

CHURCHFIELDS JUNCTION TURNING COUNT

BACKGROUND & METHOD

Background

A 'junction turning count' involves counting all the vehicle movements across a junction over a given time period.

As part of the Salisbury Transport Study WS Atkins conducted a junction turning count over the Mill Road/Churchfields junction on Monday 28/9/1998, sub-contracting the actual count to a firm called 'Count on Us Ltd'.

There were 2 specific problems with the way this count was conducted:

a) 2 categories of vehicles only were used. These were 'LGV' (light goods vehicle) and 'HGV' (heavy good vehicles). The LGV category included 'cars and 4 tyre vans', and the HGV category included '6 tyre vans and HGVS'.

b) The count was conducted from 08:00-09:00, 11:00-15:00 and 17:00-18:00. The figures obtained from these 6 hours were then doubled to get a '12-hour count'.

It is felt that this process has not given an accurate idea of the scale of the 'Churchfields problem', and this exercise is an attempt to get more accurate figures.

Method

For each arm of the junction there are 2 possible turning movements, and these have been numbered 1 to 6 (see Turning Movements diagram).

It is planned to repeat the count on Monday 30/7/2001. The count will take place for a 12 hour period – from 07:00 to 19:00 – broken down into 48 15-minute periods. There will be 6 different vehicle categories used for the count, and these are described on the Vehicle Categories sheet. This may seem a slightly bizarre choice of categories, but there are reasons for these - generally they tie in with the categories used in various other Salisbury traffic counts.

The junction turning count undertaken by Atkins involved 3 counters, one standing on each arm facing towards the junction and counting the vehicles moving away from them across the junction. For example, the counter standing on Mill Road North would count turning movements 1 and 2 (see the Turning Movements diagram). We will vary this procedure in the following way

- All the people counting will be on the widened pavement in front of Grosvenor Court (the flats opposite the end of Churchfields Road). This is not ideal, but this location means that the back of a vehicle turning in any direction can be seen (to identify HGVs), and that the counters can communicate with each other easily, which I think will be important.
- It is hoped to get 3 counters to cover the whole 12-hour period, but the counting sheet has been designed so that one person can cover more than 2 turning movements if necessary

A copy of the Count Sheet we'll be using is attached. Note the following:

- One of these sheets should be completed for each 15 minute period, and the time interval (e.g. 09:00 – 09:15) should be written on the top.
- You are advised to put a line through the columns which represent turning movements you are not counting.

- It will assist the final tallying if you could count in 5's by doing 4 upright lines & then putting a line through them.
- At the end of each 15 minute period please indicate with an X how confident you are about the statistics on the sheet, and move onto a fresh sheet.

Important Notes

If the weather is bad (i.e. rainy) we will probably abandon the attempt and try for another day.

I will have my mobile with me on the day (0771- 4246140), so please call if you can't make a previously agreed time, or want to find out if the count has been cancelled through bad weather etc.

DON'T WORRY if you find the counting has gone a bit awry – it is unlikely to be 100% accurate given that we are all novices at this. A few 'duff' counts won't invalidate the whole exercise – please mark the sheets to indicate how confident you are in the results, & give any further details if you have time to do so. **IF** you find yourself overwhelmed with vehicles to count it is better to focus on lorries and HGVs and miss a few cars rather than the other way around.

Questions you may ask

Do we need to count traffic which is not going to Churchfields (i.e. the Mill Road to Mill Road traffic)?

I've included this in the count for 2 reasons

- a) It was included in the original Atkins count
- b) Traffic in Crane Bridge St (leading into Mill Rd) is commonly counted, and I have had the figures quoted to me by Wilts County Council as representing traffic which is going through the town to Churchfields. However, not all the traffic on Mill Rd is going to/from Churchfields, and I think this count is worth taking to demonstrate that even lorries may be going along this road but not to/from Churchfields.

Why are 6-tyre vans a separate category?

Because Atkins included these in their HGV category. It might therefore be helpful to get a feel for how much this category contributed to their HGV total.

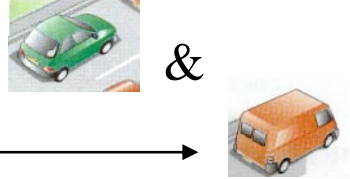



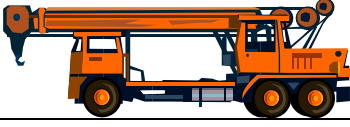

Any problems or questions – please don't hesitate to contact me!

Margaret Willmot

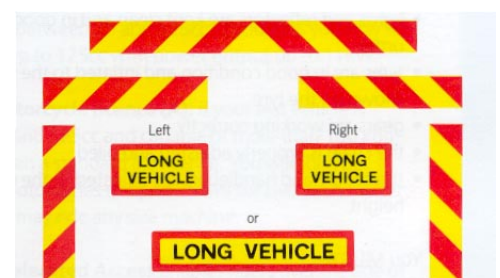
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CHURCHFIELDS JUNCTION TURNING COUNT

