Appendix 9 – Automatic Traffic Counts (ATCs) analysis

Permanent ATCs - speed and volume data analysis

The speed and volume data from permanent ATCs located in the Burnham area has been analysed for the weeks preceding and following the closure of Station Road on 16th October 2015 (as part of the Burnham Station Traffic Scheme), in order to establish the impact the road closure has had on traffic volumes and speeds in the area. The weeks being studied are from 21/09/15 to 03/01/16.

1. Dover Road

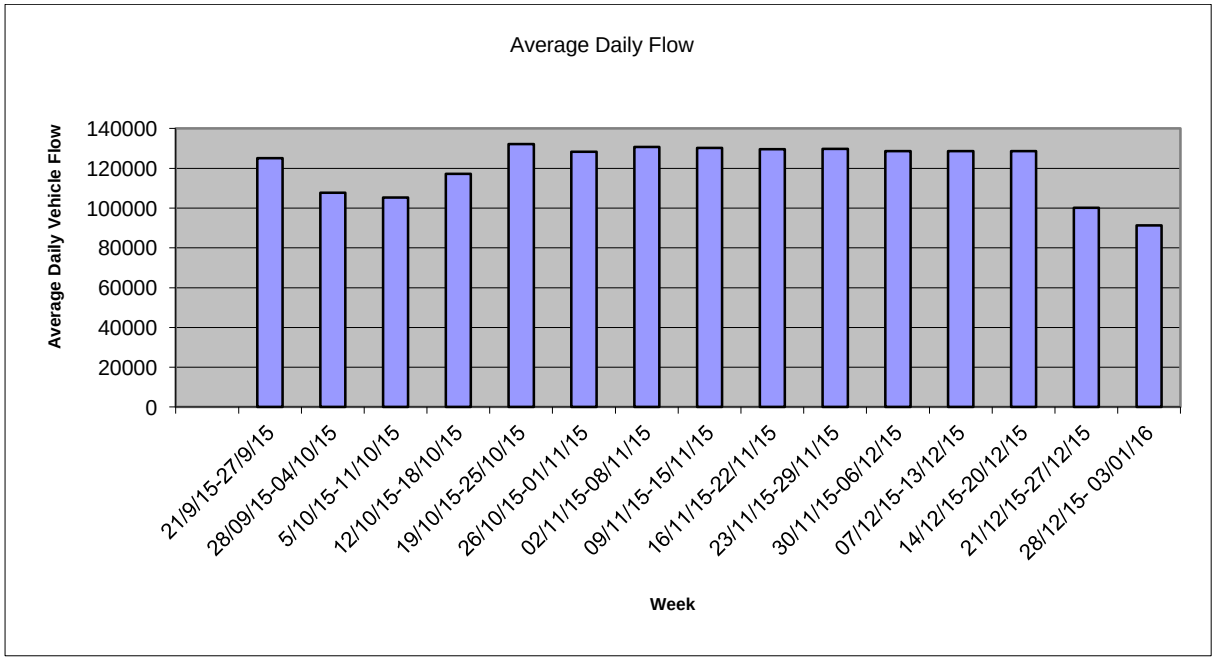

Figure 1: Average daily traffic flow data for Dover Road

The above graph shows that generally traffic volume levels have stayed at the same levels, although a small increase has been seen on the road since the week of the closure (12/10/15-18/10/15). This increase is in the region of 10%. At the end of December traffic levels are lower due to school and Christmas holidays etc.

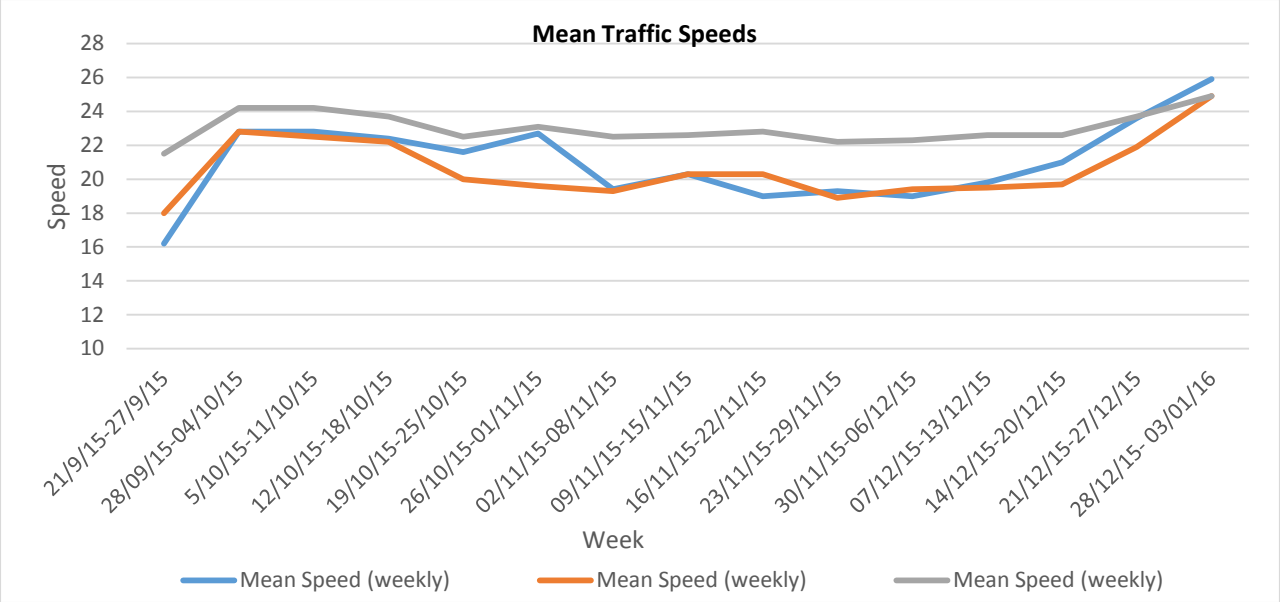

Figure 2: Mean traffic speed data for Dover Road

In the AM and PM peaks a small decrease in speeds has been observed since the scheme's introduction (increasing again towards the end of December due to the general drop in traffic volumes). The weekly mean speed has stayed approximately the same over the period.

