

Traffic Flow Comparison in the Tile Hill Area - Coventry

Background

- Traffic counts were carried out in April 2016 on the following roads:
 - Hockley Lane
 - Banner Lane
 - Station Avenue
 - Cromwell Lane
 - Duggins Lane*
 - Tile Hill lane*
 - Tanners Lane
 - Westwood Heath Road*

*Comparable data not available.

- Each count collected data over a one week period in order to obtain average weekday flows. Where possible, the new traffic data has been compared with historic count data carried out over the past 2 to 3 years. This enables a comparison to be made to determine whether traffic flows have increased significantly over that time period, see Appendix 1.
- The data comparison exercise indicated that during the am and pm peak periods overall traffic flows in the area have increased over the two to four years. However the data also shows the changes in flows vary considerably between the count sites and in some cases there is evidence of reductions in flows.
- Banner Lane shows the biggest increases in traffic over the past 4 years, particularly in the AM peak. Other routes have shown moderate increases such as Cromwell Lane, to small increases such as Station Avenue Northbound, and in some cases reductions in traffic such as Hockley Lane.
- Flows on roads which do not have comparable historic data did not appear to show any uncharacteristically high volumes typically averaging at around 500 vehicles during peak periods apart from Westwood Heath Road which showed higher “tidal” peak flows at around 1,300 vehicles heading eastbound (towards Coventry) in the am peak, with westbound (away from Coventry) am peak traffic being only 366. As a comparison, these flows are less than those shown on Banner Lane.
- In addition to this count data, a strategic modelling exercise, using the Coventry Area Strategic Model (CASM), was carried out in December 2015 to assess the impact of Local Plan growth on the highway network. The results of this assessment did not highlight the Westwood Heath/Tile Hill area as a specific high priority for concern in terms of increased delays as a result of new development traffic. The most significant output highlighted by the model in this area was that some additional pressure is anticipated to occur at the junction of Tile Hill Lane and Station Avenue.

Assumed Reasons for Traffic Growth

- In addition to any specific local reasons which might have caused any increases in traffic over the last 3 to 4 years, national trends produced by the Department for Transport show that overall traffic has continued to increase over this period although to a lesser extent on local urban roads. Background increases in traffic can therefore be assumed to account for some of that increase.
- The park and ride facility at Tile Hill railway station is one of the most significant trip attractors in the area which is likely to account for some of the increased flows in the area. The facility has been increasingly well used over the past decade leading to a public consultation in 2008 to determine whether an expansion of the car park would be supported. The results found that 95% of people (users and residents) who responded supported the expansion of the car park.
- The station car park was expanded in 2010/11 which created an additional 240 spaces giving a total of 332 spaces. The car park now frequently operates near or at capacity. It is likely therefore that traffic growth associated with the station has now largely plateaued. Increased use of the park and ride mirrors passenger growth at Tile Hill station.

Rail Passenger Growth at Tile Hill Station	
Year	Passengers
2010/11	0.339M
2011/12	0.436M
2012/13	0.450M
2013/14	0.503M
2014/15	0.544M

- Around 1,200 new homes have been built at Penrduock Drive and Banner Lane over the last 5-8 years. This is likely to account for the most significant increases in traffic movements identified on Banner Lane.
- Some increases in traffic are also likely to be associated with major employment sites in the area such as Westwood Business Park and the University of Warwick. This is reflected in the strong tidal flows on Westwood Heath Road.

	Eastbound (Towards University)		Westbound (Away from University)
AM	1392	AM	311
PM	366	PM	1286

- Traffic associated with those employment sites is already being addressed separately including a major junction capacity investment programme along the A45 corridor and further plans for enhancements on the A46, which is now identified as an Expressway. The benefits of this approach will make those major arterial corridors less congested hence more attractive for commuters which may otherwise use more minor routes. Additional work is also being carried out through the University of Warwick's Travel Plan to reduce single occupancy car trips.

Mitigation

- Existing junctions along the Crowell Lane/Station Avenue/Banner Lane corridor are currently unsignalised, typically being give way priority "T" junctions, apart from Station Avenue / Tile Hill Lane. Consequently those junctions have not yet benefited from any significant capacity enhancements in line with any corresponding increases in traffic.
- Any future developments which are expected to increase levels of traffic will be expected to carry out a Transport Assessment which would require an assessment of existing affected junctions and modelling to test the requirement for, and effectiveness of appropriate mitigation measures.
- The City Council would expect developer contributions to be capable of delivering/supporting such necessary improvements in order to mitigate any unacceptable impacts of new development traffic.

Appendix 1

Location		Northbound			
		Nov-14	Apr-16		
Hockley Lane north of Sutton Avenue	AM	482	400		
Hockley Lane north of Sutton Avenue	PM	454	458		
		Apr-12	Apr-14	Sep-14	Apr-16
Banner Lane north of Goodman Way	AM	278	267	469	493
Banner Lane north of Goodman Way	PM	930	858	1153	1275
		Apr-13	Apr-16		
Station Ave south of Torrington Ave	AM	642	570		
Station Ave south of Torrington Ave	PM	1091	1171		
		Mar-13	Mar-15	Apr-16	
Cromwell Lane north of Charter Ave	AM	618	561	511	
Cromwell Lane north of Charter Ave	PM	1258	1003	1523	
		Feb-13	Mar-15	Apr-16	
Cromwell Lane north of Westwood Heath Rd	AM	536	564	454	
Cromwell Lane north of Westwood Heath Rd	PM	846	1020	1070	

Southbound			
Nov-14	Apr-16		
483	436		
418	443		
Apr-12	Apr-14	Sep-14	Apr-16
785	759	1390	1518
605	567	730	750
Apr-13	Apr-16		
1458	1753		
894	956		
Mar-13	Mar-15	Apr-16	
1619	1105	1934	
789	669	802	
Feb-13	Mar-15	Apr-16	
985	1113	1150	
585	659	624	

Location		Eastbound			
		Apr-16			
Duggins Lane west of Nailcote Ave	AM	557			
Duggins Lane west of Nailcote Ave	PM	298			
		Apr-16			
Tile Hill Lane east of Hornbeam Drive	AM	688			
Tile Hill Lane east of Hornbeam Drive	PM	621			
		Oct-13	Nov-15	Apr-16	
Tanner's Lane west of Nailcote Ave	AM	214	456	391	
Tanner's Lane west of Nailcote Ave	PM	261	331	340	
		Apr-16			
Westwood Heath Rd west of Roughknowles Rd	AM	1392			
Westwood Heath Rd west of Roughknowles Rd	PM	366			

Westbound			
Apr-16			
281			
719			
Apr-16			
571			
812			
Oct-13	Nov-15	Apr-16	
138	285	280	
259	299	324	
Apr-16			
311			
1286			