WSCC Review of ANPR data from July 2024 Surveys – 29th August 2024 – DOCUMENT 003

Traffic surveys were completed in the Broadbridge Heath Neighbourhood Centre area during the following days:

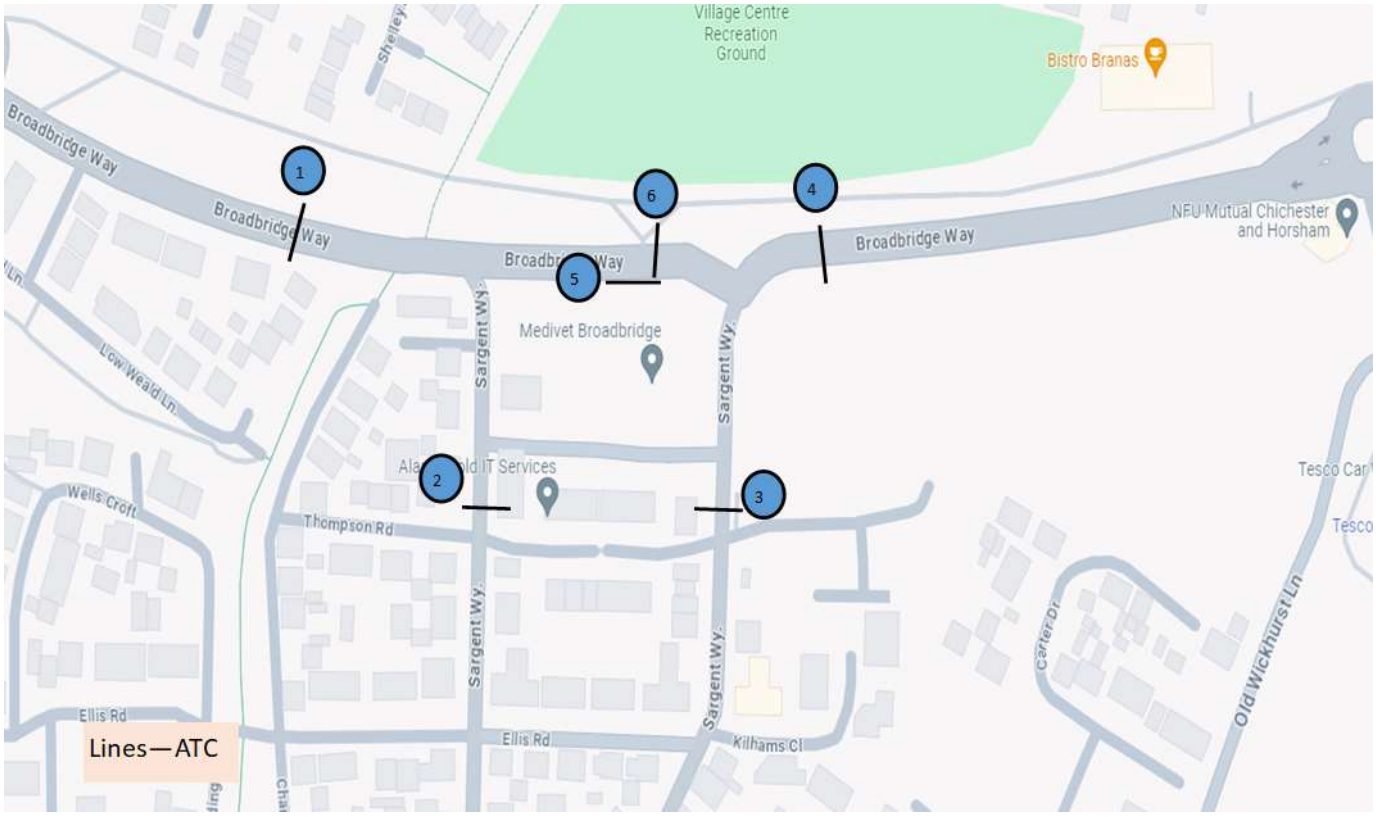
- Automatic Traffic Counters 10th July to 19th July 2024 24 hour period (Classified Counts and Speed Measurement)
- Automatic Number Plate Recognition Surveys 16th July 6am to 10pm

The site locations are shown in the plan below:

Figure 1 ANPR Sites



Figure 2 ATC Sites



Summary of ANPR Findings

For ease of presentation the results of the ANPR surveys have been split into three figures:

- Trips into and from the estate which originated or terminated in the housing areas south of the Neighbourhood Centre;
- Through trips passing through the Bus Gate / COOP Car Park, and;
- Through trips that travel around Sergeant Way without stopping.