2. A4 Bath Road (to the east of Huntercombe Spur roundabout)

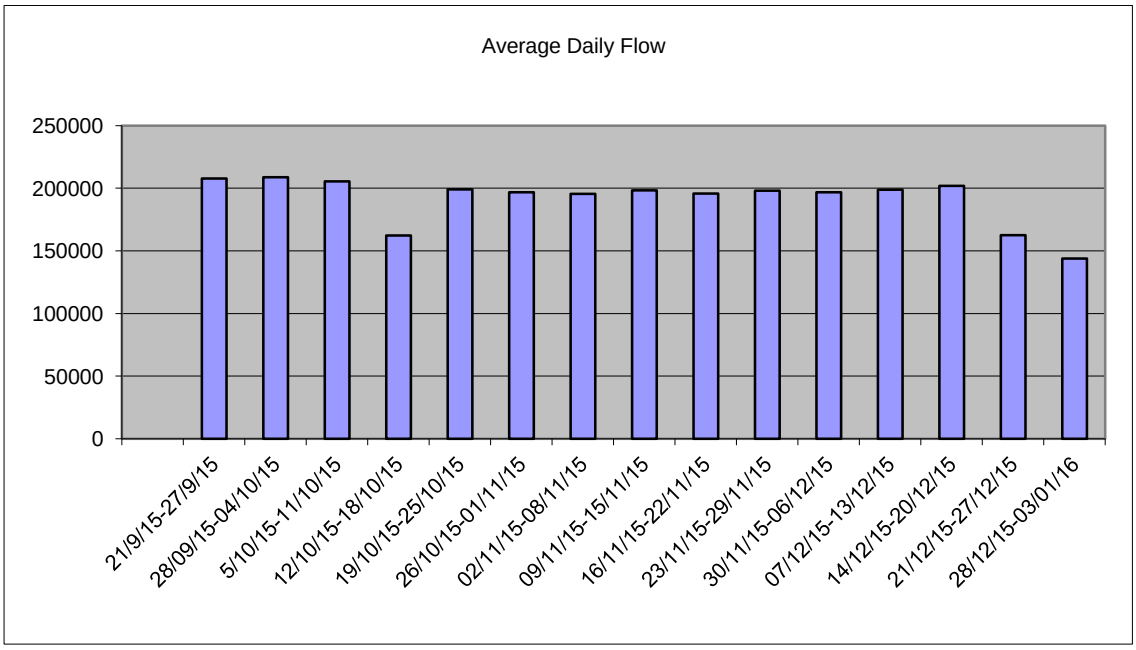

Figure 3: Average daily traffic flow data for A4 Bath Road (to the east of Huntercombe Spur roundabout)

The above graph shows relatively even levels of traffic over the period before and after the scheme introduction. There was a drop in the week that the closure was implemented but levels returned to almost the same levels as previously recorded. Again there has been a dip in traffic over the Christmas period. The average decrease in traffic since the scheme implementation is in the region of -8%.

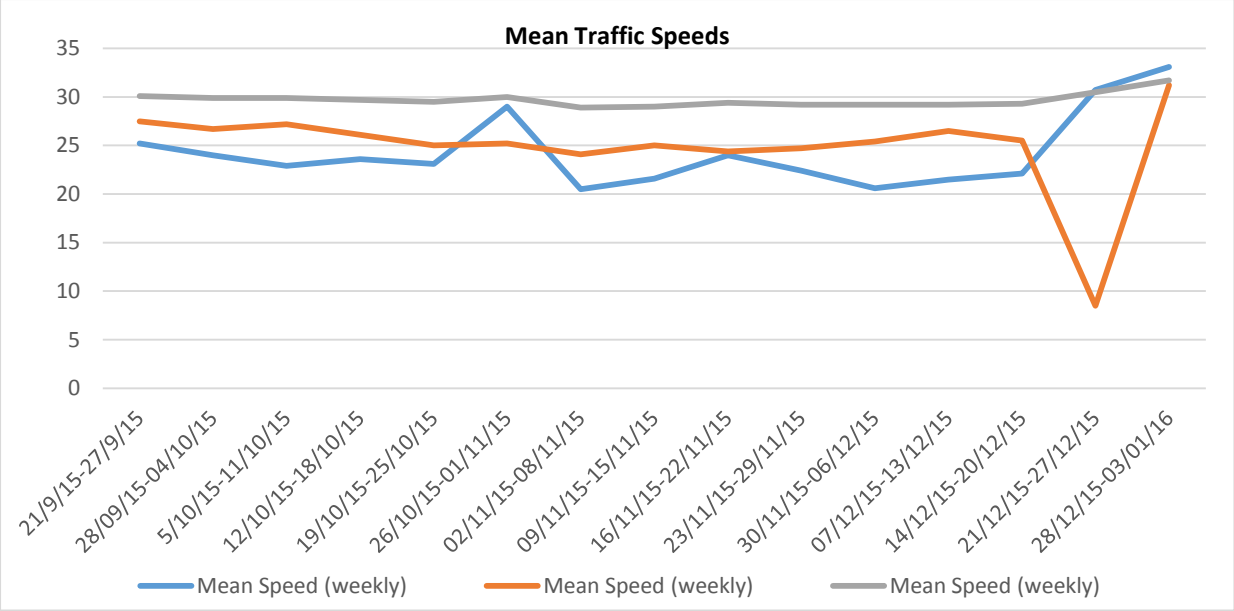

Figure 4: Mean traffic speed data for A4 Bath Road (to the east of Huntercombe Spur roundabout)

The mean weekly speed has stayed level through the recorded period. Speeds in the AM and PM peak have decreased only very slightly. There are some fluctuations in the most recent two weeks, again this is most likely due to the Christmas period.

