

TRAFFIC SURVEYS IN CARLTON - 2006

In response to concerns about the volume and speed of traffic through the Parish, the Parish Council commissioned two traffic surveys in the village for seven days from Thursday 29th June to Wednesday 5th July. One sensor was sited opposite The Gate Hangs Well, and the other opposite the church - the objective was to measure the number of vehicles and their speed at two of the most hazardous points on the local road network. Subtracting one set of counts from the other also allows a good estimate of the number of vehicles passing along Bosworth Road.

The sensors were unobtrusive and sophisticated radar devices, which produced hour-by-hour records of the number of vehicles passing in each direction and their length and speed, in the form of 28 pages of closely-typed tables. This article summarises this information, but anyone is welcome to inspect and copy the original documents.

A) Weekly traffic flow

	Barton Road		Main Street	
	Southbound	Northbound	Westbound	Eastbound
Total vehicles (7 days)	7209	7371	3548	3215
Mean vehicles/day	1030	1053	507	459
Vehicles on Sat + Sun	1571	1627	818	703
Mean vehicles/day weekend	785	814	409	352
Mean vehicles/day weekdays	1128	1149	546	502
Large vehicles weekdays	479	536	251	174
Large vehicles weekends	79	122	72	29

Large vehicle means any vehicle more than 9.3m long, which would include a large box van, a tractor and trailer, a bus or an articulated lorry. There was actually only one articulated lorry recorded during the whole seven days. To put these numbers into context, there are 108 buses (Service 153) up and 108 down Barton Road each week, as well as school and shopper buses along Main Street.

The number of vehicles passing along Bosworth Road can be estimated from the above figures. These estimates will exclude trips up and down Bosworth Road made by residents from Bosworth Road and Main Street east of the church.

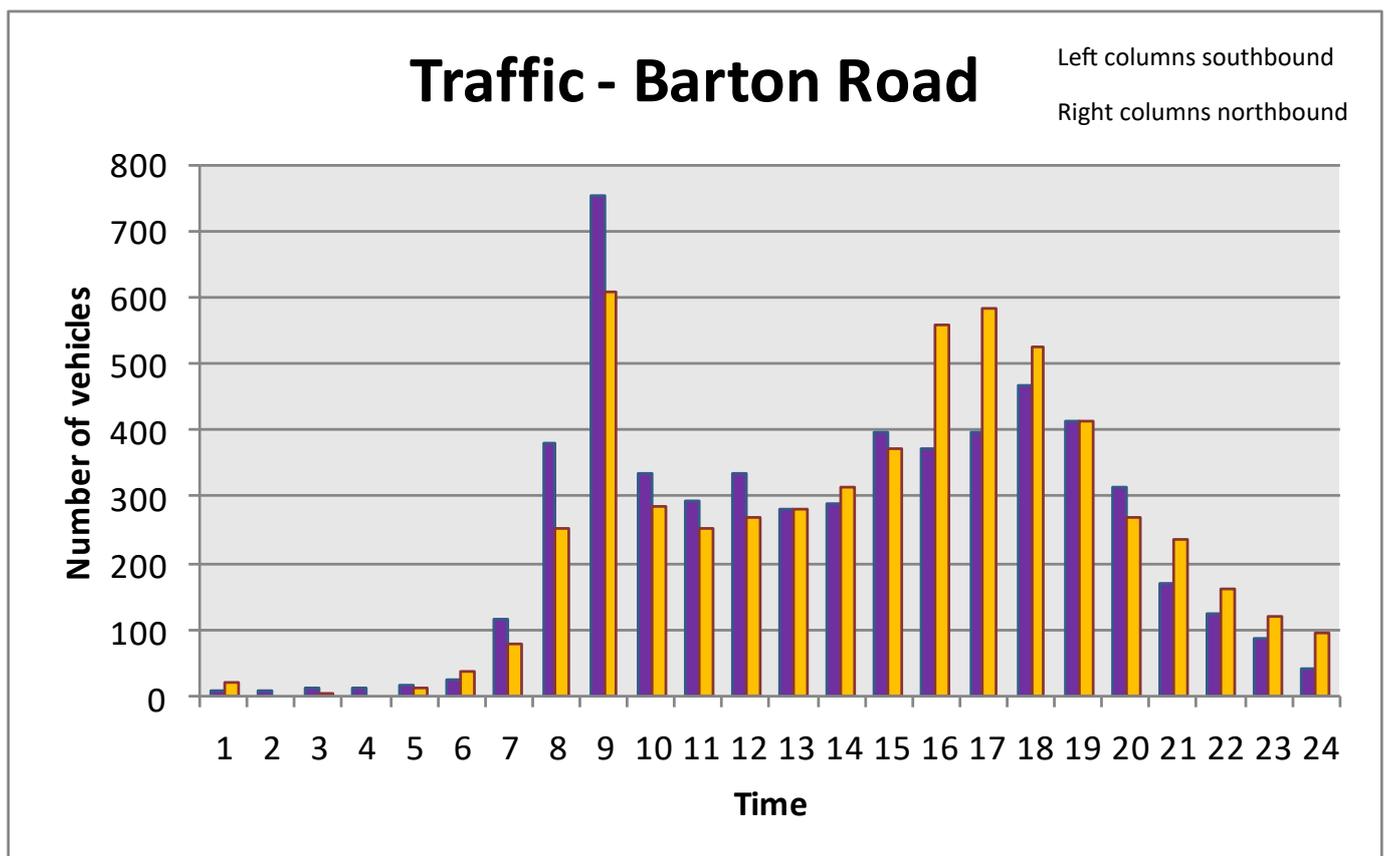
	Bosworth Road	
	Southbound	Northbound
Total vehicles (7 days)	3661	4156
Mean vehicles/day	523	594
Vehicles on Sat + Sun	753	924
Mean vehicles/day weekend	377	462

