
Surveys manually removed from selection: 0

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

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.004	36	192	0.005	36	192	0.009	
08:00 - 09:00	36	192	0.006	36	192	0.007	36	192	0.013	
09:00 - 10:00	36	192	0.002	36	192	0.002	36	192	0.004	
10:00 - 11:00	36	192	0.002	36	192	0.002	36	192	0.004	
11:00 - 12:00	36	192	0.002	36	192	0.002	36	192	0.004	
12:00 - 13:00	36	192	0.001	36	192	0.002	36	192	0.003	
13:00 - 14:00	36	192	0.001	36	192	0.001	36	192	0.002	
14:00 - 15:00	36	192	0.002	36	192	0.002	36	192	0.004	
15:00 - 16:00	36	192	0.006	36	192	0.006	36	192	0.012	
16:00 - 17:00	36	192	0.004	36	192	0.003	36	192	0.007	
17:00 - 18:00	36	192	0.002	36	192	0.002	36	192	0.004	
18:00 - 19:00	36	192	0.003	36	192	0.002	36	192	0.005	
19:00 - 20:00	1	119	0.000	1	119	0.000	1_	119	0.000	
20:00 - 21:00	1	119	0.000	1	119	0.000	1_	119	0.000	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.035			0.036			0.071	

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.001	36	192	0.001	36	192	0.002	
08:00 - 09:00	36	192	0.002	36	192	0.001	36	192	0.003	
09:00 - 10:00	36	192	0.002	36	192	0.003	36	192	0.005	
10:00 - 11:00	36	192	0.002	36	192	0.002	36	192	0.004	
11:00 - 12:00	36	192	0.002	36	192	0.001	36	192	0.003	
12:00 - 13:00	36	192	0.001	36	192	0.001	36	192	0.002	
13:00 - 14:00	36	192	0.001	36	192	0.001	36	192	0.002	
14:00 - 15:00	36	192	0.000	36	192	0.001	36	192	0.001	
15:00 - 16:00	36	192	0.001	36	192	0.001	36	192	0.002	
16:00 - 17:00	36	192	0.000	36	192	0.000	36	192	0.000	
17:00 - 18:00	36	192	0.000	36	192	0.000	36	192	0.000	
18:00 - 19:00	36	192	0.000	36	192	0.000	36	192	0.000	
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000	
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.012			0.012			0.024	

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.000	36	192	0.000	36	192	0.000
08:00 - 09:00	36	192	0.001	36	192	0.001	36	192	0.002
09:00 - 10:00	36	192	0.000	36	192	0.000	36	192	0.000
10:00 - 11:00	36	192	0.000	36	192	0.000	36	192	0.000
11:00 - 12:00	36	192	0.000	36	192	0.000	36	192	0.000
12:00 - 13:00	36	192	0.000	36	192	0.000	36	192	0.000
13:00 - 14:00	36	192	0.000	36	192	0.000	36	192	0.000
14:00 - 15:00	36	192	0.000	36	192	0.000	36	192	0.000
15:00 - 16:00	36	192	0.002	36	192	0.001	36	192	0.003
16:00 - 17:00	36	192	0.000	36	192	0.001	36	192	0.001
17:00 - 18:00	36	192	0.000	36	192	0.000	36	192	0.000
18:00 - 19:00	36	192	0.000	36	192	0.000	36	192	0.000
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.003			0.006

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

		ARRIVALS		I	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.002	36	192	0.012	36	192	0.014
08:00 - 09:00	36	192	0.004	36	192	0.018	36	192	0.022
09:00 - 10:00	36	192	0.004	36	192	0.004	36	192	0.008
10:00 - 11:00	36	192	0.003	36	192	0.003	36	192	0.006
11:00 - 12:00	36	192	0.002	36	192	0.003	36	192	0.005
12:00 - 13:00	36	192	0.003	36	192	0.003	36	192	0.006
13:00 - 14:00	36	192	0.003	36	192	0.003	36	192	0.006
14:00 - 15:00	36	192	0.004	36	192	0.005	36	192	0.009
15:00 - 16:00	36	192	0.017	36	192	0.005	36	192	0.022
16:00 - 17:00	36	192	0.007	36	192	0.005	36	192	0.012
17:00 - 18:00	36	192	0.014	36	192	0.005	36	192	0.019
18:00 - 19:00	36	192	0.008	36	192	0.006	36	192	0.014
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.071			0.072			0.143

