Appendix R

TRICS Data

Calculation Reference: AUDIT-152301-220315-0349

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	KC	KENT	2 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	1 days
04	EAST ANGLIA		
	NF	NORFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 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: 207 to 799 (units:)
Range Selected by User: 200 to 800 (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: 01/01/13 to 23/09/21

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	3 days
Tuesday	1 days
Wednesday	3 days
Thursday	2 days

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

Selected survey types:

Manual count	9 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)	1
Edge of Town	8

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:

Residential Zone	9

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,

Secondary Filtering selection:

Use Class:

C3	9 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	4 days
10,001 to 15,000	3 days
15,001 to 20,000	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:

5,001 to 25,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	3 days
125,001 to 250,000	3 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	6 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	4 days
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	9 days

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

LIST OF SITES relevant to selection parameters

1 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

2 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

3 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

4 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

5 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

6 NF-03-A-30 MIXED HOUSES NORFOLK
BRANDON ROAD
SWAFFHAM

Edge of Town
Residential Zone
Total No of Dwellings: 266
Survey date: THURSDAY *23/09/21* *Survey Type: MANUAL*

7 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone	DETACHED & SEMI-DETACHED		STAFFORDSHIRE
	Total No of Dwellings:		248	
	Survey date: WEDNESDAY		*22/11/17*	*Survey Type: MANUAL*
9	WS-03-A-06 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH Edge of Town Residential Zone	MIXED HOUSES		WEST SUSSEX
	Total No of Dwellings:		799	
	Survey date: THURSDAY		*02/03/17*	*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 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
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): 1.73

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.097	9	337	0.352	9	337	0.449
08:00 - 09:00	9	337	0.140	9	337	0.407	9	337	0.547
09:00 - 10:00	9	337	0.140	9	337	0.177	9	337	0.317
10:00 - 11:00	9	337	0.113	9	337	0.137	9	337	0.250
11:00 - 12:00	9	337	0.137	9	337	0.153	9	337	0.290
12:00 - 13:00	9	337	0.151	9	337	0.149	9	337	0.300
13:00 - 14:00	9	337	0.158	9	337	0.146	9	337	0.304
14:00 - 15:00	9	337	0.162	9	337	0.176	9	337	0.338
15:00 - 16:00	9	337	0.258	9	337	0.165	9	337	0.423
16:00 - 17:00	9	337	0.289	9	337	0.168	9	337	0.457
17:00 - 18:00	9	337	0.380	9	337	0.155	9	337	0.535
18:00 - 19:00	9	337	0.340	9	337	0.176	9	337	0.516
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.365			2.361			4.726

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.*

Parameter summary

Trip rate parameter range selected:	207 - 799 (units:)
Survey date date range:	01/01/13 - 23/09/21
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.002	9	337	0.002	9	337	0.004
08:00 - 09:00	9	337	0.004	9	337	0.003	9	337	0.007
09:00 - 10:00	9	337	0.003	9	337	0.002	9	337	0.005
10:00 - 11:00	9	337	0.002	9	337	0.003	9	337	0.005
11:00 - 12:00	9	337	0.001	9	337	0.001	9	337	0.002
12:00 - 13:00	9	337	0.002	9	337	0.002	9	337	0.004
13:00 - 14:00	9	337	0.001	9	337	0.000	9	337	0.001
14:00 - 15:00	9	337	0.003	9	337	0.003	9	337	0.006
15:00 - 16:00	9	337	0.003	9	337	0.003	9	337	0.006
16:00 - 17:00	9	337	0.003	9	337	0.003	9	337	0.006
17:00 - 18:00	9	337	0.001	9	337	0.001	9	337	0.002
18:00 - 19:00	9	337	0.001	9	337	0.002	9	337	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.025			0.051

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.001	9	337	0.000	9	337	0.001
08:00 - 09:00	9	337	0.002	9	337	0.002	9	337	0.004
09:00 - 10:00	9	337	0.004	9	337	0.002	9	337	0.006
10:00 - 11:00	9	337	0.003	9	337	0.003	9	337	0.006
11:00 - 12:00	9	337	0.002	9	337	0.002	9	337	0.004
12:00 - 13:00	9	337	0.002	9	337	0.004	9	337	0.006
13:00 - 14:00	9	337	0.003	9	337	0.001	9	337	0.004
14:00 - 15:00	9	337	0.001	9	337	0.002	9	337	0.003
15:00 - 16:00	9	337	0.001	9	337	0.002	9	337	0.003
16:00 - 17:00	9	337	0.002	9	337	0.001	9	337	0.003
17:00 - 18:00	9	337	0.001	9	337	0.001	9	337	0.002
18:00 - 19:00	9	337	0.000	9	337	0.001	9	337	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.021			0.043

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.001	9	337	0.001	9	337	0.002
08:00 - 09:00	9	337	0.001	9	337	0.001	9	337	0.002
09:00 - 10:00	9	337	0.001	9	337	0.001	9	337	0.002
10:00 - 11:00	9	337	0.001	9	337	0.001	9	337	0.002
11:00 - 12:00	9	337	0.001	9	337	0.001	9	337	0.002
12:00 - 13:00	9	337	0.001	9	337	0.001	9	337	0.002
13:00 - 14:00	9	337	0.001	9	337	0.001	9	337	0.002
14:00 - 15:00	9	337	0.001	9	337	0.001	9	337	0.002
15:00 - 16:00	9	337	0.001	9	337	0.001	9	337	0.002
16:00 - 17:00	9	337	0.001	9	337	0.001	9	337	0.002
17:00 - 18:00	9	337	0.001	9	337	0.001	9	337	0.002
18:00 - 19:00	9	337	0.000	9	337	0.000	9	337	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.011			0.022

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.004	9	337	0.005	9	337	0.009
08:00 - 09:00	9	337	0.003	9	337	0.010	9	337	0.013
09:00 - 10:00	9	337	0.000	9	337	0.002	9	337	0.002
10:00 - 11:00	9	337	0.002	9	337	0.003	9	337	0.005
11:00 - 12:00	9	337	0.002	9	337	0.004	9	337	0.006
12:00 - 13:00	9	337	0.003	9	337	0.003	9	337	0.006
13:00 - 14:00	9	337	0.003	9	337	0.003	9	337	0.006
14:00 - 15:00	9	337	0.002	9	337	0.002	9	337	0.004
15:00 - 16:00	9	337	0.004	9	337	0.004	9	337	0.008
16:00 - 17:00	9	337	0.014	9	337	0.009	9	337	0.023
17:00 - 18:00	9	337	0.011	9	337	0.009	9	337	0.020
18:00 - 19:00	9	337	0.005	9	337	0.007	9	337	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.053			0.061			0.114

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.122	9	337	0.522	9	337	0.644
08:00 - 09:00	9	337	0.178	9	337	0.723	9	337	0.901
09:00 - 10:00	9	337	0.179	9	337	0.258	9	337	0.437
10:00 - 11:00	9	337	0.147	9	337	0.195	9	337	0.342
11:00 - 12:00	9	337	0.182	9	337	0.226	9	337	0.408
12:00 - 13:00	9	337	0.214	9	337	0.213	9	337	0.427
13:00 - 14:00	9	337	0.226	9	337	0.211	9	337	0.437
14:00 - 15:00	9	337	0.225	9	337	0.251	9	337	0.476
15:00 - 16:00	9	337	0.454	9	337	0.242	9	337	0.696
16:00 - 17:00	9	337	0.488	9	337	0.252	9	337	0.740
17:00 - 18:00	9	337	0.612	9	337	0.233	9	337	0.845
18:00 - 19:00	9	337	0.516	9	337	0.277	9	337	0.793
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.543			3.603			7.146

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.010	9	337	0.021	9	337	0.031
08:00 - 09:00	9	337	0.019	9	337	0.085	9	337	0.104
09:00 - 10:00	9	337	0.021	9	337	0.023	9	337	0.044
10:00 - 11:00	9	337	0.017	9	337	0.022	9	337	0.039
11:00 - 12:00	9	337	0.019	9	337	0.019	9	337	0.038
12:00 - 13:00	9	337	0.020	9	337	0.021	9	337	0.041
13:00 - 14:00	9	337	0.024	9	337	0.015	9	337	0.039
14:00 - 15:00	9	337	0.020	9	337	0.031	9	337	0.051
15:00 - 16:00	9	337	0.092	9	337	0.031	9	337	0.123
16:00 - 17:00	9	337	0.053	9	337	0.031	9	337	0.084
17:00 - 18:00	9	337	0.048	9	337	0.035	9	337	0.083
18:00 - 19:00	9	337	0.036	9	337	0.044	9	337	0.080
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.379			0.378			0.757

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.001	9	337	0.012	9	337	0.013
08:00 - 09:00	9	337	0.000	9	337	0.011	9	337	0.011
09:00 - 10:00	9	337	0.001	9	337	0.006	9	337	0.007
10:00 - 11:00	9	337	0.002	9	337	0.003	9	337	0.005
11:00 - 12:00	9	337	0.001	9	337	0.003	9	337	0.004
12:00 - 13:00	9	337	0.001	9	337	0.001	9	337	0.002
13:00 - 14:00	9	337	0.004	9	337	0.004	9	337	0.008
14:00 - 15:00	9	337	0.002	9	337	0.002	9	337	0.004
15:00 - 16:00	9	337	0.011	9	337	0.004	9	337	0.015
16:00 - 17:00	9	337	0.014	9	337	0.004	9	337	0.018
17:00 - 18:00	9	337	0.012	9	337	0.002	9	337	0.014
18:00 - 19:00	9	337	0.010	9	337	0.004	9	337	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.059			0.056			0.115

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.000	9	337	0.006	9	337	0.006
08:00 - 09:00	9	337	0.000	9	337	0.006	9	337	0.006
09:00 - 10:00	9	337	0.000	9	337	0.002	9	337	0.002
10:00 - 11:00	9	337	0.000	9	337	0.003	9	337	0.003
11:00 - 12:00	9	337	0.000	9	337	0.001	9	337	0.001
12:00 - 13:00	9	337	0.000	9	337	0.001	9	337	0.001
13:00 - 14:00	9	337	0.001	9	337	0.000	9	337	0.001
14:00 - 15:00	9	337	0.001	9	337	0.000	9	337	0.001
15:00 - 16:00	9	337	0.004	9	337	0.001	9	337	0.005
16:00 - 17:00	9	337	0.002	9	337	0.000	9	337	0.002
17:00 - 18:00	9	337	0.006	9	337	0.001	9	337	0.007
18:00 - 19:00	9	337	0.004	9	337	0.001	9	337	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.022			0.040

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.000	9	337	0.000	9	337	0.000
08:00 - 09:00	9	337	0.000	9	337	0.000	9	337	0.000
09:00 - 10:00	9	337	0.000	9	337	0.000	9	337	0.000
10:00 - 11:00	9	337	0.000	9	337	0.000	9	337	0.000
11:00 - 12:00	9	337	0.000	9	337	0.000	9	337	0.000
12:00 - 13:00	9	337	0.000	9	337	0.000	9	337	0.000
13:00 - 14:00	9	337	0.000	9	337	0.000	9	337	0.000
14:00 - 15:00	9	337	0.000	9	337	0.000	9	337	0.000
15:00 - 16:00	9	337	0.001	9	337	0.000	9	337	0.001
16:00 - 17:00	9	337	0.000	9	337	0.000	9	337	0.000
17:00 - 18:00	9	337	0.000	9	337	0.000	9	337	0.000
18:00 - 19:00	9	337	0.000	9	337	0.000	9	337	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.000			0.001