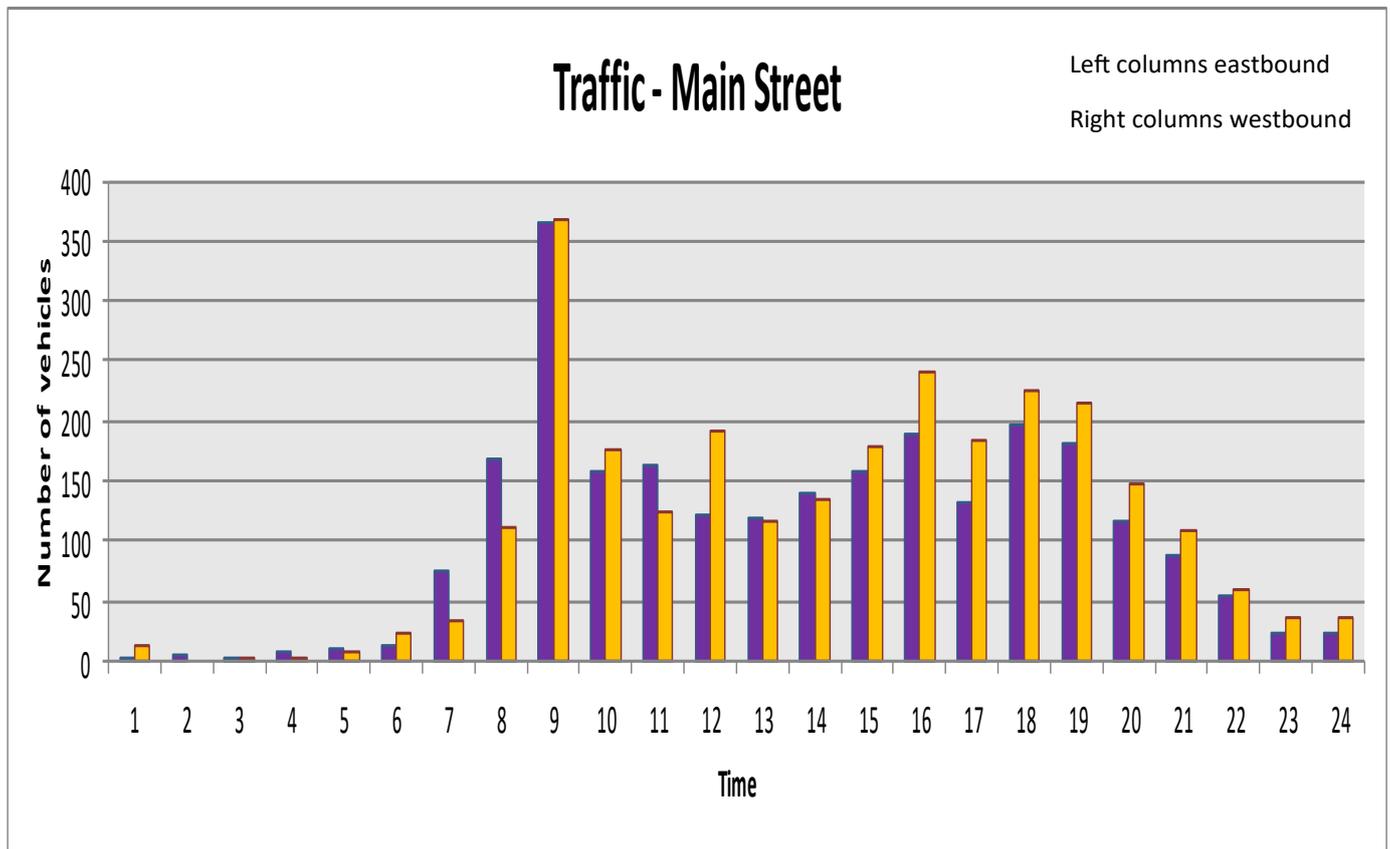
These figures show that there are roughly equal volumes of traffic along Bosworth Road and Main Street. Over a week, significantly more vehicles travel north along Bosworth Road and west along Main St than in the other direction. Along Barton Road there is a clear excess of southbound commuters in the morning, balanced by a northbound excess in the afternoon. There is no similar pattern in the traffic flow along Main Street.