ANPR results have been supplied as "Trip Chains" showing which vehicles passed each ANPR camera and linked by the number of sites they were recorded at so, as an example, a vehicle that enters at Site 1a travelling east and passes south through site 2A is recorded 1a_IN>2a_S

Figure 3 Trips Into and From the Estate Area – with Key Flows Indicated



Table 1 Trips Into and From the Estate Area (Main movements > 5 cars)

Trip Chain	Cars	LGVs	OGV1	OGV2	Total
1a_IN>2a_S	152	23	1	0	176
2a_N>1a_OUT	189	29	2	0	220
4a_IN>3a_S	905	78	3	0	986
3a_N>4a_OUT	591	36	6	0	633
3a_S>2a_N>1a_OUT	9	2	0	0	11
4a_IN>3a_S>2a_N	13	2	0	0	15
2a_N>5b_S>4a_OUT	39	6	0	0	45
3a_N>3a_S	20	1	0	0	21

Figure 4 Through Trips (Via Car Park and Bus Gate) with Key Flows Indicated



Table 2 Through Trips via Car Park and Bus Gate (Main movements > 5 cars)

Trip Chain	Cars	LGVs	OGV1	OGV2	Total
1a_IN>4a_OUT (BG)	16	2	0	0	18
1a_IN>5a_E>4a_OUT (BG)	14	12	0	1	27
1a_IN>5b_S>4a_OUT (CP)	991	126	2	0	1119
1a_IN>5b_S>3a_S>2a_N>1a_OUT (CP)	45	5	0	0	50
4a_IN>5a_W>1a_OUT (BG)	4	9	0	0	13
4a_IN>5b_N>1a_OUT (CP)	7	2	0	0	9
(BG) = Bus Gate; (CP) =Car Park					