3. A4 Bath Road (to the west of Stowe Road)

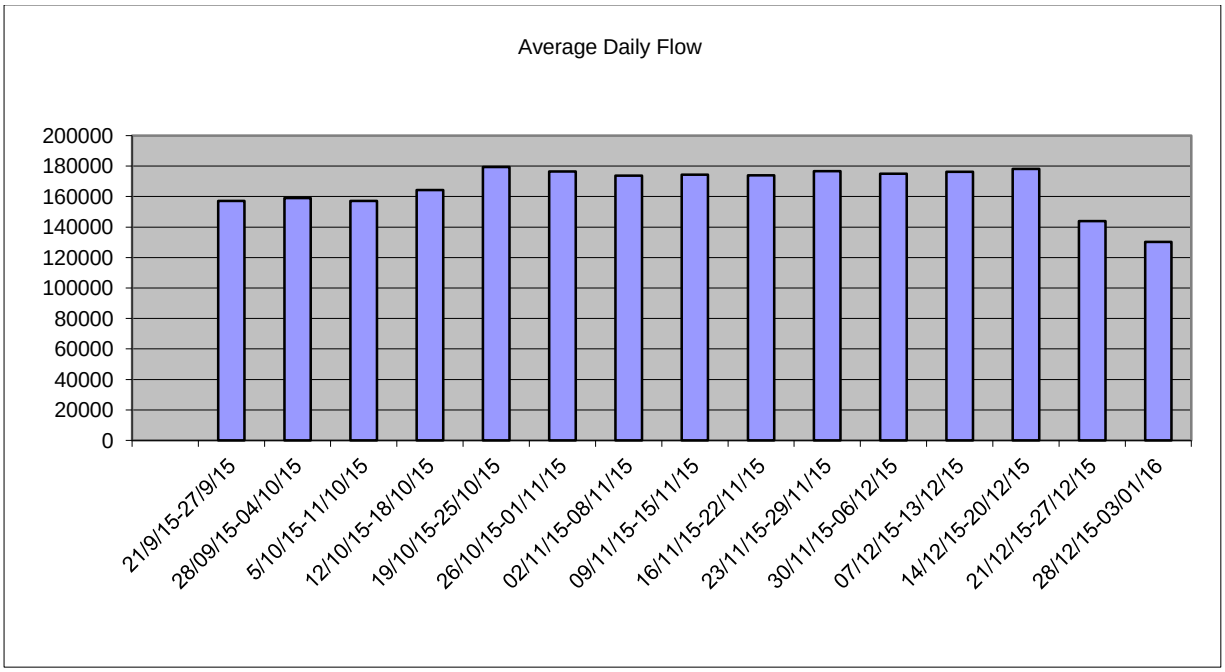

Figure 5: Average daily traffic flow data for A4 Bath Road (to the west of Stowe Road)

There has been an increase in traffic recorded along this section of the Bath Road since the week of the closure of Station Road. The volumes have fluctuated however the increase is in the region of 7% extra traffic.

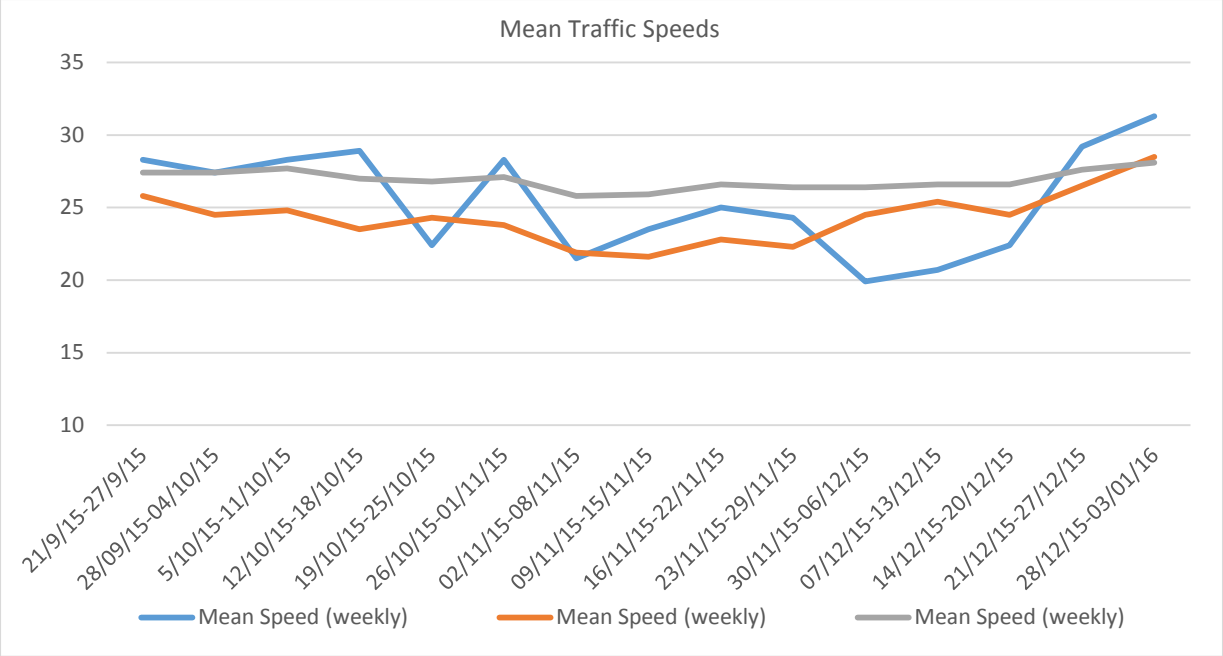

Figure 6: Mean traffic speed data for A4 Bath Road (to the west of Stowe Road)

There has been noticeable fluctuations in the mean speeds recorded along this section of the Bath Road. There has been a slight dip in the weekly mean speed and a noticeable dip in the AM and PM peak hour speeds. Speeds have increased in the most recent two weeks due to the drop in traffic as a result of Christmas holidays.

