

LiveLee analysis of traffic data

From the data collected by London Borough of Lewisham as part of their borough-wide survey to show the effectiveness of 20mph speed limits introduced on all Lewisham roads. The data also showed the number of vehicles passing each selected site in 15 minute intervals.

The data were collected in early June 2017 (10th – 18th). As there was very good weather that week (the average daily temperature was 22°C, the high was 28°C and there was no rain) it is likely that slightly fewer than normal numbers of vehicles were on the roads – with the main roads being less busy satnavs using live traffic data would have sent fewer vehicles through the rat runs.

We have used the 15 minute intervals to calculate an hourly average number of vehicles passing each point as this is the usual method of expressing traffic volumes. We have also combined the Cambridge Drive northbound data with the Upwood Road westbound data to give an indication of the number of vehicles that are likely to be travelling westbound along Upwood Road between Horn Park Lane and Cambridge Drive. This is the significant pinch-point at which cars and vans pass through during the morning peak period.

The data collected by London Borough of Lewisham confirms traffic survey data collected by LiveLee. It shows that **during the busiest part of the day 636 cars and vans an hour pass along Upwood Road in a westbound direction.**

It is interesting to note that during that same busiest hour an average of only 35 vehicles were able to go against the flow of peak-hours traffic (ie eastbound). This will bear out the data below regarding the proportion of vehicles that are likely to be driven by residents.

Data collected Monday 12 June to Friday 16 June 2017

Time	062 Cambridge Drive northbound		063 Upwood Road westbound		Combined result London-bound		061 Dorville Road westbound	
	Avg. no.	Hourly rate equivalent	Avg. no.	Hourly rate equivalent	Avg. no.	Hourly rate equivalent	Avg. no.	Hourly rate equivalent
0600	4	18	19	77	24	94	9	37
0615	8	25	40	119	49	144	20	58
0630	16	38	79	185	95	223	37	88
0645	28	56	105	243	132	299	57	123
0700	43	95	105	329	148	424	72	186
0715	56	143	116	404	172	547	98	265
0730	50	176	105	431	155	607	89	317
0745	59	208	100	426	159	634	109	369
0800	62	227	88	409	150	636	90	387
0815	70	240	79	373	149	613	96	385
0830	55	246	76	344	132	590	98	394
0845	55	242	75	319	131	562	102	386
0900	34	215	68	299	102	514	69	365
0915	23	168	63	283	86	450	52	321
0930	19	132	51	257	70	389	38	261
0945	14	90	36	218	50	308	34	193
1000	12	68	26	176	38	244	28	152



In order to calculate the overall numbers of vehicles that are rat running it is possible to compare a 'control' street with the streets that are part of the rat run. The council collected data from Leyland Road (the southbound only section between Dorville Road and Upwood Road). This street is rarely used as a rat run but does have commuter parking – this allows for a good comparison with neighbouring streets.

Over the five weekdays of the data collection a total of 1,632 vehicles used that part of Leyland Road compared with 8,280 for Cambridge Drive, 16,766 for Dorville Road and 17,109 for Upwood Road (some vehicles will have been counted twice).

This indicates that up to 89.5% of vehicles using Upwood Road are rat running and not likely to be visiting residential or business premises in the network of streets in the LiveLee area.

These data can also be used to give some idea about the number of vehicles that are using the roads to the west of Burnt Ash Road for westbound journeys instead of the main roads. A high proportion of the westbound vehicles counted in Dorville Road and Upwood Road will have crossed Burnt Ash Road and turned into Holme Lacey, Southbrook, Micheldever and Handen roads. A daily average of 3,493 vehicles was counted. **We can see that on each weekday, perhaps, an extra 3,000 vehicles are using the network of streets to the west of Burnt Ash Road for westbound journeys** (allowing for 14% of drivers being either local or continuing their journeys along Burnt Ash Road and Burnt Ash Hill).