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.001	9	337	0.018	9	337	0.019
08:00 - 09:00	9	337	0.000	9	337	0.017	9	337	0.017
09:00 - 10:00	9	337	0.001	9	337	0.009	9	337	0.010
10:00 - 11:00	9	337	0.002	9	337	0.006	9	337	0.008
11:00 - 12:00	9	337	0.001	9	337	0.004	9	337	0.005
12:00 - 13:00	9	337	0.001	9	337	0.002	9	337	0.003
13:00 - 14:00	9	337	0.005	9	337	0.004	9	337	0.009
14:00 - 15:00	9	337	0.003	9	337	0.002	9	337	0.005
15:00 - 16:00	9	337	0.016	9	337	0.005	9	337	0.021
16:00 - 17:00	9	337	0.017	9	337	0.005	9	337	0.022
17:00 - 18:00	9	337	0.018	9	337	0.003	9	337	0.021
18:00 - 19:00	9	337	0.015	9	337	0.005	9	337	0.020
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.080			0.080			0.160

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
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): 1.73

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.136	9	337	0.566	9	337	0.702
08:00 - 09:00	9	337	0.199	9	337	0.834	9	337	1.033
09:00 - 10:00	9	337	0.201	9	337	0.292	9	337	0.493
10:00 - 11:00	9	337	0.167	9	337	0.226	9	337	0.393
11:00 - 12:00	9	337	0.204	9	337	0.253	9	337	0.457
12:00 - 13:00	9	337	0.238	9	337	0.238	9	337	0.476
13:00 - 14:00	9	337	0.257	9	337	0.232	9	337	0.489
14:00 - 15:00	9	337	0.250	9	337	0.287	9	337	0.537
15:00 - 16:00	9	337	0.566	9	337	0.282	9	337	0.848
16:00 - 17:00	9	337	0.571	9	337	0.297	9	337	0.868
17:00 - 18:00	9	337	0.689	9	337	0.279	9	337	0.968
18:00 - 19:00	9	337	0.571	9	337	0.332	9	337	0.903
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.049			4.118			8.167

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.073	9	337	0.318	9	337	0.391
08:00 - 09:00	9	337	0.116	9	337	0.375	9	337	0.491
09:00 - 10:00	9	337	0.111	9	337	0.150	9	337	0.261
10:00 - 11:00	9	337	0.093	9	337	0.115	9	337	0.208
11:00 - 12:00	9	337	0.114	9	337	0.125	9	337	0.239
12:00 - 13:00	9	337	0.128	9	337	0.124	9	337	0.252
13:00 - 14:00	9	337	0.131	9	337	0.120	9	337	0.251
14:00 - 15:00	9	337	0.137	9	337	0.148	9	337	0.285
15:00 - 16:00	9	337	0.233	9	337	0.137	9	337	0.370
16:00 - 17:00	9	337	0.260	9	337	0.146	9	337	0.406
17:00 - 18:00	9	337	0.346	9	337	0.137	9	337	0.483
18:00 - 19:00	9	337	0.321	9	337	0.161	9	337	0.482
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.063			2.056			4.119

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL LGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.019	9	337	0.028	9	337	0.047
08:00 - 09:00	9	337	0.017	9	337	0.023	9	337	0.040
09:00 - 10:00	9	337	0.021	9	337	0.021	9	337	0.042
10:00 - 11:00	9	337	0.015	9	337	0.016	9	337	0.031
11:00 - 12:00	9	337	0.020	9	337	0.023	9	337	0.043
12:00 - 13:00	9	337	0.018	9	337	0.018	9	337	0.036
13:00 - 14:00	9	337	0.021	9	337	0.023	9	337	0.044
14:00 - 15:00	9	337	0.018	9	337	0.022	9	337	0.040
15:00 - 16:00	9	337	0.018	9	337	0.020	9	337	0.038
16:00 - 17:00	9	337	0.020	9	337	0.015	9	337	0.035
17:00 - 18:00	9	337	0.029	9	337	0.014	9	337	0.043
18:00 - 19:00	9	337	0.016	9	337	0.011	9	337	0.027
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.232			0.234			0.466

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	9	337	0.001	9	337	0.002	9	337	0.003
08:00 - 09:00	9	337	0.000	9	337	0.003	9	337	0.003
09:00 - 10:00	9	337	0.000	9	337	0.000	9	337	0.000
10:00 - 11:00	9	337	0.000	9	337	0.000	9	337	0.000
11:00 - 12:00	9	337	0.000	9	337	0.001	9	337	0.001
12:00 - 13:00	9	337	0.000	9	337	0.000	9	337	0.000
13:00 - 14:00	9	337	0.000	9	337	0.000	9	337	0.000
14:00 - 15:00	9	337	0.001	9	337	0.000	9	337	0.001
15:00 - 16:00	9	337	0.002	9	337	0.001	9	337	0.003
16:00 - 17:00	9	337	0.003	9	337	0.002	9	337	0.005
17:00 - 18:00	9	337	0.002	9	337	0.001	9	337	0.003
18:00 - 19:00	9	337	0.001	9	337	0.002	9	337	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.012			0.022

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.*

Calculation Reference: AUDIT-152302-230727-0746

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : A - PRIMARY
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	CW	CORNWALL	1 days
	SM	SOMERSET	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
08	NORTH WEST		
	BP	BLACKPOOL	1 days
09	NORTH		
	TV	TEES VALLEY	3 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: Number of pupils
Actual Range: 126 to 538 (units:)
Range Selected by User: 92 to 538 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 15/11/22

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:

Monday	1 days
Tuesday	2 days
Wednesday	3 days
Thursday	3 days

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

Selected survey types:

Manual count	9 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)	2
Edge of Town	2
Neighbourhood Centre (PPS6 Local Centre)	5

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:

Residential Zone	6
Village	3

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:

Secondary Filtering selection:

Use Class:

F1(a)	9 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:

1,001 to 5,000	2 days
5,001 to 10,000	1 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
50,001 to 100,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	2 days
125,001 to 250,000	3 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	7 days
1.1 to 1.5	2 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	9 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	9 days

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

LIST OF SITES relevant to selection parameters

1 BP-04-A-01 PRIMARY SCHOOL BLACKPOOL
SEVERN ROAD
BLACKPOOL
SOUTH SHORE
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of pupils: 449
Survey date: TUESDAY *27/09/16* *Survey Type: MANUAL*

2 CW-04-A-03 PRIMARY ACADEMY CORNWALL
TREVERBYN RISE
PENRYN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 440
Survey date: THURSDAY *28/03/19* *Survey Type: MANUAL*

3 NF-04-A-01 PRIMARY SCHOOL NORFOLK
CITY ROAD
NORWICH
LAKENHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 420
Survey date: WEDNESDAY *21/09/22* *Survey Type: MANUAL*

4 SM-04-A-01 PRIMARY SCHOOL SOMERSET
BRIDGWATER ROAD
NEAR TAUNTON
BATHPOOL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of pupils: 407
Survey date: THURSDAY *27/09/18* *Survey Type: MANUAL*

5 TV-04-A-01 PRIMARY SCHOOL TEES VALLEY
CLIFTON AVENUE
BILLINGHAM

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of pupils: 538
Survey date: WEDNESDAY *25/05/22* *Survey Type: MANUAL*

6 TV-04-A-02 PRIMARY SCHOOL TEES VALLEY
WOLVISTON MILL LANE
BILLINGHAM

Edge of Town
Residential Zone
Total Number of pupils: 232
Survey date: MONDAY *23/05/22* *Survey Type: MANUAL*

7 TV-04-A-03 PRIMARY SCHOOL TEES VALLEY
THE GREEN
BILLINGHAM
WOLVISTON
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of pupils: 126
Survey date: THURSDAY *26/05/22* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 WK-04-A-01 C OF E JUNIOR SCHOOL WARWICKSHIRE
PLANTAGENET DRIVE
RUGBY

Edge of Town
Residential Zone
Total Number of pupils: 420
Survey date: TUESDAY *15/11/22* *Survey Type: MANUAL*

9 WL-04-A-02 C OF E PRIMARY ACADEMY WILTSHIRE
HIGH STREET
ROWDE

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of pupils: 199
Survey date: WEDNESDAY *03/04/19* *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 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.30

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.069	9	359	0.030	9	359	0.099
08:00 - 09:00	9	359	0.324	9	359	0.276	9	359	0.600
09:00 - 10:00	9	359	0.028	9	359	0.026	9	359	0.054
10:00 - 11:00	9	359	0.013	9	359	0.011	9	359	0.024
11:00 - 12:00	9	359	0.027	9	359	0.024	9	359	0.051
12:00 - 13:00	9	359	0.023	9	359	0.022	9	359	0.045
13:00 - 14:00	9	359	0.015	9	359	0.023	9	359	0.038
14:00 - 15:00	9	359	0.047	9	359	0.041	9	359	0.088
15:00 - 16:00	9	359	0.210	9	359	0.244	9	359	0.454
16:00 - 17:00	9	359	0.063	9	359	0.099	9	359	0.162
17:00 - 18:00	8	379	0.011	8	379	0.027	8	379	0.038
18:00 - 19:00	8	379	0.007	8	379	0.008	8	379	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.837			0.831			1.668

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.*

Parameter summary

Trip rate parameter range selected:	126 - 538 (units:)
Survey date date range:	01/01/15 - 15/11/22
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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.

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TAXIS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.001	9	359	0.001	9	359	0.002
08:00 - 09:00	9	359	0.005	9	359	0.005	9	359	0.010
09:00 - 10:00	9	359	0.000	9	359	0.000	9	359	0.000
10:00 - 11:00	9	359	0.000	9	359	0.000	9	359	0.000
11:00 - 12:00	9	359	0.000	9	359	0.000	9	359	0.000
12:00 - 13:00	9	359	0.000	9	359	0.000	9	359	0.000
13:00 - 14:00	9	359	0.000	9	359	0.000	9	359	0.000
14:00 - 15:00	9	359	0.000	9	359	0.000	9	359	0.000
15:00 - 16:00	9	359	0.004	9	359	0.004	9	359	0.008
16:00 - 17:00	9	359	0.000	9	359	0.000	9	359	0.000
17:00 - 18:00	8	379	0.000	8	379	0.000	8	379	0.000
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.010			0.020

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL OGVS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.000	9	359	0.000	9	359	0.000
08:00 - 09:00	9	359	0.001	9	359	0.001	9	359	0.002
09:00 - 10:00	9	359	0.000	9	359	0.000	9	359	0.000
10:00 - 11:00	9	359	0.000	9	359	0.000	9	359	0.000
11:00 - 12:00	9	359	0.001	9	359	0.001	9	359	0.002
12:00 - 13:00	9	359	0.000	9	359	0.001	9	359	0.001
13:00 - 14:00	9	359	0.000	9	359	0.000	9	359	0.000
14:00 - 15:00	9	359	0.000	9	359	0.000	9	359	0.000
15:00 - 16:00	9	359	0.000	9	359	0.000	9	359	0.000
16:00 - 17:00	9	359	0.000	9	359	0.000	9	359	0.000
17:00 - 18:00	8	379	0.000	8	379	0.000	8	379	0.000
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.003			0.005

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL PSVS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.000	9	359	0.000	9	359	0.000
08:00 - 09:00	9	359	0.001	9	359	0.001	9	359	0.002
09:00 - 10:00	9	359	0.001	9	359	0.001	9	359	0.002
10:00 - 11:00	9	359	0.000	9	359	0.000	9	359	0.000
11:00 - 12:00	9	359	0.000	9	359	0.000	9	359	0.000
12:00 - 13:00	9	359	0.000	9	359	0.000	9	359	0.000
13:00 - 14:00	9	359	0.000	9	359	0.000	9	359	0.000
14:00 - 15:00	9	359	0.000	9	359	0.000	9	359	0.000
15:00 - 16:00	9	359	0.000	9	359	0.001	9	359	0.001
16:00 - 17:00	9	359	0.000	9	359	0.000	9	359	0.000
17:00 - 18:00	8	379	0.000	8	379	0.000	8	379	0.000
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.003			0.005