4. Burnham Lane (to the south of the Buckingham Avenue junction, near the railway bridge)

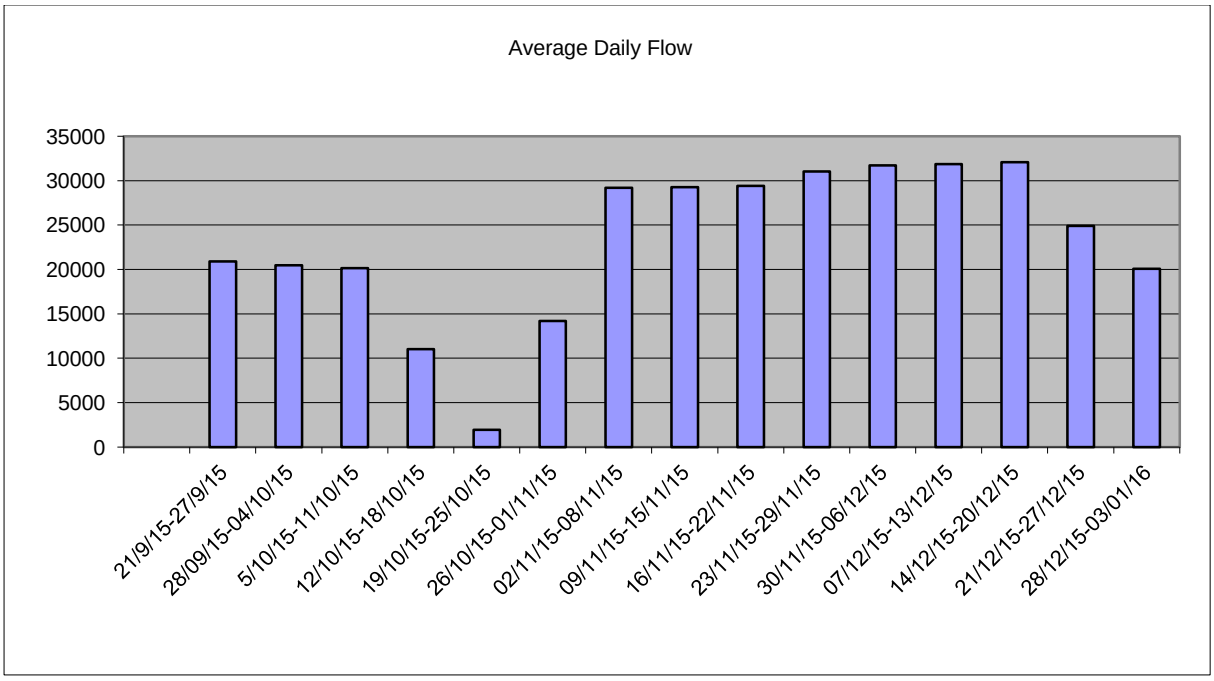

Figure 7: Average daily traffic flow data for Burnham Lane

As can be seen from the above graph, traffic volumes along Burnham Lane (under the railway bridge) have noticeably increased since the closure of Station Road. The week preceding the closure, the week of and the week after the closure saw a large decrease in traffic, however the following weeks have showed more traffic. The overall increase since the scheme is approximately 22%.

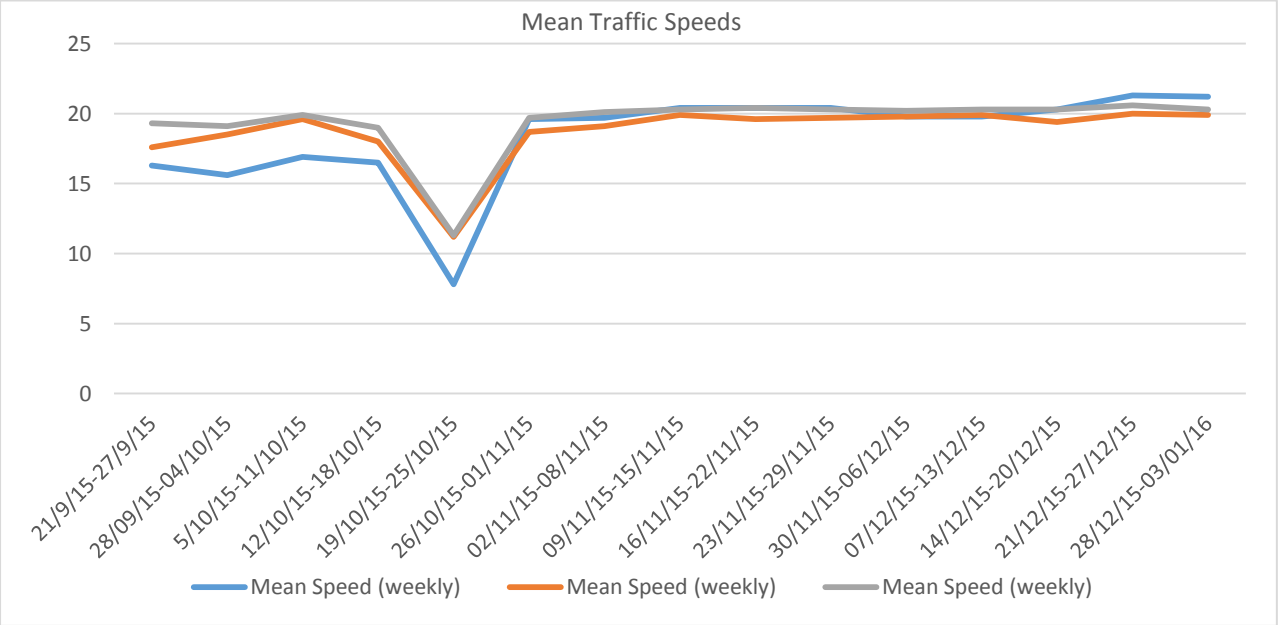

Figure 8: Average daily traffic flow data for Burnham Lane

Apart from the week immediately following the road closure (in which there was a large drop in speeds), the speeds along Burnham Lane have stayed approximately the same both before and after the scheme.