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	,		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.094	36	192	0.438	36	192	0.532
08:00 - 09:00	36	192	0.178	36	192	0.657	36	192	0.835
09:00 - 10:00	36	192	0.168	36	192	0.209	36	192	0.377
10:00 - 11:00	36	192	0.146	36	192	0.186	36	192	0.332
11:00 - 12:00	36	192	0.150	36	192	0.168	36	192	0.318
12:00 - 13:00	36	192	0.181	36	192	0.174	36	192	0.355
13:00 - 14:00	36	192	0.184	36	192	0.185	36	192	0.369
14:00 - 15:00	36	192	0.184	36	192	0.231	36	192	0.415
15:00 - 16:00	36	192	0.473	36	192	0.222	36	192	0.695
16:00 - 17:00	36	192	0.412	36	192	0.224	36	192	0.636
17:00 - 18:00	36	192	0.469	36	192	0.227	36	192	0.696
18:00 - 19:00	36	192	0.395	36	192	0.229	36	192	0.624
19:00 - 20:00	1	119	0.168	1	119	0.017	1	119	0.185
20:00 - 21:00	1	119	0.151	1	119	0.017	1	119	0.168
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.353			3.184			6.537

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL PEDESTRIANS Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	5	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.029	36	192	0.059	36	192	0.088	
08:00 - 09:00	36	192	0.052	36	192	0.179	36	192	0.231	
09:00 - 10:00	36	192	0.052	36	192	0.030	36	192	0.082	
10:00 - 11:00	36	192	0.026	36	192	0.031	36	192	0.057	
11:00 - 12:00	36	192	0.025	36	192	0.029	36	192	0.054	
12:00 - 13:00	36	192	0.037	36	192	0.033	36	192	0.070	
13:00 - 14:00	36	192	0.032	36	192	0.033	36	192	0.065	
14:00 - 15:00	36	192	0.036	36	192	0.049	36	192	0.085	
15:00 - 16:00	36	192	0.161	36	192	0.054	36	192	0.215	
16:00 - 17:00	36	192	0.073	36	192	0.045	36	192	0.118	
17:00 - 18:00	36	192	0.065	36	192	0.047	36	192	0.112	
18:00 - 19:00	36	192	0.051	36	192	0.044	36	192	0.095	
19:00 - 20:00	1	119	0.008	1	119	0.008	1	119	0.016	
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.647			0.641			1.288	

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

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS		[DEPARTURES	5	TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.002	36	192	0.029	36	192	0.031
08:00 - 09:00	36	192	0.002	36	192	0.016	36	192	0.018
09:00 - 10:00	36	192	0.002	36	192	0.005	36	192	0.007
10:00 - 11:00	36	192	0.002	36	192	0.004	36	192	0.006
11:00 - 12:00	36	192	0.003	36	192	0.004	36	192	0.007
12:00 - 13:00	36	192	0.004	36	192	0.004	36	192	0.008
13:00 - 14:00	36	192	0.004	36	192	0.004	36	192	0.008
14:00 - 15:00	36	192	0.004	36	192	0.004	36	192	0.008
15:00 - 16:00	36	192	0.016	36	192	0.004	36	192	0.020
16:00 - 17:00	36	192	0.016	36	192	0.003	36	192	0.019
17:00 - 18:00	36	192	0.011	36	192	0.002	36	192	0.013
18:00 - 19:00	36	192	0.008	36	192	0.001	36	192	0.009
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00				·					
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.074			0.080			0.154