Figure 5 Through Trips Via Sergeants Way with Key Flows Indicated

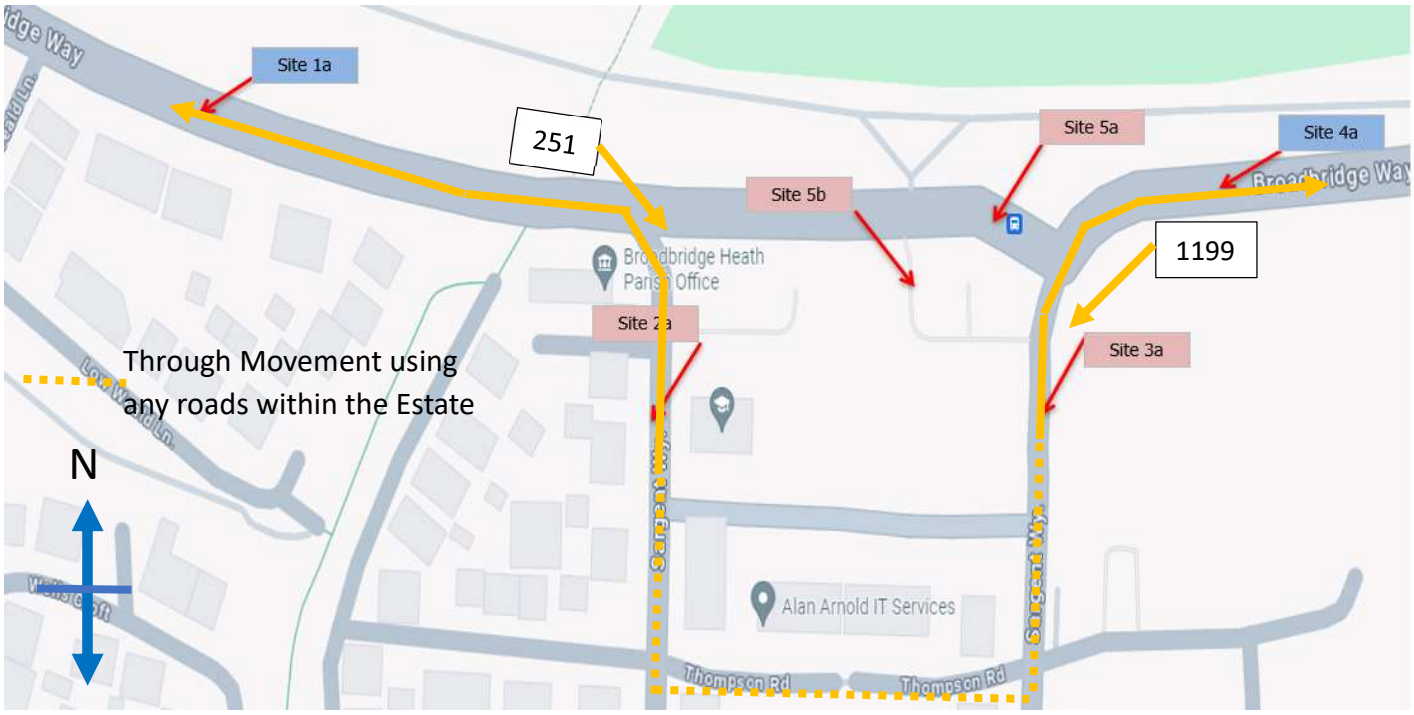


Table 3 Through Trips via Sergeants Way (Main movements > 5 cars)

Trip Chain	Cars	LGVs	OGV1	OGV2	Total
1a_IN>1a_OUT	41	3	0	0	44
1a_IN>2a_N>3a_N>4a_OUT	14	2	0	0	16
1a_IN>2a_S>3a_N>4a_OUT	203	44	3	1	251
1a_IN>2a_S>4a_OUT	4	4	0	0	8
1a_IN>4a_OUT	16	2	0	0	18
1a_IN>5a_E>4a_OUT	14	12	0	1	26
4a_IN>3a_S>2a_N>1a_OUT	1044	152	3	0	1199
4a_IN>3a_S>2a_N>5b_S>4a_OUT	18	2	0	0	20
4a_IN>4a_OUT	93	11	0	0	104

Overall Summary

- Through movements using the Neighbourhood Centre Car Park (eastbound) remains high at 1119 vehicles
- Through movement using Sergeant Way directly (westbound) 1199 vehicles
- Through movement using Sergeant Way directly (eastbound) 250 vehicles
- Trips originating in the estate exiting (westbound) 231 vehicles
- Trips originating in the estate exiting (eastbound) 633 vehicles
- Trips originating outside estate and terminating in the estate (from west) 156 vehicles
- Trips originating outside estate and terminating in the estate (from east) 1001 vehicles
- Vehicle numbers using the bus gate directly are low (57), as are trips through the car park exiting past the No Entry signs (9)

There are a small number of various trip movements that would add to the above numbers at each recording site, but the above are the general large-scale traffic movements.

On the above basis, it appears that the eastern side of Sergeant Way (site 3a) heading to and coming from the east is the busier side for estate-based traffic (two-way flow of 1634 vehicles) when compared to the western side of 864 vehicles.

It also appears that the east – west movement either through the car park or around Sergeant Way is of a similar level of traffic.

Summary of Speed Surveys

The ATC sites were used to record vehicle numbers (by vehicle type) and vehicle speed, these were also used to check the ANPR recording numbers as a check, a separate comparison sheet was provided by Intelligent-data-collection as part of the survey.

Table 4 Summary of Recorded Mean Speeds (sites outlined in Figure 2)

Site Location	Description	Direction and Mean Speed mph	Direction and Mean Speed mph
1	On Broadbridge Way, West S/Way	Eastbound 31.4	Westbound 34.3
2	Western side Sergeant Way	Southbound 19.9	Northbound 20.3
3	Eastern side Sergeant Way	Southbound 19.3	Northbound 19.1
4	On Broadbridge Way, East of Bus Gate	Eastbound 20.0	Westbound 18.1
5	Car Park Access off Bus Gate	Southbound 9.2	Northbound not recorded
6	Through Bus Gate	Eastbound 12.8	Westbound 11.9

A traffic counter was not installed in the straight carriageway between the Neighbourhood Centre and Tesco roundabout and it is acknowledged that, in this section, mean speeds are almost certainly going to be higher than the 30mph speed limit, this has been discussed before in previous technical notes and is a consequence of the width of the road, the lack of frontage development and the rural nature of the section which influences driver behaviour, tending to an increase in speed over the posted limit. This is reflected in the speed data noted on site 1 where this is some distance from Sergeants Way on the straight, with westbound traffic increasing speed as it heads towards the A281 Newbridge roundabout.