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL CYCLISTS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.003	9	359	0.000	9	359	0.003
08:00 - 09:00	9	359	0.032	9	359	0.004	9	359	0.036
09:00 - 10:00	9	359	0.000	9	359	0.000	9	359	0.000
10:00 - 11:00	9	359	0.000	9	359	0.000	9	359	0.000
11:00 - 12:00	9	359	0.000	9	359	0.001	9	359	0.001
12:00 - 13:00	9	359	0.001	9	359	0.001	9	359	0.002
13:00 - 14:00	9	359	0.001	9	359	0.000	9	359	0.001
14:00 - 15:00	9	359	0.000	9	359	0.000	9	359	0.000
15:00 - 16:00	9	359	0.002	9	359	0.028	9	359	0.030
16:00 - 17:00	9	359	0.001	9	359	0.004	9	359	0.005
17:00 - 18:00	8	379	0.002	8	379	0.002	8	379	0.004
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.040			0.082

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.095	9	359	0.020	9	359	0.115
08:00 - 09:00	9	359	0.457	9	359	0.047	9	359	0.504
09:00 - 10:00	9	359	0.032	9	359	0.017	9	359	0.049
10:00 - 11:00	9	359	0.014	9	359	0.011	9	359	0.025
11:00 - 12:00	9	359	0.022	9	359	0.022	9	359	0.044
12:00 - 13:00	9	359	0.020	9	359	0.019	9	359	0.039
13:00 - 14:00	9	359	0.014	9	359	0.027	9	359	0.041
14:00 - 15:00	9	359	0.022	9	359	0.051	9	359	0.073
15:00 - 16:00	9	359	0.037	9	359	0.331	9	359	0.368
16:00 - 17:00	9	359	0.031	9	359	0.142	9	359	0.173
17:00 - 18:00	8	379	0.009	8	379	0.038	8	379	0.047
18:00 - 19:00	8	379	0.007	8	379	0.010	8	379	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.760			0.735			1.495

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.016	9	359	0.006	9	359	0.022
08:00 - 09:00	9	359	0.562	9	359	0.168	9	359	0.730
09:00 - 10:00	9	359	0.023	9	359	0.018	9	359	0.041
10:00 - 11:00	9	359	0.003	9	359	0.013	9	359	0.016
11:00 - 12:00	9	359	0.017	9	359	0.022	9	359	0.039
12:00 - 13:00	9	359	0.021	9	359	0.021	9	359	0.042
13:00 - 14:00	9	359	0.003	9	359	0.011	9	359	0.014
14:00 - 15:00	9	359	0.067	9	359	0.047	9	359	0.114
15:00 - 16:00	9	359	0.154	9	359	0.503	9	359	0.657
16:00 - 17:00	9	359	0.021	9	359	0.070	9	359	0.091
17:00 - 18:00	8	379	0.003	8	379	0.020	8	379	0.023
18:00 - 19:00	8	379	0.002	8	379	0.004	8	379	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.892			0.903			1.795

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.006	9	359	0.000	9	359	0.006
08:00 - 09:00	9	359	0.109	9	359	0.048	9	359	0.157
09:00 - 10:00	9	359	0.004	9	359	0.003	9	359	0.007
10:00 - 11:00	9	359	0.001	9	359	0.000	9	359	0.001
11:00 - 12:00	9	359	0.005	9	359	0.004	9	359	0.009
12:00 - 13:00	9	359	0.002	9	359	0.002	9	359	0.004
13:00 - 14:00	9	359	0.000	9	359	0.002	9	359	0.002
14:00 - 15:00	9	359	0.010	9	359	0.002	9	359	0.012
15:00 - 16:00	9	359	0.036	9	359	0.093	9	359	0.129
16:00 - 17:00	9	359	0.005	9	359	0.022	9	359	0.027
17:00 - 18:00	8	379	0.000	8	379	0.004	8	379	0.004
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.178			0.180			0.358

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.002	9	359	0.000	9	359	0.002
08:00 - 09:00	9	359	0.005	9	359	0.003	9	359	0.008
09:00 - 10:00	9	359	0.001	9	359	0.000	9	359	0.001
10:00 - 11:00	9	359	0.000	9	359	0.000	9	359	0.000
11:00 - 12:00	9	359	0.000	9	359	0.000	9	359	0.000
12:00 - 13:00	9	359	0.000	9	359	0.000	9	359	0.000
13:00 - 14:00	9	359	0.000	9	359	0.000	9	359	0.000
14:00 - 15:00	9	359	0.000	9	359	0.000	9	359	0.000
15:00 - 16:00	9	359	0.002	9	359	0.008	9	359	0.010
16:00 - 17:00	9	359	0.002	9	359	0.001	9	359	0.003
17:00 - 18:00	8	379	0.000	8	379	0.001	8	379	0.001
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.013			0.025

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.001	9	359	0.000	9	359	0.001
08:00 - 09:00	9	359	0.004	9	359	0.009	9	359	0.013
09:00 - 10:00	9	359	0.000	9	359	0.024	9	359	0.024
10:00 - 11:00	9	359	0.009	9	359	0.000	9	359	0.009
11:00 - 12:00	9	359	0.003	9	359	0.000	9	359	0.003
12:00 - 13:00	9	359	0.000	9	359	0.000	9	359	0.000
13:00 - 14:00	9	359	0.000	9	359	0.000	9	359	0.000
14:00 - 15:00	9	359	0.000	9	359	0.000	9	359	0.000
15:00 - 16:00	9	359	0.020	9	359	0.004	9	359	0.024
16:00 - 17:00	9	359	0.000	9	359	0.002	9	359	0.002
17:00 - 18:00	8	379	0.000	8	379	0.000	8	379	0.000
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.039			0.076

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.009	9	359	0.000	9	359	0.009
08:00 - 09:00	9	359	0.118	9	359	0.061	9	359	0.179
09:00 - 10:00	9	359	0.006	9	359	0.027	9	359	0.033
10:00 - 11:00	9	359	0.010	9	359	0.000	9	359	0.010
11:00 - 12:00	9	359	0.009	9	359	0.004	9	359	0.013
12:00 - 13:00	9	359	0.002	9	359	0.002	9	359	0.004
13:00 - 14:00	9	359	0.000	9	359	0.002	9	359	0.002
14:00 - 15:00	9	359	0.010	9	359	0.002	9	359	0.012
15:00 - 16:00	9	359	0.059	9	359	0.105	9	359	0.164
16:00 - 17:00	9	359	0.007	9	359	0.025	9	359	0.032
17:00 - 18:00	8	379	0.000	8	379	0.005	8	379	0.005
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.230			0.233			0.463

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.30

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.122	9	359	0.026	9	359	0.148
08:00 - 09:00	9	359	1.168	9	359	0.279	9	359	1.447
09:00 - 10:00	9	359	0.060	9	359	0.062	9	359	0.122
10:00 - 11:00	9	359	0.027	9	359	0.024	9	359	0.051
11:00 - 12:00	9	359	0.048	9	359	0.049	9	359	0.097
12:00 - 13:00	9	359	0.044	9	359	0.043	9	359	0.087
13:00 - 14:00	9	359	0.018	9	359	0.040	9	359	0.058
14:00 - 15:00	9	359	0.099	9	359	0.100	9	359	0.199
15:00 - 16:00	9	359	0.252	9	359	0.966	9	359	1.218
16:00 - 17:00	9	359	0.060	9	359	0.240	9	359	0.300
17:00 - 18:00	8	379	0.013	8	379	0.065	8	379	0.078
18:00 - 19:00	8	379	0.008	8	379	0.014	8	379	0.022
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.919			1.908			3.827

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL CARS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.066	9	359	0.028	9	359	0.094
08:00 - 09:00	9	359	0.313	9	359	0.265	9	359	0.578
09:00 - 10:00	9	359	0.024	9	359	0.023	9	359	0.047
10:00 - 11:00	9	359	0.011	9	359	0.009	9	359	0.020
11:00 - 12:00	9	359	0.024	9	359	0.020	9	359	0.044
12:00 - 13:00	9	359	0.021	9	359	0.019	9	359	0.040
13:00 - 14:00	9	359	0.010	9	359	0.021	9	359	0.031
14:00 - 15:00	9	359	0.045	9	359	0.038	9	359	0.083
15:00 - 16:00	9	359	0.204	9	359	0.238	9	359	0.442
16:00 - 17:00	9	359	0.061	9	359	0.098	9	359	0.159
17:00 - 18:00	8	379	0.011	8	379	0.026	8	379	0.037
18:00 - 19:00	8	379	0.007	8	379	0.008	8	379	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.797			0.793			1.590

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL LGVS
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.002	9	359	0.002	9	359	0.004
08:00 - 09:00	9	359	0.004	9	359	0.004	9	359	0.008
09:00 - 10:00	9	359	0.002	9	359	0.002	9	359	0.004
10:00 - 11:00	9	359	0.002	9	359	0.002	9	359	0.004
11:00 - 12:00	9	359	0.002	9	359	0.003	9	359	0.005
12:00 - 13:00	9	359	0.001	9	359	0.002	9	359	0.003
13:00 - 14:00	9	359	0.005	9	359	0.002	9	359	0.007
14:00 - 15:00	9	359	0.001	9	359	0.003	9	359	0.004
15:00 - 16:00	9	359	0.002	9	359	0.001	9	359	0.003
16:00 - 17:00	9	359	0.001	9	359	0.001	9	359	0.002
17:00 - 18:00	8	379	0.000	8	379	0.001	8	379	0.001
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.022			0.023			0.045

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.*

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 PUPILS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	9	359	0.000	9	359	0.000	9	359	0.000
08:00 - 09:00	9	359	0.000	9	359	0.000	9	359	0.000
09:00 - 10:00	9	359	0.000	9	359	0.000	9	359	0.000
10:00 - 11:00	9	359	0.000	9	359	0.000	9	359	0.000
11:00 - 12:00	9	359	0.000	9	359	0.000	9	359	0.000
12:00 - 13:00	9	359	0.000	9	359	0.000	9	359	0.000
13:00 - 14:00	9	359	0.000	9	359	0.000	9	359	0.000
14:00 - 15:00	9	359	0.000	9	359	0.000	9	359	0.000
15:00 - 16:00	9	359	0.000	9	359	0.000	9	359	0.000
16:00 - 17:00	9	359	0.000	9	359	0.000	9	359	0.000
17:00 - 18:00	8	379	0.000	8	379	0.000	8	379	0.000
18:00 - 19:00	8	379	0.000	8	379	0.000	8	379	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

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.*

Appendix S

Croudace Homes Ltd Education Briefing Note

Education Briefing Note

Land at Officers' Meadow, Shenfield, Brentwood, Essex

Croudace Homes Ltd

Draft v7: September 2023

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Version Control

Version	Main Changes	Date
Draft v1	First Draft	29 October 2020
Draft v2	Revision of education & demographic data	28 March 2022
Draft v3	Header page amendments	23 May 2022
Draft v4	Review dwelling mix and school data	24 January 2023
Draft v5	Minor amends	25 May 2023
Draft v6	Review dwelling mix and numbers	9 August 2023
Draft v7	Final amendments	September 2023

Introduction

1.1 This report has been produced to support the development, by Croudace Homes Ltd, of land at Officers' Meadow, Shenfield, Brentwood, Essex. The site forms part of the allocation R03 – Land North of Shenfield in the Brentwood Local Plan 2016-33. The particular focus of the report will be the potential impact of the site on local education facilities and a review of how best the developer may meet any identified needs.