The total number of vehicles passing up and down Bosworth Road over the 7-day period was 7817. In 7-day surveys carried out at the end of September 1998 and 1999 the total numbers of vehicles recorded were 12183 and 11304 respectively. It is unlikely that the amount of traffic passing through Carlton has decreased since 1999, so this difference is most likely seasonal, though it is much larger than expected.

B) Traffic flow through the day

The graphs below show the average numbers of vehicles hour-by-hour on weekdays. The busiest day of the week is Wednesday, followed by Friday. As expected, the busiest times on all local roads are the hour ending 9am and the three hours ending at 4, 5 and 6 pm.





C) Speeding

Directly measured speeds and vehicle numbers

Speed	Barton Road		Main Street	
	Southbound	Northbound	Westbound	Eastbound
0 - 30 mph	6006	5859	3282	2885
30 - 40 mph	1203	1512	264	324
40 - 50 mph	211	220	2	6
50 + mph	15	8	0	0

Percentage of vehicles exceeding speed of ..

Speed	Barton Road Southbound	Barton Road Northbound	Main Street Westbound	Main Street Eastbound
30 mph	16.7	20.5	7.4	10.1
40 mph	2.9	3.0	0	0.2
50 mph	0.2	0.1	0	0

As expected, vehicles travelling north on Barton Road are the most likely to speed. On first inspection these figures are worrying, but do not appear too serious with the vast majority of vehicles travelling at less than 40 mph.

However, it is worth restating that the Main Street detector was outside the church, and the Barton Road detector was outside the Gate Hangs Well. It is worrying that vehicles were travelling at these speeds around the blind bend by the church and along the narrowest part of Main Street where there are usually parked vehicles. Vehicles would be expected to be travelling at their slowest in this area, which suggests that they would have been travelling faster along the more open sections of Main Street.

Similarly, the Barton Road speed measurements were made between the junctions with Main Street and Nailstone Road where visibility is not good, where vehicles are turning, and where vehicles are often parked or going in and out of the pub car park.

On the reasonable assumptions that vehicles turning in and out of Main Street are unlikely to be doing more than 30 mph outside The Gate, the numbers of vehicles passing along Main Street can be subtracted from the totals. If it is also assumed that most drivers passing through the village en route between Market Bosworth and Barton in the Beans will ease off the accelerator when entering the 30 mph zone, and will be travelling at their slowest speed in front of The Gate Hangs Well, the figures become more frightening.

Calculated through vehicle numbers

Barton Road

Speed	Southbound	Northbound
0 - 30 mph	2724	2974
30 - 40 mph	1203	1512
40 - 50 mph	211	220
50 + mph	15	8

Percentage of through vehicles exceeding speed of ..

30 mph	44.2	50.8
40 mph	7.7	7.4
50 mph	0.6	0.3

These results are consistent with surveys carried out near Tall Trees on Bosworth Road in 1998 and 1999 where it was found that 85% of vehicles were exceeding 30 mph, 40% exceeding 40 mph, and 7% exceeding 50 mph.

There were 23 records of vehicles travelling at more than 50 mph, all on Barton Road. The time of these records is shown on the chart below, which suggests that excessive speeding is more likely to occur before the main commuter rush in the morning, and from 3pm through the evening.

The averaged figure that 20.5% of vehicles heading north along Barton Road are exceeding the 30 mph speed limit hides a wide variation of between 11 and 36% for individual hours between 6am and midnight. There is no pattern to this variation - there is not more speeding at commuter times, at school times, or even when there is less traffic. It looks as though the decision to speed is made by individual drivers regardless of the time of day or traffic conditions, which makes this a difficult problem of education and behaviour control as well as enforcement.

The Parish Council will use these figures to support a request for laser speed checks by the Police, and to support an application to the County Council for a volunteer speed monitoring group to be set up in the Parish. The latter scheme is described in the latest issue of Leicestershire Matters. The PC will keep the issue of traffic calming under review. The PC would also particularly ask local residents not to park on or obstruct pavements so that pedestrians do not have to put themselves at risk by walking in the road.

Parish Clerk August 2006