5. Buckingham Avenue (to the east of Henley Road)

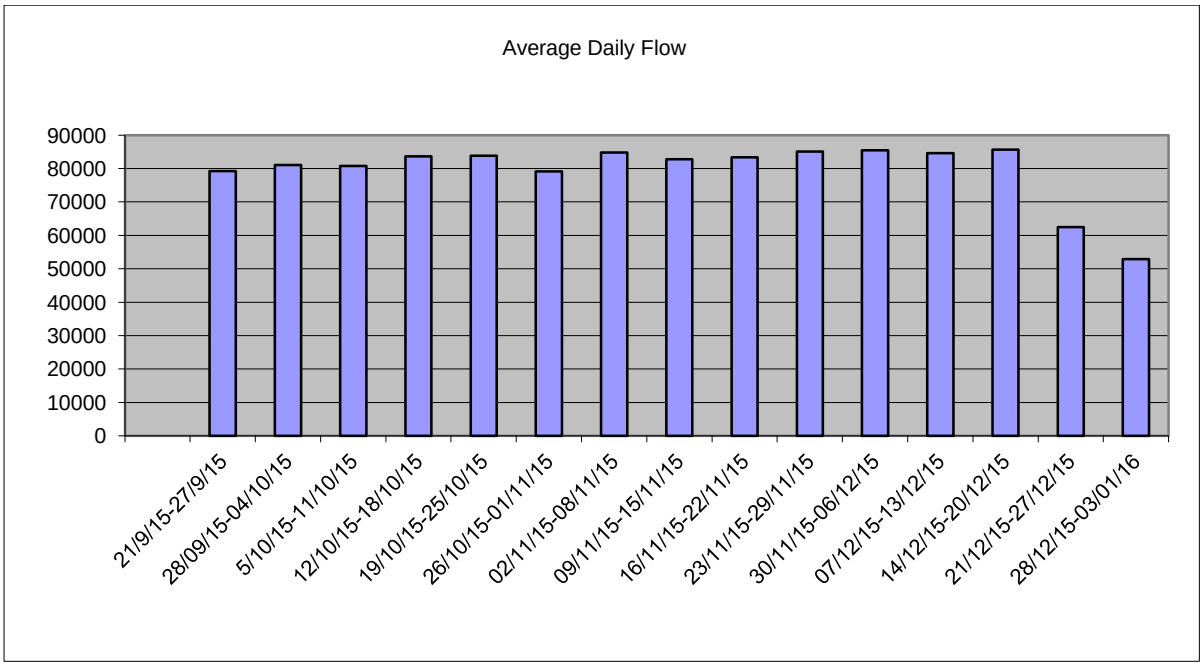

Figure 9: Average daily traffic flow data for Buckingham Avenue

Traffic volumes along Buckingham Avenue after the road closure have stayed very similar to those occurring before the closure. From the results a very slight decrease in traffic volume can be seen, around -2% if the flows for the most recent two weeks are discounted due to the effect of the Christmas break.

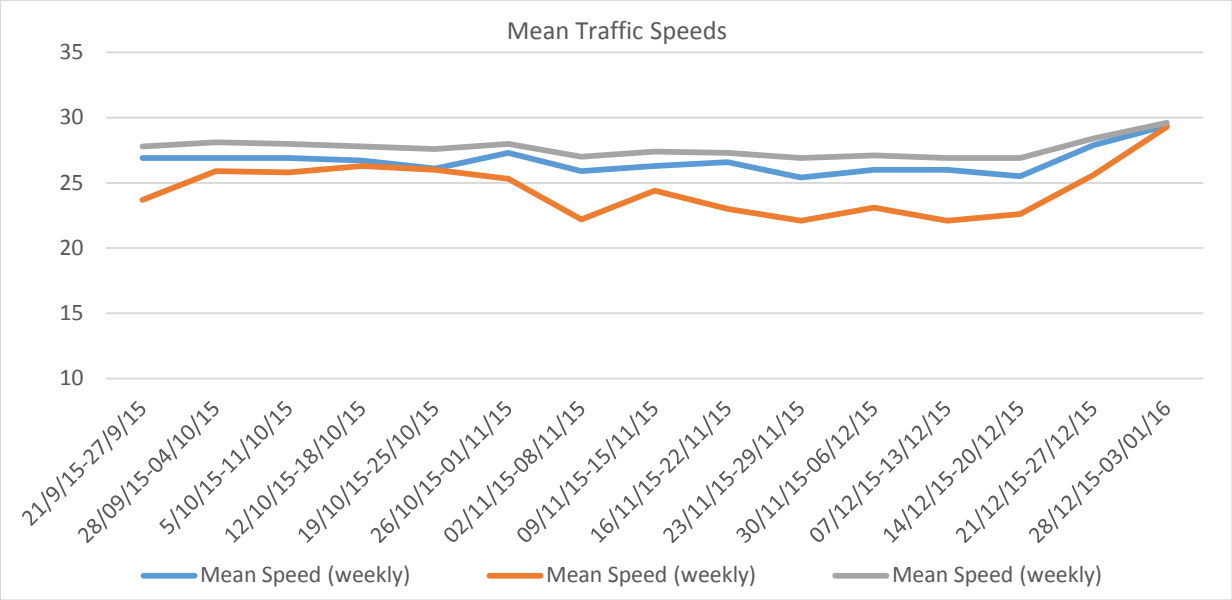

Figure 10: Average daily traffic flow data for Buckingham Avenue

Traffic speeds have seen a slight decrease since the closure of Station Road, apart from the most recent two weeks which due to the decrease in traffic because of Christmas have seen an increase in speeds. The decrease in traffic speed is most apparent in the PM peak hour, while the mean weekly speed and the AM peak hour have stayed more constant.