1.2 Under Policy R03, the site is anticipated to provide for approximately 825 new dwellings together with a new primary school and early years provision, a residential care home and 2ha for employment purposes. Recent masterplanning exercises, however, suggest that the more likely yield will be closer to 700 dwellings due to flood mitigation, as set out in the Land North of Shenfield Masterplan Development Principles Document. **For the purposes of this report, all calculations will be based on the lower figure of 700 dwellings.**

1.3 This is an historic report that has been updated to support the Croudace Homes planning application for 344 dwellings. Calculations based on ECC's pupil product ratios indicate that the development will yield the following pupils:

- Early years – 24.6
- Primary – 81.9
- Secondary – 54.6
- Post-16 – 11.5

1.4 As things stand, provision for these pupils will need to be made via a S106 agreement. At 2020 levels the approximate costs are shown as follows (prior to indexation and the addition of 10% carbon uplift):

- Early Years - £741,124
- Primary - £1,679,605
- Secondary - £1,298,115
- Post-16 - £275,563
- Total - £3,994,407

1.5 However, with the provision of a site for a new 2FE (420 place) school within the development at approximately 2.1ha, only 19.5% of this should be transferred free of charge by this development, with other local developers funding the remainder.

1.6 The site sits on the north-eastern edge of Brentwood, in between the A1023 / A12 and the railway line.

1.7 Brentwood Borough Council (BBC or the "Borough") is the planning authority, while the education authority for the area is Essex County Council (ECC).

1.8 BBC has a recently adopted Local Plan covering the period 2016-33 (adopted 23 March 2022). The Council does not have an adopted CIL Scheme at this stage, although consultation on proposals was initiated in October 2016, no further progress appears to have been made.

1.9 ECC has a published methodology on the seeking of relevant developer contributions. This document, "The Essex County Council Developers' Guide to Infrastructure Contributions) was most recently revised in 2020.

1.10 In August 2023 the Department for Education (DfE) published revised guidance entitled "Securing developer contributions for education". This guidance draws together current planning and education legislation to provide education authorities with the information upon which to base their approach to seeking education contributions. It is now widely referred to by education authorities and will form part of the basis of the approach within this report.

1.11 This note will look carefully at the trends in dwelling delivery, of births and the age of the population in the area over the last decade. The history of dwelling delivery identifies the proportion of new households, which are often characterised by a younger population. The trend in birth numbers, too, is often linked to dwelling delivery and if rising, to younger populations. Births also indicate the future demand for school places. The trend in the median age of the population is an indicator of the nature of the area and how stable it is. The assumption is that the population should reflect national norms, which includes its ageing. When the balance of dwelling delivery does not maintain the median age of the population at around the national norm, there are implications for social infrastructure. Finally, trends in overall current and future population are assessed, together with the impact of household movement into and out of the Council area.

1.12 Existing local schools are identified and mapped, with Google Earth providing the approximate walking distances from the proposed development. The relevant schools, having been selected by distance are then described for capacity, numbers of pupils by age and occupancy levels.

1.13 The data used throughout this report is the most up to date available within the public realm. It should be noted, however, that some data sources are updated more frequently than others and due to this it is not possible in all circumstances to cover the same time, geographical and data sequences. In addition, Ward boundaries are occasionally changed and, again, this means that comparable data is not always available.

Statutory and Planning Policy Matters

2.1 The Local Planning Authority is required to determine planning applications in accordance with the Development Plan unless material considerations indicate otherwise.

2.2 **Planning law** prescribes circumstances where local planning authorities are required to consult specified bodies (known as statutory consultees) prior to a decision being made on an application. In two tier authorities, the County Council is a Statutory Consultee as a Planning Authority[1] and as a Highways Authority[2], there is no blanket inclusion of other Council functions.

2.3 The Local Planning Authority consults with the Education Authority as a Non-Statutory Consultee[3].

2.4 **Education law** requires the Education Authority to secure sufficient schools for its area. The statutory duties of an education authority are set out in the Education Act 1996 (as amended). In respect of schools, and inter alia school places, section 14 applies. Section 14 is supplemented by Regulation 3: The Education (Areas to which Pupils and Students Belong) Regulations 1996[4]. Regulation 3 says that a person shall be treated as belonging to an area of the education authority in which he is normally resident or, where he has no ordinary residence, the area of the authority in which he is for the time being resident.

2.5 Regulation 3 gives a voice to the various particularities in the superceded education acts from 1870 through to 1996.

[1] Para 7 of Schedule 1 to the town & country Planning Act 1990, Article 21 Development Management Procedure Order and Schedule 4(b)(c) Development Management Procedure Order.
[2] Schedule 4(g)(h)(i) Development Management Procedure Order
[3] Statement of Community Involvement (Feb 2019) appendices 2 & 3 simply says Suffolk County Council (all relevant departments).
[4] SI 1996 No. 615

2.6 The duty under the Act is not an absolute duty. But the circumstances on the day or a state of emergency have been determined by the Courts to be the only satisfactory excuse. [5]

2.7 Despite the s14 duty being described as thus, the statutory duty of the education authority to achieve sufficiency of provision is not fettered in any way. Thus, whilst the education authority sits outside of the town planning system, not being a Statutory Consultee, it is a Non-Statutory Consultee because (a) it is on a list created by this LPA and (b) it might be affected by its decisions.

2.8 The coverage of the duty imposed by s14 is greater than the needs of its general population and those attributed to permitted new housing. This includes all manner of transient and future populations, however unexpected. The education authority must plan for and secure capacity to accommodate the decisions of the town planning system and the clearly stated priorities for housing growth. It must presume the possibility of planning permission being granted. There are funding mechanisms in place for the impact on the school infrastructure of new housing in areas with a CIL charging regime set at zero or sites where the LPA agrees that viability matters prevent funding by new development. There is also a funding pot where developer funding is delayed.[6]

2.9 It is clear that the duty to secure sufficient provision (s14) is very wide ranging and all encompassing. The bar is set extremely high and whatever the circumstances, were the LPA to grant permission, the education authority is compelled by statute, if there is no or insufficient existing surplus, to secure sufficient additional provision.

2.10 The Education Act (s497 EA96) contemplates default or failure by an education authority to discharge any duty under education act and the Secretary of State if satisfied of the failure can issue instructions or step in.

2.11 By virtue of the fallback provisions on grounds of viability (see paragraph 2.8 above) and the priority given to the delivery of new housing by the planning system, it is unlikely that a permission without the requested developer funding (S106/CIL) is a material consideration. To argue otherwise gives a non-statutory consultee a veto.

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[5] See *Meade v London Borough* Haringey [1979] 2 All ER 1016 at 1027, *R v Liverpool City Council, ex p Ferguson* [1985] IRLR at 50 and *R v Secretary of State for Education and Science, ex p Avon County Council* (No 2) (1990) 88 LGR 737n, [1990] COD 349.

[6] Joint letter from DCLG & DfE to Chief Executives – Supporting housing development to increase housing supply 09_02_2016

Site Context

3.1 The site is allocated for residential-led development under policy R03 (Land North of Shenfield) of the BLP, however, it is **unlikely to yield more than 700 dwellings.**

3.2 The location of the site is shown in Map 1:

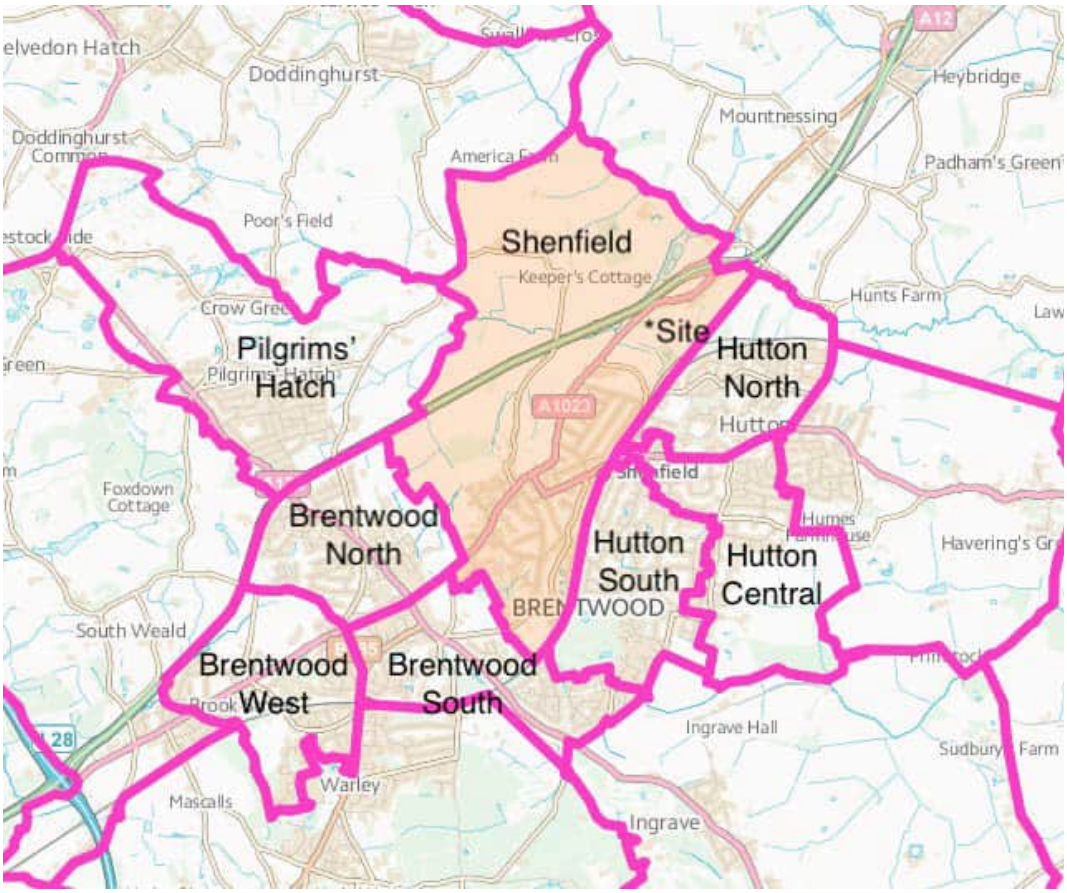
Map 1: Site Location Plan – boundaries approximate

3.3 While the dwelling mix has not been fully established for the allocation as a whole at this stage, the potential mix for the Croudace element of 344 dwellings is known, and is shown in Table 1, scaled up to 700 dwellings.