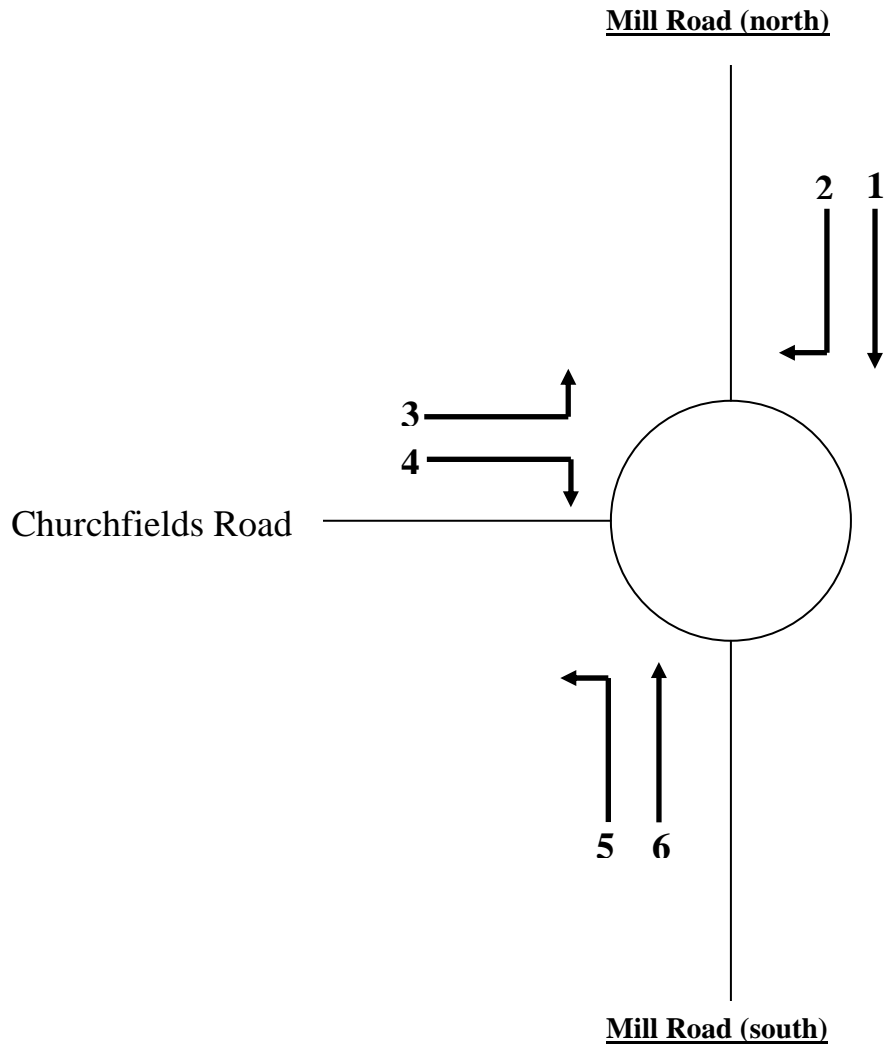
VEHICLE CATEGORIES

Category	Type	Comment	
1	Cars & 4-tyre vans	Van has driver in the body of the vehicle (unlike lorry – see below) This category has 2 tyres on both front & back axle – 4 tyres in all Need to check the back axle.	
2	6-tyre vans	Van has driver in the body of the vehicle (unlike lorry – see below). This category has paired tyres on the rear axle, so 6-tyres in all. Need to check the back axle.	
3	Small Lorries – not HGV	A lorry has a separate cab for the driver. This category does NOT have the HGV marking on the back. Need to check back for NO HGV markings.	
4	HGV – 2-axle	As category 3 above, but this category has HGV Markings on back Need to check back for HGV markings.	
5	HGV - > 2-axle, rigid	HGV Markings on back, more than 2 axles	
6	HGV – articulated	Drivers cab flexibly attached to rear section – check as it turns. HGV Markings on back	

HGV Markings – Vehicles over 7,500 kilograms max gross weight must display a red/yellow marking on the reverse. Either just the striped marking, or ‘Long Vehicle’ marking as appropriate.



CHURCHFIELDS JUNCTION TURNING COUNT
TURNING MOVEMENTS





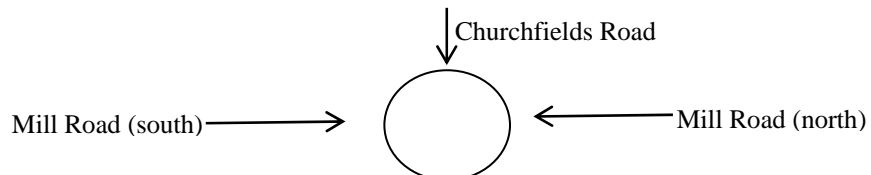
CHURCHFIELDS JUNCTION TURNING COUNT SHEET



(assume facing Churchfields Road)



Date : _____ Initials: _____

Time start _____ end _____

Category	Type	Turning Movement 4 	Turning Movement 3 
1	Cars & 4-tyre vans		
2	6-tyre vans		
3	Small lorries – not HGV		
4	HGV – 2-axle		
5	HGV – > 2-axle, rigid		
6	HGV - articulated		



Cat	Type	Turning Mvt 5 	Turning Mvt 6 
1	Cars & 4-tyre vans		
2	6-tyre vans		
3	Small lorries – not HGV		
4	HGV – 2-axle		
5	HGV – > 2-axle, rigid		
6	HGV - articulated		

Cat	Type	Turning Mvt 1 	Turning Mvt 2 
1	Cars & 4-tyre vans		
2	6-tyre vans		
3	Small lorries – not HGV		
4	HGV – 2-axle		
5	HGV – > 2-axle, rigid		
6	HGV - articulated		

Degree of confidence
Mark with X

Good-----Medium-----Bad
Got everything.....Missed Some.....Missed Lots