Temporary ATCs - speed and volume data analysis

As with the permanent ATCs, speed and volume data has also been taken from temporary ATCs located around the Burnham area. The two weeks before the closure (26/09/15 – 09/10/15) and three weeks after the closure (16/11/15 – 13/12/15) have been analysed.

6. Huntercombe Lane North (north of railway bridge)

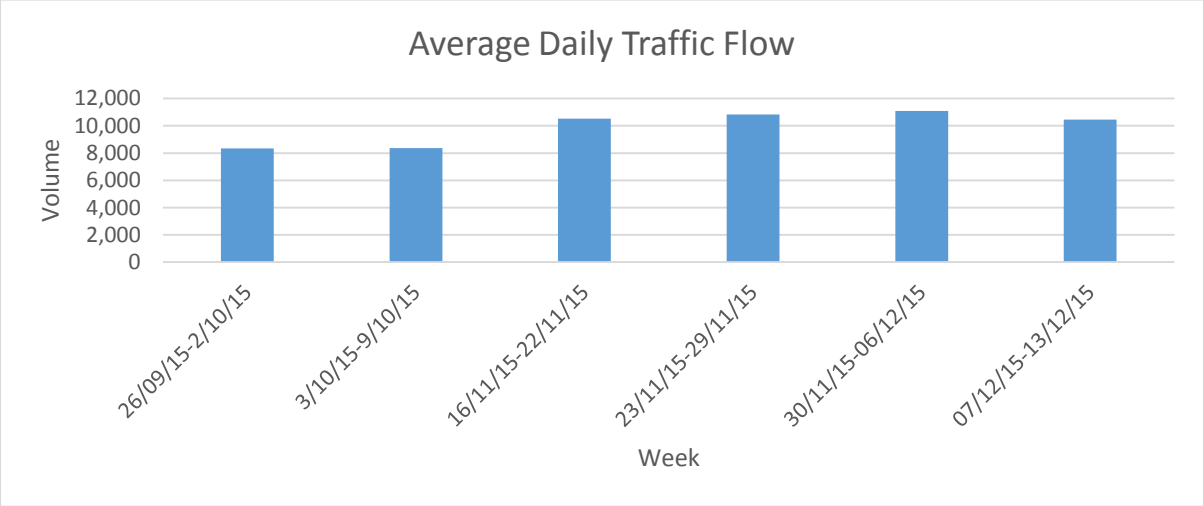

Figure 11: Average daily traffic flow data for Huntercombe Lane North

An increase in the average daily traffic flow along Huntercombe Lane North can be seen. The average increase since the scheme is approximately 29%.

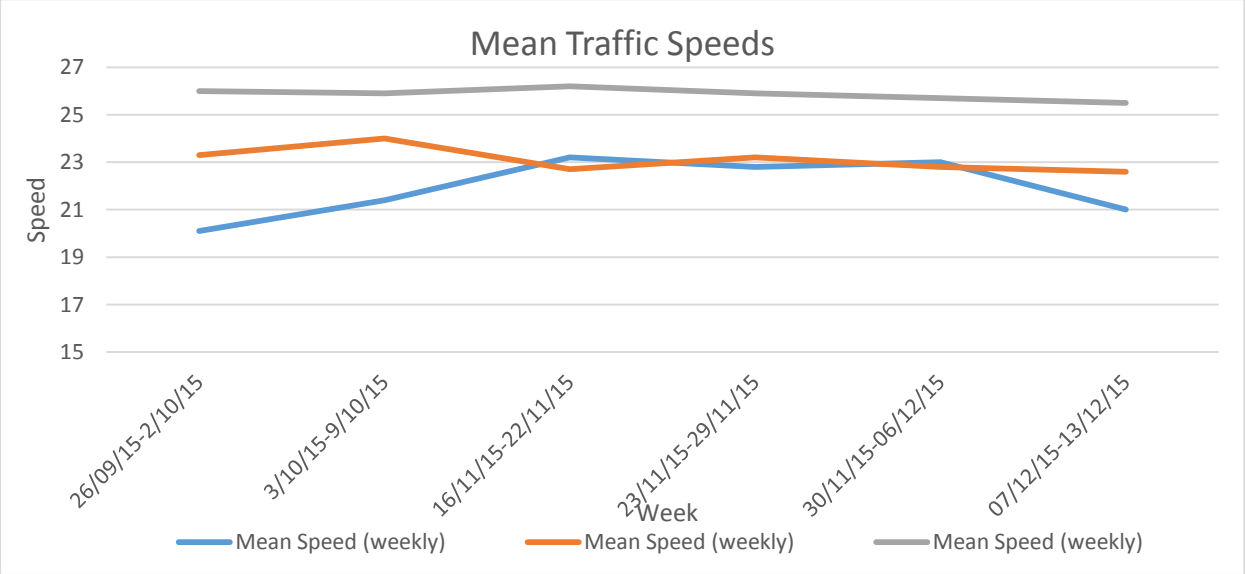

Figure 12: Mean speed data for Huntercombe Lane North

Mean weekly traffic speeds have stayed relatively constant over the surveyed period. Speeds in the AM peak hour have seen a slight decrease while speeds in the PM

peak hour increased in the two weeks following the closure and fell again during December.