	Flats		Houses			
	1-bed	2-bed	2-bed	3-bed	4-bed+	Total
Percentage	15.7%	9.9%	23.3%	25.3%	25.9%	100%
344 dwellings	54	34	80	87	89	344
700 dwellings	110	69	163	177	181	700

Table 1: Potential mix (approximate)

3.4 The site sits within the Ward of Shenfield, which covers the northern extent of the of Shenfield and Hutton, both of which are north east of Brentwood itself. The development is proposed as a Sustainable Urban Extension to the town of Brentwood and on this basis a wider selection of Wards covering the whole of the town's urban area will be reviewed, to better reflect the development's identity as an urban extension. The site location and the Wards are shown in Map 2:



Map 2: Brentwood Wards 2020 (OS Election Maps)

3.5 Ward boundaries changed in 2002-3 and consequently, the historic ward data is limited for some elements.

Local Demography

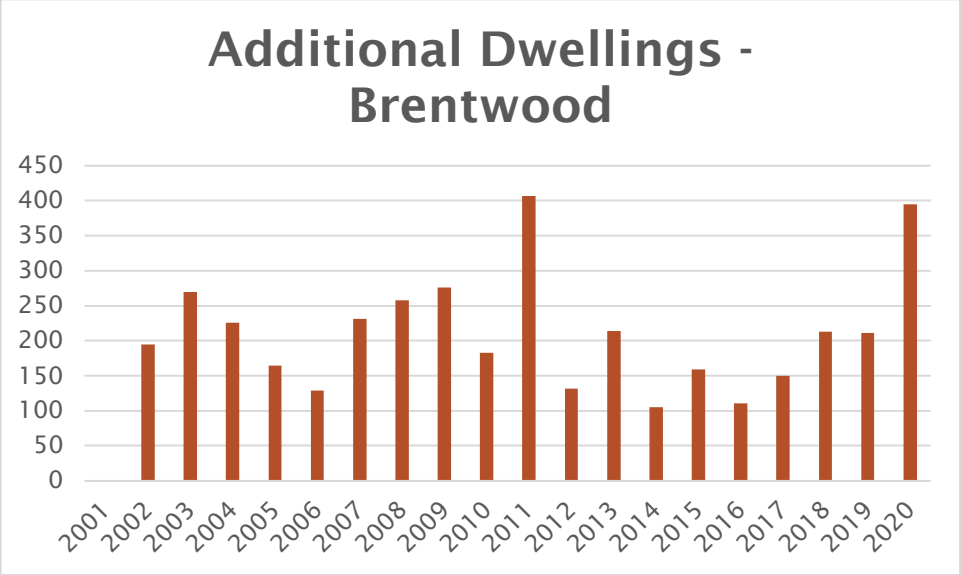
Dwellings

4.1 By 2020 the Borough comprised 33,757 dwellings (Table 2). There was an increase of 4,030 dwellings in the Borough over the 20-year period[7] shown. This is a total increase of 13.65% - an average increase of 237 dwellings (or 0.71%) per annum.

Dwellings	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Change
Brentwood	29727	29922	30192	30418	30583	30712	30943	31201	31477	31660	32067	32199	32413	32518	32677	32788	32938	33151	33362	33757	4030
Change		195	270	226	165	129	231	258	276	183	407	132	214	105	159	111	150	213	211	395	4030

Table 2: Occupied Dwelling numbers – Borough

4.2 The numbers of additional dwellings per annum since 2001 are shown in Graph 1. This shows that the number of additional dwellings per annum was, on average, higher in the early part of the period (at approximately 215 per annum). In 2011 it reached a peak and following this a lower average number of additional dwellings arose through to 2020 (at an average of 188 per annum).



Graph 1: Additional dwellings per annum - Borough

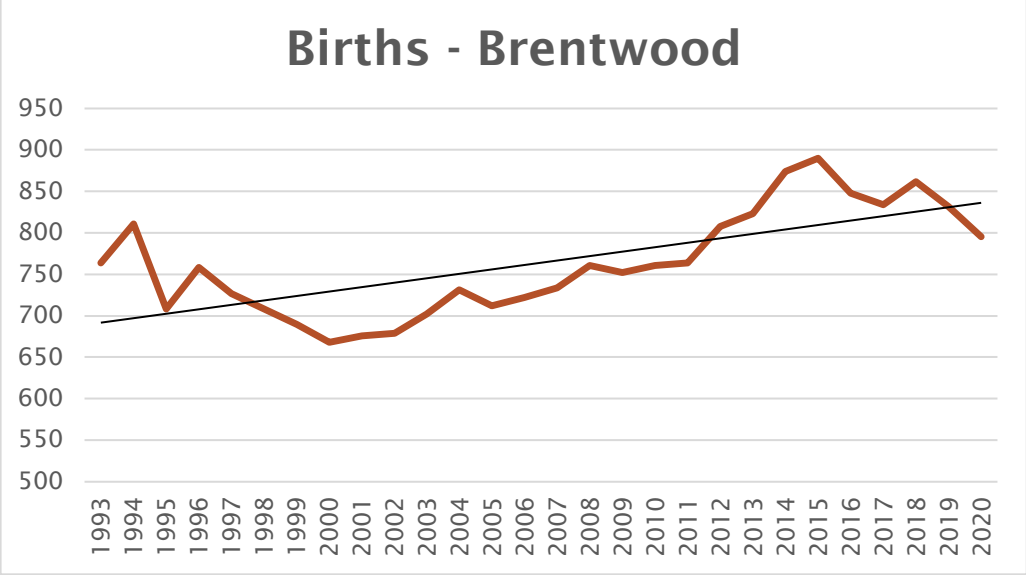
4.3 Across the whole period the average number of additional dwellings was 237 per annum. This is a little short of the 300 per annum aimed at within the BLP

[7]MCHLG 2019

up to 2023-24 and significantly short of the 400 dwellings per annum to 2029-30 and the 984 per annum from then to 2032-33.

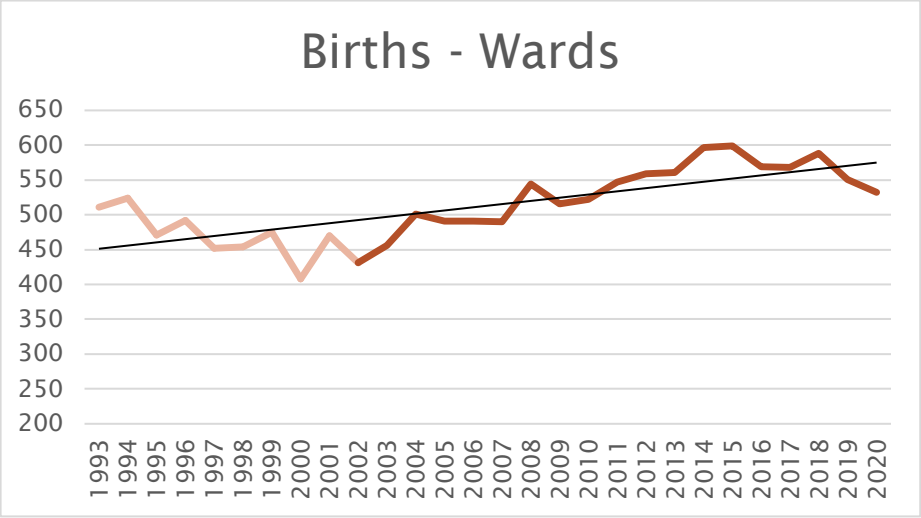
Births

5.1 Graph 2 shows the numbers of births in the Borough between 1993 and 2019. There has been an average of 764 births per year across the period. The number of births per annum started the period at a peak of 811 in 1994. From there numbers fell through to 2000, at which point they have increased steadily through to 2015 (890 births). Since 2015 numbers have fallen and in 2020 fell to below 800 per annum. The overall trend through the period has been one of rising numbers of births within the Borough.



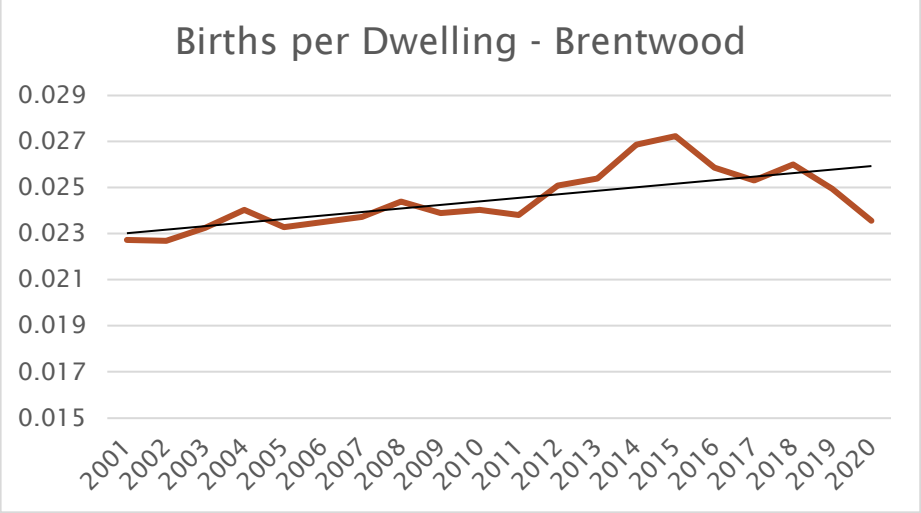
Graph 2: Births – Borough

5.2 The picture within the Brentwood town Wards shows a similar picture of rising birth numbers for the later part of the period (2002 onwards). Prior to this, as with the Borough as a whole birth numbers fell by approximately 120 between 1993 and 2002 (Graph 3). The Ward structure changed in 2003 with the introduction of Hutton Central, this change is shown as a change of colour in the data-line, although the area covered remained the same. Nonetheless, the children born at the peak of both borough and ward births are now aged between four and eight and will be working their way through the early years of primary school.



Graph 3 – Births in Brentwood Wards

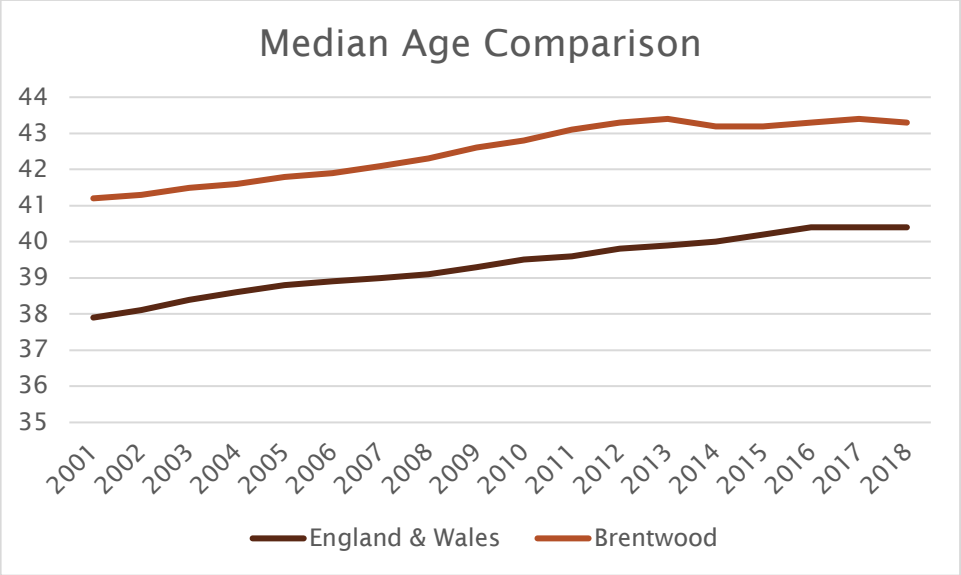
5.3 A review of births per dwelling (Graph 4) within the Borough indicates that the number of births per dwelling rose consistently through the period to 2015. Following that point, however, numbers have started to fall significantly and are now close to the level seen at the beginning of the period. This suggests that fewer young children are likely to be entering the primary school system in the next few years.