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

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL TOTAL RAIL PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS]	DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.000	36	192	0.004	36	192	0.004
08:00 - 09:00	36	192	0.000	36	192	0.002	36	192	0.002
09:00 - 10:00	36	192	0.000	36	192	0.001	36	192	0.001
10:00 - 11:00	36	192	0.000	36	192	0.000	36	192	0.000
11:00 - 12:00	36	192	0.000	36	192	0.001	36	192	0.001
12:00 - 13:00	36	192	0.000	36	192	0.000	36	192	0.000
13:00 - 14:00	36	192	0.000	36	192	0.001	36	192	0.001
14:00 - 15:00	36	192	0.000	36	192	0.000	36	192	0.000
15:00 - 16:00	36	192	0.001	36	192	0.000	36	192	0.001
16:00 - 17:00	36	192	0.002	36	192	0.000	36	192	0.002
17:00 - 18:00	36	192	0.002	36	192	0.000	36	192	0.002
18:00 - 19:00	36	192	0.002	36	192	0.001	36	192	0.003
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.007			0.010			0.017

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.000	36	192	0.001	36	192	0.001
08:00 - 09:00	36	192	0.000	36	192	0.003	36	192	0.003
09:00 - 10:00	36	192	0.000	36	192	0.000	36	192	0.000
10:00 - 11:00	36	192	0.000	36	192	0.000	36	192	0.000
11:00 - 12:00	36	192	0.000	36	192	0.000	36	192	0.000
12:00 - 13:00	36	192	0.000	36	192	0.000	36	192	0.000
13:00 - 14:00	36	192	0.000	36	192	0.000	36	192	0.000
14:00 - 15:00	36	192	0.000	36	192	0.000	36	192	0.000
15:00 - 16:00	36	192	0.003	36	192	0.000	36	192	0.003
16:00 - 17:00	36	192	0.001	36	192	0.000	36	192	0.001
17:00 - 18:00	36	192	0.000	36	192	0.000	36	192	0.000
18:00 - 19:00	36	192	0.000	36	192	0.000	36	192	0.000
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00				<u>.</u>	·				
Total Rates:			0.004			0.004			0.008

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

		ARRIVALS			DEPARTURES		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.002	36	192	0.034	36	192	0.036
08:00 - 09:00	36	192	0.002	36	192	0.021	36	192	0.023
09:00 - 10:00	36	192	0.002	36	192	0.006	36	192	0.008
10:00 - 11:00	36	192	0.002	36	192	0.005	36	192	0.007
11:00 - 12:00	36	192	0.003	36	192	0.004	36	192	0.007
12:00 - 13:00	36	192	0.005	36	192	0.004	36	192	0.009
13:00 - 14:00	36	192	0.004	36	192	0.005	36	192	0.009
14:00 - 15:00	36	192	0.004	36	192	0.004	36	192	0.008
15:00 - 16:00	36	192	0.020	36	192	0.004	36	192	0.024
16:00 - 17:00	36	192	0.019	36	192	0.004	36	192	0.023
17:00 - 18:00	36	192	0.013	36	192	0.003	36	192	0.016
18:00 - 19:00	36	192	0.010	36	192	0.002	36	192	0.012
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00							•		
Total Rates:			0.086			0.096			0.182

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.

WSP GROUP STREET NAME TOWN/CITY

Licence No: 100314

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.76

		ARRIVALS		[DEPARTURES	,		TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.128	36	192	0.542	36	192	0.670	
08:00 - 09:00	36	192	0.237	36	192	0.875	36	192	1.112	
09:00 - 10:00	36	192	0.225	36	192	0.250	36	192	0.475	
10:00 - 11:00	36	192	0.178	36	192	0.225	36	192	0.403	
11:00 - 12:00	36	192	0.180	36	192	0.205	36	192	0.385	
12:00 - 13:00	36	192	0.225	36	192	0.214	36	192	0.439	
13:00 - 14:00	36	192	0.222	36	192	0.225	36	192	0.447	
14:00 - 15:00	36	192	0.228	36	192	0.289	36	192	0.517	
15:00 - 16:00	36	192	0.670	36	192	0.285	36	192	0.955	
16:00 - 17:00	36	192	0.511	36	192	0.278	36	192	0.789	
17:00 - 18:00	36	192	0.560	36	192	0.281	36	192	0.841	
18:00 - 19:00	36	192	0.465	36	192	0.282	36	192	0.747	
19:00 - 20:00	1	119	0.176	1	119	0.025	1	119	0.201	
20:00 - 21:00	1	119	0.151	1	119	0.017	1	119	0.168	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			4.156			3.993			8.149	