7. Priory Road (east of Derwent Drive)

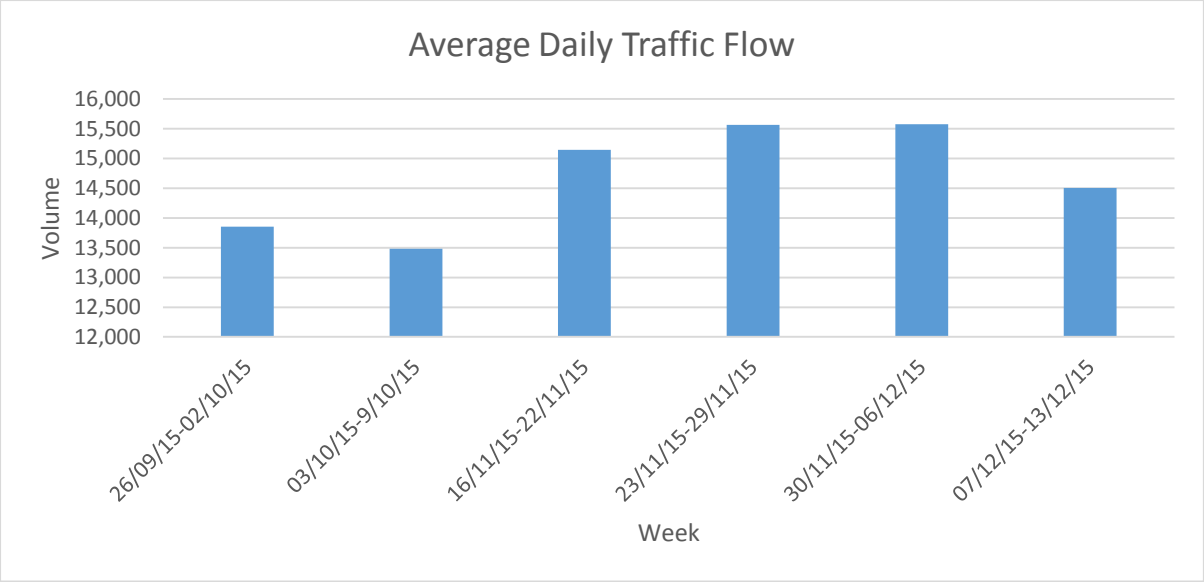

Figure 13: Average daily traffic flow for Priory Road

From the above table it can be seen that the average daily traffic flow along Priory Road has seen a noticeable increase since the closure of Station Road. This increase has been in the region of 11%.

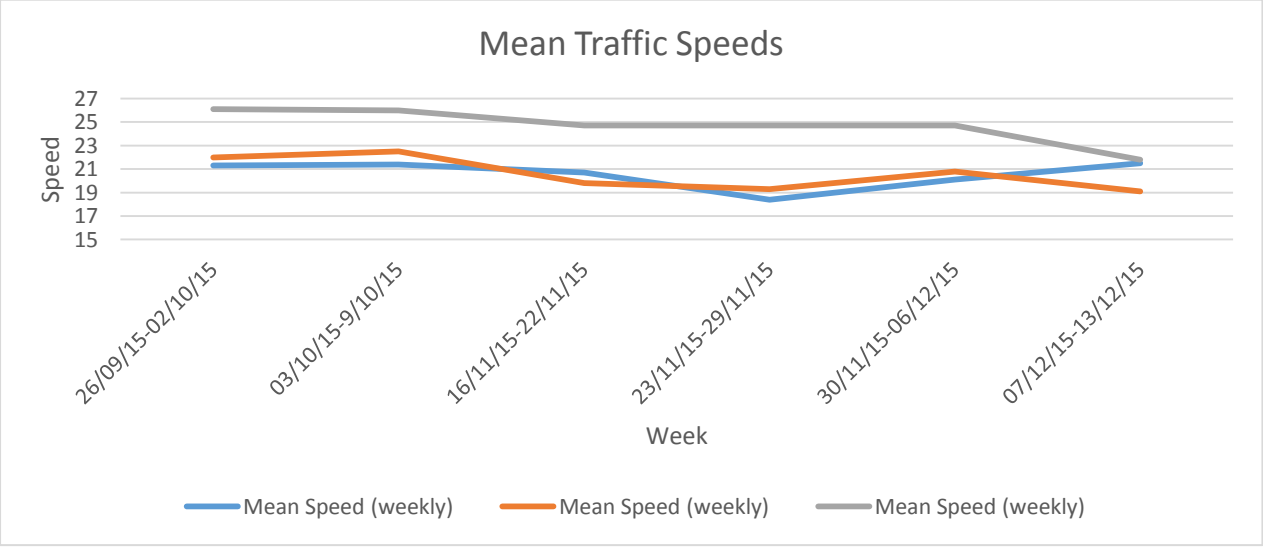

Figure 14: Mean traffic speeds along Priory Road

Since the closure of Station Road there has been a decrease in traffic speeds along Priory Road. This is particularly apparent in the PM peak hour and from the mean

weekly speed. In the AM peak hour speeds dropped just after the closure but rose again in the following weeks.