Graph 4: Births per dwelling - Borough

Age

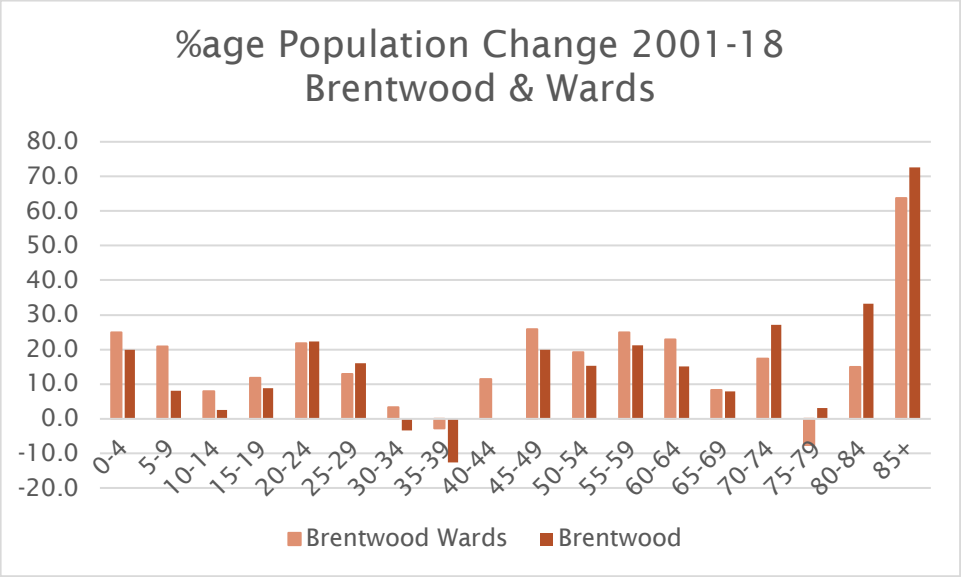
6.1 The median age within the Borough started the period at 41.2 years old, 3.3 years above the national average. It has risen throughout the period, ending at 43.3 years old – 2.9 above the national average. As such it has largely mirrored the rate of aging of the population nationally but has remained above average throughout the period (Graph 5).



Graph 5: Median Age Comparison – Borough & National

6.2 The percentage change in age profile of residents within the town Wards and the whole Borough by five-year age-groups, between 2001 and 2018 are shown in Graph 6.

6.3 This shows that there was significant growth in residents of 85 years and above – by more than 70% in the Borough and just over 60% in the Wards. Outside of that, he majority of age groups increased by between 10% and 20% - with similar trends showing between the Borough and Wards. There was a small decline in 35-39 year-olds and 30-34 year-olds (Borough only) and of 75-59 years-olds (Wards only). However, the number of children un 14 years grew, with the youngest age-group showing the largest change – just over 20% in both Borough and Wards. The Wards showed a higher increase of school-aged children than the Borough as a whole.

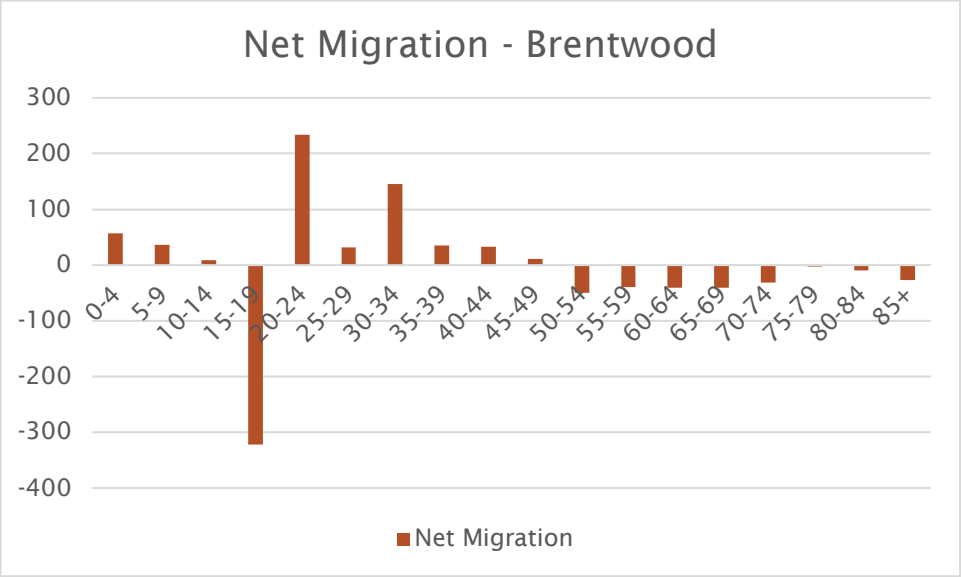


Graph 6: Age profile comparison – Borough and Wards

6.4 The increased numbers of 0-4 year-olds will continue to move into the primary school system over the next two years.

Migration

7.1 ONS data on moves undertaken in 2020 shows that the Borough experienced a small level net inward migration overall in that year. There was a total of 8,203 moves into and out of the Borough with, 4,116 individuals moving out of the Borough and 4,087 moving in. This resulted in a total of 29 more moving into the Borough than moved out (a difference of just 2.1% of total moves). The detail is shown in Graph 7 and Table 3.



Graph 7: Impact of Net Migration Into and Out of the Borough - 2020

Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Totals
Into Brentwood	278	178	134	119	747	593	595	385	249	171	150	133	89	64	58	45	43	85	4116
Out of Brentwood	221	142	125	441	513	561	450	350	216	160	200	172	130	105	89	48	52	112	4087
Net Migration	57	36	9	-322	234	32	145	35	33	11	-50	-39	-41	-41	-31	-3	-9	-27	29

Table 3: Impact of Net Migration Into and Out of the Borough - 2020

7.2 The data shows that in 2020, the largest group moving out of the Borough were those between 15 and 19 years old, with 322 (net) leaving. However, this trend reversed in the next year group (20-24 years old) with 234 (net) moving into the Borough. This suggests many young people moved out to attend university but after that they either returned home to seek work or moved in to take up work in the area.

7.3 For the remainder of the year groups, the trend was for clear net inward migration in the year groups up to 45-49 but after that age, the trend was for outward net migration in small number of those age 50+. This suggests that Brentwood appealed to younger workers and families but that more individuals moved away as they matured. It must be borne in mind that 2020 saw the height of Covid "lock down" measures and the number of moves is lower than evidenced for 2019.

7.4 The Census data at Ward level for 2011 provides information as to where individuals moved from when moving into dwellings within the Wards within Brentwood Borough (Table 4). A total of 46.1% of moves into dwellings within the

Wards were either within the Ward itself or from within the Borough. Of the remainder, 46.3% came from elsewhere in the UK while 7.7% moved in from abroad.

Area	Non-Movers	Total Moves into Dwellings	Moved within Ward	Moved into Ward from Borough	Moved into Ward from UK	Moved into Ward from abroad
All Brentwood Wards	72,372	7,371	878	2,517	3,412	564
% of Movers		**100%**	**11.9%**	**34.1%**	**46.3%**	**7.7%**

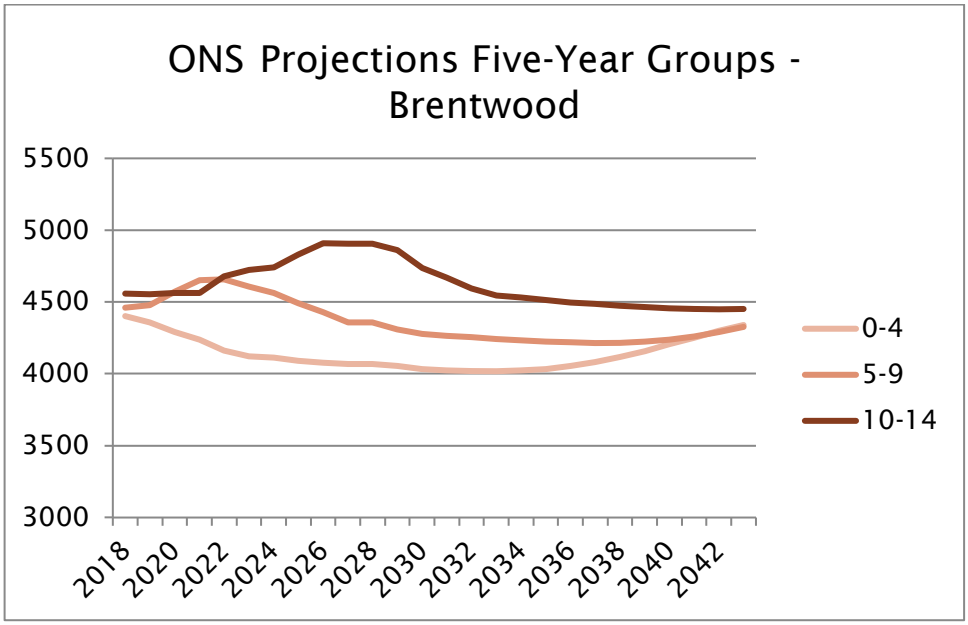
Table 4: Ward moves data 2011 (Census)

7.5 The implications of this are that 46% of individuals moving into housing within Brentwood Borough already lived in the Borough, and nearly 12% moved within their existing Ward. Their children would already either have had a school place and would not have needed to be additionally provided for, or they would already have been included within forecasts, having been registered with a local GP as a baby. While this does not mean that a school place would have been available in the immediate locality, at the very approximately 12% of individuals who moved did so within their home Ward, suggesting that any children associated with those households would have remained at the school they were already attending or forecast to attend.

Longer Term Population Projections

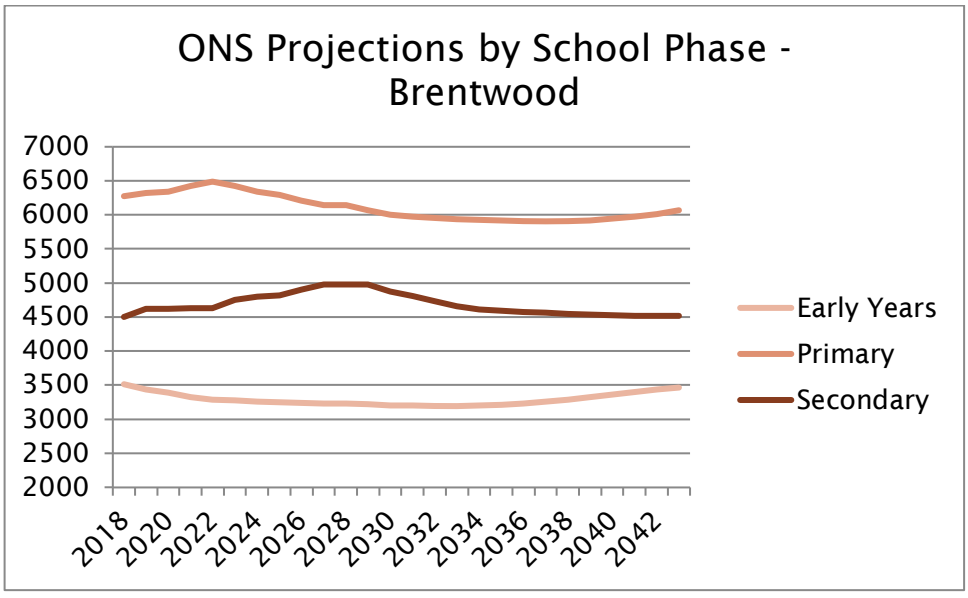
8.1 ONS Projections for longer-term population changes based on 2018 show that the population of the Borough is projected to grow from 76,550 in 2018 to 78,573 by 2043 – an increase of approximately 2.64%.

8.2 As the current projections stand, however, the number of children as a whole is expected to decrease. There are, however, variations between the cohorts and across time, and the trends are shown in Graph 8 for five-year grouped cohorts. It is clear from this that a peak of children is moving through the system, leaving the youngest cohort and aging through the 5-9 years-old and then moving into the 10-14 year-old cohort.