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.064	36	192	0.274	36	192	0.338
08:00 - 09:00	36	192	0.123	36	192	0.348	36	192	0.471
09:00 - 10:00	36	192	0.117	36	192	0.130	36	192	0.247
10:00 - 11:00	36	192	0.089	36	192	0.112	36	192	0.201
11:00 - 12:00	36	192	0.094	36	192	0.103	36	192	0.197
12:00 - 13:00	36	192	0.117	36	192	0.107	36	192	0.224
13:00 - 14:00	36	192	0.117	36	192	0.117	36	192	0.234
14:00 - 15:00	36	192	0.121	36	192	0.158	36	192	0.279
15:00 - 16:00	36	192	0.240	36	192	0.139	36	192	0.379
16:00 - 17:00	36	192	0.239	36	192	0.140	36	192	0.379
17:00 - 18:00	36	192	0.292	36	192	0.144	36	192	0.436
18:00 - 19:00	36	192	0.257	36	192	0.145	36	192	0.402
19:00 - 20:00	1	119	0.126	1	119	0.008	1	119	0.134
20:00 - 21:00	1	119	0.101	1	119	0.017	1	119	0.118
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.097			1.942			4.039

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.011	36	192	0.035	36	192	0.046
08:00 - 09:00	36	192	0.015	36	192	0.028	36	192	0.043
09:00 - 10:00	36	192	0.018	36	192	0.020	36	192	0.038
10:00 - 11:00	36	192	0.024	36	192	0.024	36	192	0.048
11:00 - 12:00	36	192	0.022	36	192	0.021	36	192	0.043
12:00 - 13:00	36	192	0.022	36	192	0.021	36	192	0.043
13:00 - 14:00	36	192	0.019	36	192	0.020	36	192	0.039
14:00 - 15:00	36	192	0.016	36	192	0.020	36	192	0.036
15:00 - 16:00	36	192	0.022	36	192	0.017	36	192	0.039
16:00 - 17:00	36	192	0.032	36	192	0.016	36	192	0.048
17:00 - 18:00	36	192	0.030	36	192	0.014	36	192	0.044
18:00 - 19:00	36	192	0.018	36	192	0.013	36	192	0.031
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.249			0.249			0.498

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.

WSP GROUP STREET NAME TOWN/CITY

TRIP RATE for Land Use 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING

MULTI-MODAL MOTOR CYCLES Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	36	192	0.001	36	192	0.003	36	192	0.004	
08:00 - 09:00	36	192	0.000	36	192	0.002	36	192	0.002	
09:00 - 10:00	36	192	0.000	36	192	0.001	36	192	0.001	
10:00 - 11:00	36	192	0.001	36	192	0.001	36	192	0.002	
11:00 - 12:00	36	192	0.001	36	192	0.001	36	192	0.002	
12:00 - 13:00	36	192	0.001	36	192	0.001	36	192	0.002	
13:00 - 14:00	36	192	0.001	36	192	0.002	36	192	0.003	
14:00 - 15:00	36	192	0.001	36	192	0.001	36	192	0.002	
15:00 - 16:00	36	192	0.002	36	192	0.001	36	192	0.003	
16:00 - 17:00	36	192	0.002	36	192	0.001	36	192	0.003	
17:00 - 18:00	36	192	0.004	36	192	0.002	36	192	0.006	
18:00 - 19:00	36	192	0.003	36	192	0.002	36	192	0.005	
19:00 - 20:00	1	119	0.000	1	119	0.000	1	119	0.000	
20:00 - 21:00	1	119	0.000	1	119	0.000	1	119	0.000	
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates: 0.017 0.018							0.035			

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.