

Wiltshire County Council's Automatic Traffic Counter (ATC) readings, 2007

Information has been obtained from WCC's ATC readings at five sites along the A338/346 transport Corridor including one from south of the A303; this site north of Winterbourne Gunner is north of the Portway mini-roundabout.

The sites are:-

Site	Road	Location	Grid Reference	
B2	A338	North of Winterbourne Gunner	418302	136081
C2	A338	North of Tidworth	423308	150806
C3	A338	South of Burbage	423643	156722
C4	A346	South of Cadley	421485	165392
D1	A346	North of Marlborough	419597	173018

The counts were recorded by length of vehicle using inductive loop technology. The counts therefore record buses and coaches as well as LGV's travelling over the sites. The data gives traffic levels crossing the ATCs in both directions and an overall combined count is given. The data is split into individual hours and by length of vehicle.

The length of vehicle that constitutes LGV traffic is 6.5 - 30 metres in length.

Typically WCC monitors the sites quarterly for a whole week and the data was supplied for B2 on July 4-11; C2, 3 &4 on October 10-17 and D1 on July 18-25.

a) Daily traffic flow both north and south of the A303

The following Table A shows the average daily traffic flow of cars, vans and LGVs in both directions and the number of LGVs (6.5-30m) included in this total.

Table A - Daily average - Total number for both directions

WCC Code	Location	Average daily total number of vehicles recorded	Number of LGVs recorded in this sample	% LGVs in total number of vehicles
B2	N of Winterbourne Gunner	7,327	326	4.5%
C2	Tidworth Military Cemetery	7,044	592	8.4%
C3	N of Collingbourne Kingston	7,895	836	10.6%
C4	A346 S of Cadley	8,833	883	10.0%
D1	A346 N of Marlborough	15,044	1,241	8.3%

At Collingbourne Kingston, which includes any traffic from or going to the Ludgershall Road there is an increase of 851 vehicles of which 244 are LGV (29%).

Along the Corridor north of Marlborough, compared with Cadley, south of the A4 there is a very high increase in both the total number of vehicles (6,211 vehicles, 70%) and in the number of LGVs (358 LGVs, 41%).

From the figures in Table A it appears as if there is more traffic along the Corridor in 2007 than in 2006. From the data in document 1 Figure 4.1 the total number of vehicles passing through D1 north of Marlborough in October 2006 was about 14,200. In 2007, 15,044 vehicles were recorded; this is an increase of about 800 vehicles a day compared to the 2006 record. This increase of 5% brings the total number of vehicles nearly back to the peak in 1998 before the opening of the Newbury by-pass. Points C2, 3 & 4 each show an increase of about 500 vehicles a day compared with 2005 and 2006.

b) Information on LGV traffic passing problem sites

It is the long LGVs which cause most of the problems in the bendy and narrow parts of the route. There are more LGVs on the route on a weekday (Monday to Friday) than at the weekend (Saturday & Sunday), therefore details are given for weekdays.

Table B, Average number of LGVs (12.5-30m long) per day and the maximum per hour,

	Location	Average Number of 12.5 – 30m LGVs on a weekday	Maximum Number of 12.5 – 30m LGVs per hour on a weekday	Time of Maximum number per hour
B2	N of Winterbourne Gunner	57	11	1300-1400
C2	Tidworth Military Cemetery	254	27	1000-1100
C3	N of Collingbourne Kingston	439	43	1200-1300
C4	A346 S of Cadley	430	45	1100-1200
D1	A346 N of Marlborough	510	44	1600-1700

Priority Locations.

The information from the ATC readings can give additional data about the priority locations.

a. Barn Street and Herd Street, Marlborough.

The number of long LGVs recorded from point D1 would be representative of the number of vehicles passing through the narrow point in Barn Street. With a maximum of 44 long LGVs per hour, this is 1 travelling northbound and one travelling southbound every 3 minutes and if they arrive at the same time there will be a hold-up as they cannot pass one another.

b. Burbage Wharf.

The large number of LGVs crossing these bridges is illustrated by the readings from site C4 in Table B and these high numbers show the seriousness of the danger on these bridges.

c. Collingbourne Ducis.

The number of vehicles passing through point C2 will be similar to the number going round the bends by the church in Collingbourne Ducis. Although the A342 crosses the Corridor between C2 and this location, very little traffic turns at this crossroads.

d. Cholderton

The information from location B2 illustrates the number of long LGVs on the A338 through Cholderton and from the A303 to the mini roundabout near Gomeldon.

e). Comparison of data from the ATC readings with the 2006 Number Plate Survey

In order to make a comparison with the 2006 major traffic survey the average number of LGVs was calculated from the ATC data for a 10 hour period from 0800 – 1800hrs and given in Table C. The 2006 survey was carried out on a weekday and it was noted from the ATC readings that there were considerably more LGVs along the Corridor on a weekday than at the weekend. Therefore the average number of LGVs was calculated from the weekday figures. In table C the number of LGVs is taken from the ATC readings for both vehicles between 6–12.5m long and those from 12.5-30m in length and then added to give the total.

Table C - 10hr (0800 – 1800 hrs) average for a weekday
Total for both directions - Data from a week in July or October 2007

	Location	Total LGVs in 10 hrs on a weekday Length of vehicle 6 – 12.5m	Total LGV in 10 hr period on a weekday Length of vehicle 12.5 – 30m	Total number of LGVs in a 10hr period on a weekday
B2	N of Winterbourne Gunner	264	39	303
C2	Tidworth Military Cemetery	383	168	515
C3	N of Collingbourne Kingston	461	274	735
C4	A346 S of Cadley	518	265	783
D1	A346 N of Marlborough	747	322	1069

The 2006 HGV Registration Plate Survey, October 2006 gives a total of 413 HGVs travelling northwards on the A346 north of Marlborough. Assuming an equal number travelling southwards, this gives a total of 826 HGVs.

From the ATC readings of October 2007 there were 1,069 LGVs (HGVs) an increase of 243 LGVs (29%).

The ATC readings were selected to be from 0800 to 1800 hrs. The Registration Plate Survey was made at staggered times along the route and for north of Marlborough the 10 hour period probably did not finish until it was nearly dark, say 2000hrs. In the evening there is a continuing decrease in the hourly rate of LGVs and hence if this was the case the total number of LGVs would have been lower than if the survey had been for a 10hr period finishing at 1800 hours.

Some of the increase in the ATC numbers of 2007 could be attributed to a 5% increase in all vehicles from 2006 to 2007. Another reason might be in the classification of vehicles, where smaller 2-axle lorries might be included in the ATC readings but not in the number plate recognition survey.

The number plate recognition survey found that the 125 northbound LGVs travelled from the A303 to the M4 without stopping. This is equivalent to 250 LGVs on the route and if these LGVs can be prevented from using the A338/346 Corridor it would ease the traffic problems along the whole Corridor.

Joan Davies, 27th March 2009