Graph 8: ONS Child Projections in five-year cohorts – Brentwood

8.3 When the five-year cohorts are converted to pre-school, primary and secondary groups (excluding sixth form), the following projections are revealed (Graph 9):



Graph 9: ONS Projections by School phase - Brentwood

8.4 As with the five-year age groups, the primary and secondary phases are projected to see increases prior to numbers falling and then stablising.

8.5 When taken from 2022 to 2043 the following changes are projected:

- Pre-school – increase of 186
- Primary – decrease of 425
- Secondary – decrease 118

8.6 It is clear that pupil numbers have expanded over the last eight to 10 years and that a significant "bulge" of children is working its way through the system. It is now moving into the secondary school phase and will take a number of years to work through. After 2026, however, the pressure should start to reduce for that cohort. For the primary cohort, numbers are still expected to rise a little to 2021 prior to a levelling off and then a gentle rise towards the end of the period. The pre-school cohort is anticipated to fall and level off at the beginning of the period but then start to increase from around 2034.

8.7 A review of the 2019 ONS Mid-Year Estimates (MYE) for the nine Brentwood town Wards indicates that the primary figures are in the process of reducing (Table 5), in line with the ONS Projections. These estimates are some 200 lower than the equivalent estimates from 2019 but with a similar indicated reduction over the next few years.

Age	Age0	Age1	Age2	Age3	Age4	Age5	Age6	Age7	Age8	Age9	Age10
Child Population	523	542	566	564	578	595	559	608	594	554	546
2020								4034			
2021							4052				
2022						4064					
2023					4012						
2024				3927							

Table 5: ONS MYE 2019 for Brentwood town Wards – showing potential future local trends

Demographic Summary

8.8 In summary:

- Additional housing within the Borough has fluctuated through the last two decades with fewer additional dwellings on average since 2001. Figures do not appear to have reached the levels currently set for delivery in the DLP.

- Births across the Borough and within the local Wards fell between 1993 and 2000 but have risen consistently since. Numbers of births are currently in decline.
- Median age – the median age of residents within the Borough has risen through the period, staying approximately three years above the average for England and Wales.
- Migration – this showed a net inward migration for the Borough in 2020 but only by a very small margin. The majority of inward migration being of younger adults and their children, with net outward migration of those over 40 years. Approximately 46% of all house moves in 2011 occurred within the Borough with 11.9% of movers staying within the Ward they were already living in.
- Population – The population as a whole is projected to increase through to 2043, but only by approximately 2.64%. The child population, however, is projected to decrease by a small margin. The different school cohorts show differing timescales of change, with an increase in secondary-age child numbers moving through the system. However, in line with the aging of the population, the Mid Year Estimates suggest that some falls in the primary-age population will occur in the medium term before starting to rise again towards 2040.

Child Yield and Cost

9.1 Essex County Council has a "Developers' Guide to Infrastructure Contributions" document that was revised in 2020. This lays out the methodology currently in use by ECC. With no CIL Scheme yet in place within the Brentwood Borough, the ECC approach remains the default methodology in the area.

9.2 Table 6 shows the number of pupils calculated per dwelling by the methodology in Essex. ECC excludes 1-bedroom properties and those designated for either students or the elderly, as being unlikely to produce school-age children.

	Pupils per Dwelling		
School Age	1-bed Dwellings	Houses (2-bed+)	Flats (2-bed+)
Early Years	0	0.09	0.045
Primary	0	0.3	0.15
Secondary	0	0.2	0.1
Post-16	0.01	0.04	0.02

Table 6: Pupil Product Ratios

9.3 ECC expects to maintain an operating surplus of 5% in its schools. This is somewhat higher than the 2% (per year group) currently in use by the DfE when considering Basic Need Capital Grants.

9.4 The costs were updated in 2020 and are shown in Table 7. Indexation from that point will need to be added in due course. These costs mirror the DfE recommended "Scorecard" costs and are considered reasonable.

9.5 The calculation of pupils arising from the proposed development, on the basis of 700 dwellings with the proposed mix applied as per Table 1, and subsequent potential costs for the smaller Croudace element are shown in Table 7. Should the number / type of dwellings or the cost per place change then these figures will change.

School Phase	Total Pupil Yield **700**	Pupil Yield Croudace Site **344**	Cost per Place 2020	Cost for Croudace (**344**)
Early Years (new build)	50.0	24.6	£30,127	£ 741,124
Primary (new build)	166.7	81.9	£20,508	£1,679,605
Secondary (expansion)	111.1	54.6	£23,775	£1,298,115
Post-16 (expansion)	23.3	11.5	£23,962	£ 275,563
Total				**£3,994,407**

Table 7: Pupils arising from development (approx) – proposed mix

9.8 For secondary and post-16, the ECC "expansion" cost per place has been used, while the figure for primary is assumed to be a "new build" cost. These costs will need to be indexed from a point in late 2020 (4Q2020).

9.9 The total figure of approximately 162 primary age pupils from the whole site represents approximately 0.77FE of a primary school.

9.10 If the mix varies from that shown in Table 1, these figures will, necessarily, change – and will rise if fewer 1-bedroom dwellings and flats are provided.

Schools

10.1 In our assessments, we take into account all primary-age schools within a two-mile and secondary-age schools within a three-mile walking distance of the development. These are the distances prescribed, beyond which local authorities are required to fund transport where the nearest available school is further away. The actual measurement used, when the assessment about transport is made, is very precise, i.e. front-door to front-door. In advance of a detailed and fixed development layout, we have used the approximate distance from the nearest site boundary to make the assessment. Once the site has been completed some of these schools may not be eligible for some pupils. In addition, walking routes via foot and cycle paths have been included.

10.2 The Authority is required to make annual pupil forecasts to the Department for Education (DfE) on a year-of-age basis by 'school planning area' or group. In doing this it identifies each school in the group[8] and its capacity. The forecasts cover the period for which birth data is available. Pupils covered by Section 106 agreements or likely to come forward from housing, which does not as yet have permission, may be included within the figures. For primary school age pupils, this runs to 2025-26 and for secondary 2027-28. These are known as the School Capacity ("**SCAP**") returns, and they form the basis on which the Government allocates its funding for additional school places that are its responsibility to provide.

Primary Schools

11.1 There are five primary schools within a two-mile walk of the southern end of the proposed development. This reduces to two schools when measured from the northern end.

11.2 The location of all five schools are shown in Map 3. Once the development is complete it is possible that the measurements will change and that one or more of these schools will not fall within a two-mile distance on foot, due to the final position of access roads and footways.

[8] Clusters (school planning areas) are determined by each authority, with no consistency necessarily with other forms of planning area or across different authorities.

Map 3: Primary schools within a two-mile walking distance from southern end of site

11.3 The capacities and numbers on roll of these schools are shown in Table 8.

School	Postcode	Grade	Distance N	Distance S	PA	CAP	PAN Yr R	Yr 3	NoR	Yr R	yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
Shenfield St Mary's CEPS	CM15 9AL	1	1.69	1.29	8810311	420	60	60	421	60	60	60	60	60	61	60
Long Ridings PS	CM13 1DU	2	1.29	0.33	8810311	420	60	60	402	53	59	60	55	56	58	61
St Jospeh the Worker Catholic PS	CM13 1BJ	1	2.07	1.11	8810311	210	30	30	208	30	30	30	30	26	30	32
Hutton All Saints CEPS	CM13 1JW	2	2.14	1.38	8810311	231	33	33	227	28	33	33	33	33	33	34
Willowbrook PS	CM13 2TU	2	2.13	1.22	8810311	210	30	30	214	30	32	32	30	30	30	30
Totals						1491	213	213	1472	201	214	215	208	205	212	217
Surplus									19	12	-1	-2	5	8	1	-4
Occupancy									98.7	94.4	100.5	100.9	97.7	96.2	99.5	101.9

Table 8: Primary Schools Number on Roll Jan 2023
NoR = Number of pupils on Roll, PAN = Published Admission Number, CAP = Capacity

11.4 The numbers on roll at January 2022 show that these schools were functionally full when pupil numbers are compared with total capacity. There were four year-groups with a small surplus (19 pupils in total) with the remainder either fully subscribed or over-subscribed, producing a surplus across the seven year groups, of just six pupils (1.3%).

11.5 It is clear that with a potential yield of 167 pupils from the whole allocated site, there will not be sufficient space in these schools to accommodate the additional pupils.

11.6 The five schools are grouped together with a further 11, for forecasting and planning purposes. The most recently published SCAP forecast for the group is shown in Table 9:

Year	Yr R	Yr1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Total
May 2022 Actual	677	671	704	669	696	680	682	**4779**
2022-23 F/c	640	676	677	707	671	702	687	**4760**
2023-24 F/c	666	647	683	684	714	678	709	**4781**
2024-25 F/c	700	681	662	698	699	729	693	**4862**
2025-26 F/c	695	714	695	676	712	713	743	**4948**
2026-27 F/c	706	708	727	708	689	725	726	**4989**
PAN	**723**	**723**	**723**	**728**	**728**	**728**	**728**	**5124**

Table 9: Brentwood Primary – SCAP Forecast 2022

11.7 The forecast shows that pupil numbers for this group are anticipated to rise by approximately 210 through the period to 2026-27, leaving 135 surplus places (2.6% of the total capacity available). The spare capacity forecast to remain is largely due to the recent expansion of Warley PS, to the south of Brentwood, by 210 places. The forecast figures for 2025-26 are slightly lower than the forecast for the same year published in 2021.

11.8 Nonetheless, the need for some new provision to meet the needs arising from the Shenfield SUE within the near future, remains valid. It is clear, however, that the need produced by the development itself calculates at less than 1FE and the pupil numbers arising should be set against any existing and forecast surplus places.

Potential Expansion of Existing Schools

12.1 A desktop study of the five schools closest to the proposed development indicates that four are occupying sites appropriate to their capacity and roll. Only one appears to have capacity for expansion, the one closest to the development – Long Ridings Primary School. This school appears to have a site of approximately 3.1ha, although Title Deeds are not available to enable a full check to be carried out.

12.2 The site measurement includes the occupation of Poppets Nursery, an independently operated early years setting which occupies approximately 0.1ha. This leaves a total site of 3ha for the school. Map 4 shows the approximate boundaries of the school:

Map 4: Long Ridings Primary School site boundary (approx)

12.3 This size of site is within the DfE recommended scale for a school of between 657 and 841 pupils. That is the equivalent of between 3FE and 4FE (630 to 840 pupils) and suggests that the school (as a 2FE establishment) is capable of expansion by at least 1FE and potentially 2FE – sufficient to meet the needs of the proposed development.

12.4 While it is accepted that a new school is proposed on the development site under Policy R03 of the BLP and is likely to form a vital element of social infrastructure, it should be borne in mind that the most local existing primary

school could potentially meet the needs of the children calculated to arise on the development – should it need to do so.

12.5 it is recommended that ECC be approached to understand its position on the expansion of Long Ridings CP School.

Provision of Primary School Site

13.1 Within site Allocation R03, it is understood that the four parties to the consortium intend to enter agreement in order to equalize the value of the primary school site between them. With a total pupil yield of less than 1FE, this is the maximum scale of site which should be provided at nil consideration to ECC to mitigate the needs of the development. DfE Guidance recommends a site of between 0.9ha and 1.2ha for this size of school.

13.2 However, Policy R03 states that sufficient site to accommodate a 2FE school and early years facility will be required and at 2.1ha. This is at the top end of the DfE recommended site size range (1.63ha to 2.04ha).

13.3 Using the SHMA mix, the site itself gives rise to approximately 0.8FE of pupils, or at its maximum 1FE which, in turn, has a recommended site size of between 0.9ha and 1.2ha. At the upper end, therefore, approximately 0.9ha is being requested that is not "necessary" to meet the needs of this development. This portion should be reserved as an option for ECC to acquire within an agreed timeframe to meet the needs of other developments and/or demographic changes across the town. The ECC Developers' Guide (pg 22) states "*In line with DfE guidance, additional land for expansion of new school sites should be safeguarded and alternative uses should be precluded thus enabling ECC to purchase such sites at an appropriate cost.*" It does not, however, specify a mechanism for recouping that cost from other developers.

13.4 It is recommended that the school land is shown in two parcels, the first indicated at between 0.9ha and 1.2ha, to be offered at nil consideration - to meet the needs arising of the Shenfield SUE. The second area should be shown as residential but indicated as potential expansion land for the school (approximately 0.9ha) for acquisition by ECC should it wish to do so. Showing the land as potentially residential provides for a valuation were the school or the expansion not to come forward.

13.5 Given the presence of other developments across Brentwood town, the expansion land should be funded by the developers of those sites, for which ECC

should seek land costs proportionately along with build costs for the new school. The justification for this should be included within the Draft Local Plan and/or the Infrastructure Delivery Plan, at a sum per dwelling or per calculated pupil that reflects the agreed cost of the “expansion” land.

Shenfield Allocations

14.1 Notwithstanding the Policy position in terms of the provision of a school site, a reduction to in the anticipated number of dwellings to 700, the pupil yield of the site using the original mix is 180 (0.86FE). At this level, it remains possible for the needs arising in isolation from this site to be met through the expansion of Long Ridings PS by 1FE.

14.2 However, the site does not stand alone within Shenfield, and there is a total of 18 Allocated sites in the area, to produce approximately 2,485 new homes when the reduction of the Shenfield SUE is factored in). At the standard ECC PPR assuming all dwellings were to be houses of two bedrooms or more this would yield approximately **746** primary pupils (3.6FE). Even with the expansion of Long Ridings, this could not currently be accommodated within existing schools. Map 5 shows the allocated sites and schools in the area:

Map 5: Allocated sites and primary schools – Brentwood / Shenfield

14.3 At first sight, therefore, it would appear that, alongside the potential expansion of Long Ridings PS, a new 2FE school could be justified to meet the cumulative needs across the Shenfield area over the next 10 to 11 years.

14.4 However, in the longer term, the ONS Projections discussed in Section 8 suggest that significant reductions in primary-age child numbers are likely to occur through to 2043. When these are modelled against the pupil yield from the Allocated sites at both the higher PPR (all two-bedrooms and above) and lower PPR (including allowance for one-beds and flats) a different picture emerges. Table 10 shows that for the standard ECC PPR for two-bedroom houses the need for new facilities across the 16 schools within the Shenfield group is unlikely to emerge until approximately 2033 – the end of the Local Plan period. When a mix based on the Shenfield SUE proposals incorporating 10% 1-bedroom properties is utilised, no need arises until 2043.

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Primary	6427	6489	6423	6344	6295	6213	6145	6145	6064	5998	5975	5957	5941	5927	5917	5908	5905	5909	5920	5941	5972	6014	6064
Shenfield Group - projection	4740	4786	4737	4679	4643	4583	4532	4532	4472	4424	4407	4393	4381	4372	4364	4358	4355	4358	4366	4382	4405	4435	4472
Group percentage	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75	73.75
Allocated sites with mix - 2,485 x 0.3 = 746 pupils	57	58	57	57	57	58	57	58	57	57	58	57	57										
Cumulative	57	115	172	229	286	344	401	459	516	573	631	688	745	745	745	745	745	745	745	745	745	745	745
Total pupils projected	4797	4901	4909	4908	4929	4927	4933	4991	4988	4997	5038	5081	5126	5117	5109	5103	5100	5103	5111	5127	5150	5180	5217
Group capacity	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093	5093
Surplus projected - PPR 0.3 (ECC standard)	**296**	**192**	**184**	**185**	**164**	**166**	**160**	**102**	**105**	**96**	**55**	**12**	**-33**	**-24**	**-16**	**-10**	**-7**	**-10**	**-18**	**-34**	**-57**	**-87**	**-124**
Surplus projected - PPR 0.256 (SUE Mix)	**304**	**209**	**209**	**218**	**205**	**216**	**218**	**169**	**180**	**179**	**147**	**112**	**75**	**84**	**92**	**98**	**101**	**98**	**90**	**74**	**51**	**21**	**-16**

Table 10: Pupil yield projection (ONS Population Projection based)

14.5 At its worst, therefore, the need for an additional 124 places is calculated (0.6FE) which could be met through the expansion of Long Ridings PS, with no new school site required at all. At its best, the projected reduction in pupil numbers combined with a lower PPR taking account of a dwelling mix including 1-bed properties and flats produces a result where no additional places are required at all across Shenfield until at least 10 years after the LP period. This should give both BBC and ECC the opportunity to locate a site elsewhere in the area.

14.6 The model used above is based on the Brentwood town school's proportion of the ONS Population projections for Brentwood based on 2018 and these could change when the next Projection is issued later this year. Nonetheless, the trend is a common one across England and Wales and should inform the decision-making processes of ECC in planning for new school places.

14.7 ECC's 10 Year Plan for Education indicates that there are no expansion projects currently in the pipeline although it expects a new primary school to be required in Shenfield when development starts. However, with a projected

underlying reduction in the number of primary aged children, there is no clear case for a new primary school within Shenfield or the wider area of Brentwood over the next 20 years as things stand. While pockets of pressure may occur across Brentwood, it should be possible to address these through the expansion of Long Ridings PS.

14.8 The proposed mix for the development is likely to be a critical factor in assessing need going forward and once this has been firmly established it is recommended that a revised projection be prepared. Once this is in place, it is recommended that ECC be engaged in dialogue on the realistic assessment for the need for a new primary school, and any plans it may have for the expansion of Long Ridings PS. Furthermore, the projection above does not take account of Allocated sites within the centre of town which are likely to comprise solely flats – potentially seven sites with 624 dwellings (identified as R10, R11, R12, R13, R14, R15 and R20). The application of a lower PPR to these sites reduces the pupil yield still further.

Secondary Schools

15.1 Map 6 shows the five secondary schools within a three-mile walk of the proposed development.

Map 6: Secondary Schools

15.2 The capacity data and numbers on roll at the school are shown in Table 11:

School	Postcode	Grade	Distance	PA	CAP	PAN	NoR	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13
Shenfield High	CM15 9DA	2	0.2	8815301	1499	240	1543	243	244	236	237	207	209	167
St Martin's School	CM13 2HG	2	1.89	8815301	1805	292	1805	296	255	292	291	283	197	191
Brentwood County High	CM14 4JF	-	2.64	8815301	1310	210	934	107	126	153	94	140	201	113
Brentood Ursuline Convent	CM14 4EX	2	2.48	8815301	1047	175	1036	174	173	173	172	171	75	98
Becket Keys CE FS	CM15 9DA	1	2.71	8815301	1050	150	1047	168	166	169	164	163	105	112
Totals					6711	1067	6365	988	964	1023	958	964	787	681
Surplus							346	79	103	44	109	103		
							94.8	92.6	90.3	95.9	89.8	90.3		

Table 11: Secondary School Data January 2023
NoR = Number of pupils on Roll, PAN = Published Admission Number, Cap = Capacity

15.3 As at January 202 the schools showed an 5.2% surplus of places when related to capacity across all year groups – a total of 346 pupils. The schools, therefore, at present have a significant number of spare places – although considerably fewer than in 2020, when 833 were evident.

15.4 The schools are grouped together in a planning area for planning and forecasting purposes and the forecasts for the group are shown in Table 12:

Year	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Sixth Form	Total Roll
May 2022 Actual	988	964	1023	958	964	1468	**6365**
2022-23 F/c	1071	991	968	1029	959	1491	**6509**
2023-24 F/c	1032	1077	997	974	1035	1434	**6549**
2024-25 F/c	1034	1042	1088	1007	984	1479	**6634**
2025-26 F/c	1030	1044	1053	1098	1018	1484	**6727**
2026-27 F/c	1047	1040	1054	1063	1109	1456	**6769**
2027-28 F/c	1040	1054	1047	1061	1070	1534	**6806**
2028-29 F/c	1024	1046	1060	1053	1067	1560	**6810**
Listed PAN / CAP	**1067**					**1380**	**6711**

Table 12: SCAP forecasts Brentwood Secondary 2022

15.5 The forecast indicates a steadily rising roll through to 2028-29 at which point there is forecast to arise a deficit of 99 places across all year groups. This is not sufficient to meet the needs of this development, even when considered in isolation, and consequently a contribution towards expansion works would be considered reasonable.

Summary and Recommendations

16.1 Primary Schools – The schools within a two-mile walking distance are functionally full. While schools in the broader Brentwood town area have some places available these are forecast to reduce over the next five years, to a point where approximately 135 places remain.

16.2 At 344 dwellings the proposed development is calculated to yield 82 primary pupils when the proposed mix is applied. When the same mix is applied to the full Allocation at 700 dwellings, a total of 167 primary pupils is calculated.

16.3 To mitigate its impact, therefore, and depending upon the mix finally approved, the full development, needs only to provide places for a maximum of 1FE (210 pupils), with anything in excess of that provided by other means of funding.

16.4 However, with longer-term projections indicating sufficient space through to at least 2032 and Long Ridings PS potentially capable of expansion by 1FE, the need for a new school site within this time frame is less clear. The longer-term projections indicate that even when calculated on the basis of ECC's "two-bedroom+ house" rate, an expansion at Long Ridings PS would be sufficient.

16.5 When those sites likely to comprise only flatted accommodation are factored in at a lower rate, the need reduces further.

16.6 While it is unlikely that ECC or BBC will wish to move from their position of reserving a 2.1ha school site within the Shenfield allocation, it is recommended that the longer-term position be presented to them with a view to a withdrawal of that site within the lifetime of the development, to enable alternative uses to be considered.

16.7 Nonetheless, in the mean-time, it is recommended that a maximum of 1.2ha of land be reserved to meet the needs of the development, should Long Riding PS be deemed incapable of expansion. This site to be transferred at nil consideration to ECCC. Extension land of up to 0.9ha should be shown as potentially residential but earmarked as land with an option for ECC to acquire within an agreed timeframe.

16.8 The value of the land will need to be negotiated with ECC but with a view that other local developments could and should contribute towards the cost, on the basis that if not used for a school it would most likely revert to residential use.

16.9 An alternative proposal would be to seek agreement with ECC to establish a town-wide approach for the remaining developments within Brentwood town to support the purchase of the extension land.

16.10 Secondary – At present there are not forecast to be sufficient places available within the schools in Brentwood town to meet the needs arising from the development. It is likely that additional places will be required in the medium term and a contribution justifiably sought.

Appendix T

School Census Data

TS007 - Age by single year

population	All usual residents
units	Persons
date	2021

Age	Hutton Central	Hutton North	Shenfield	Total Existing Pupils	Allocation Pupils
Total: All usual residen	4,055	4,290	5,459		
Aged 4 years	46	52	65	1,430	167
Aged 5 to 9 years	266	315	317		
Aged 10 years	49	54	81		
Aged 11 years	58	50	77		

In order to protect against disclosure of personal information, records have been swapped between different geographic areas and counts perturbed by small amounts. Small counts at the lowest geographies will be most affected.

School	Capacity
Long Ridings	420
Huton CofE	231
Willowbrook	210
Exsiting Capacity	861
Total Pupils (inc. Site)	1,597
Remaining	**736**