8. Whittaker Road (west of Littlebrook Avenue)

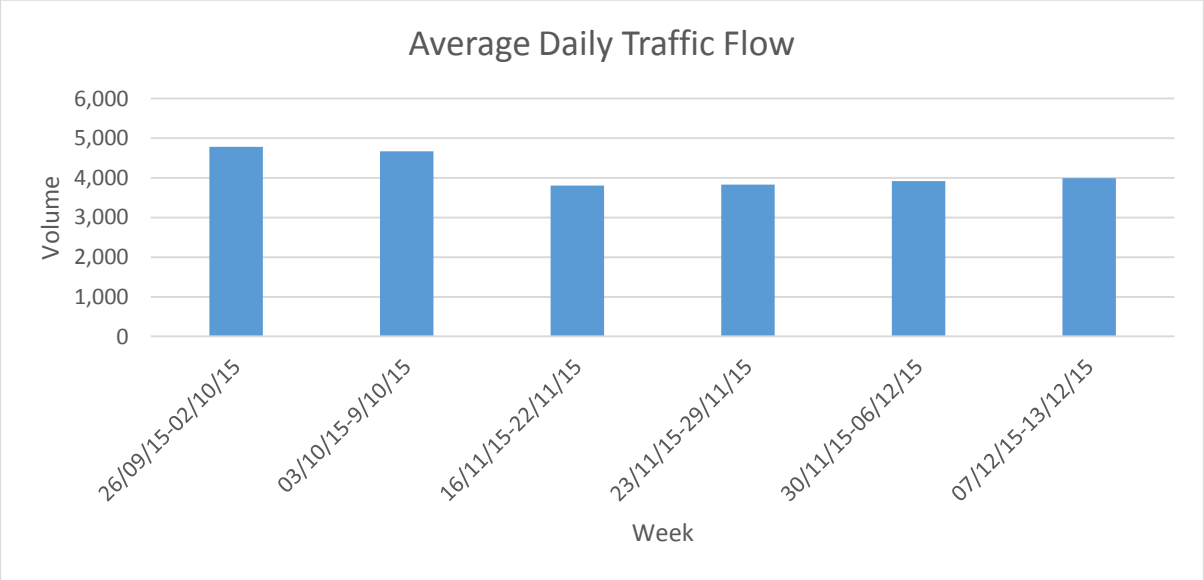

Figure 15: Average daily traffic flow for Whittaker Road

From the temporary ATC data it can be concluded that Whittaker Road has seen approximately a 17% decrease in average daily traffic flow since the introduction of the scheme.

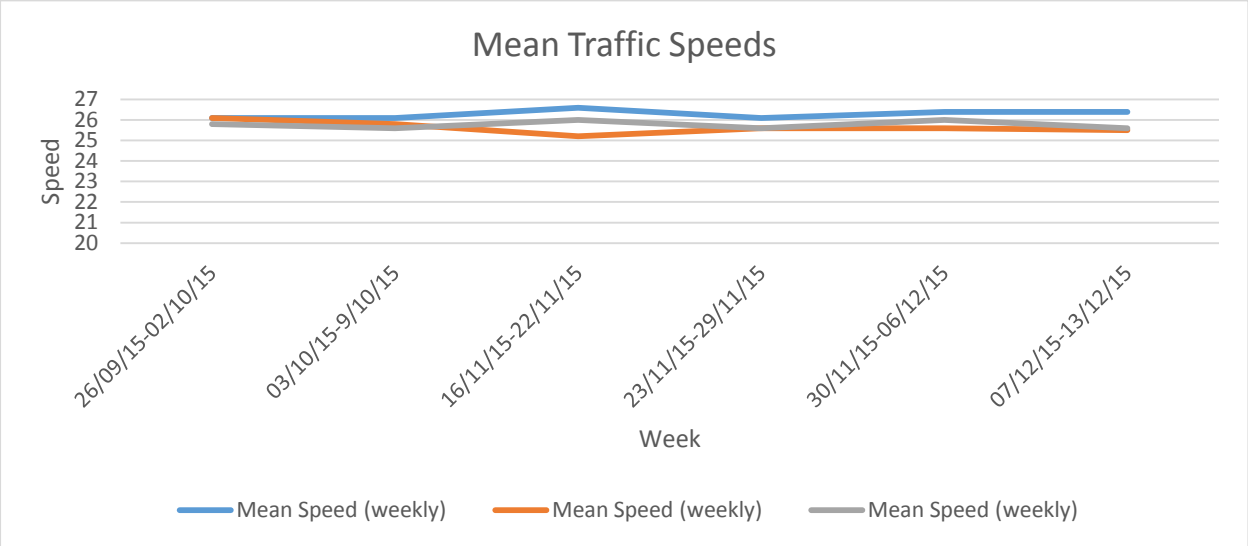

Figure 16: Mean traffic speeds along Whittaker Road

Mean traffic speeds have stayed very similar both before and after the closure of Station Road. During the week of the closure there was a small rise in speeds in the AM peak hour, but a decrease in the PM peak hour, since then they have returned to approximately the same levels.

9. Pevensey Road (east of Pennine Road)

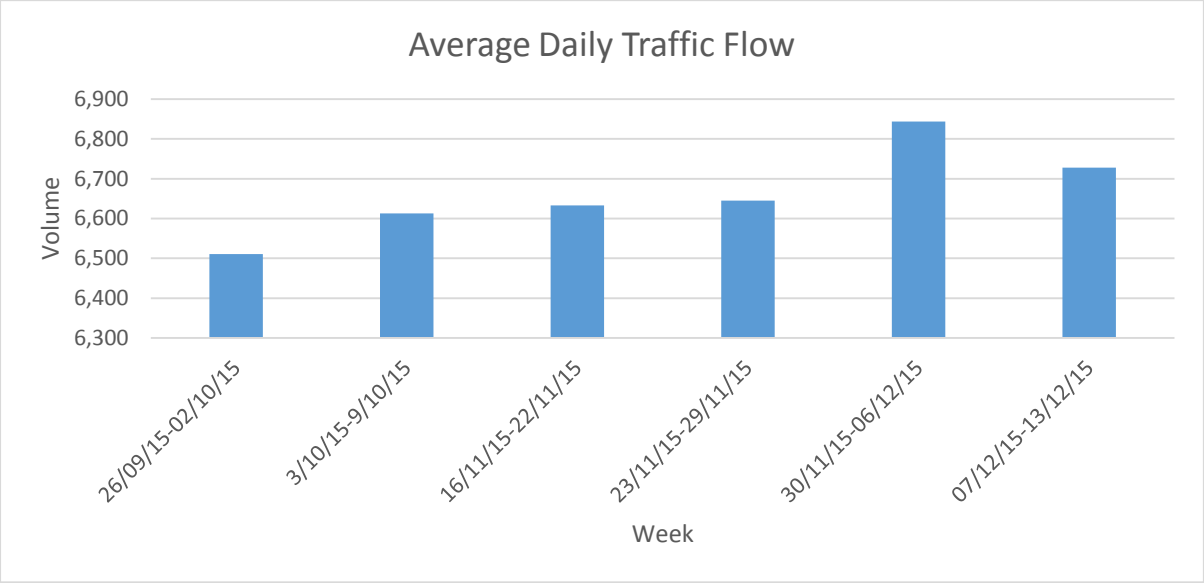

Figure 17: Average daily traffic flow for Pevensey Road

A small increase of approximately 3% in the average daily traffic flow along Pevensey Road has been recorded since the introduction of the scheme.

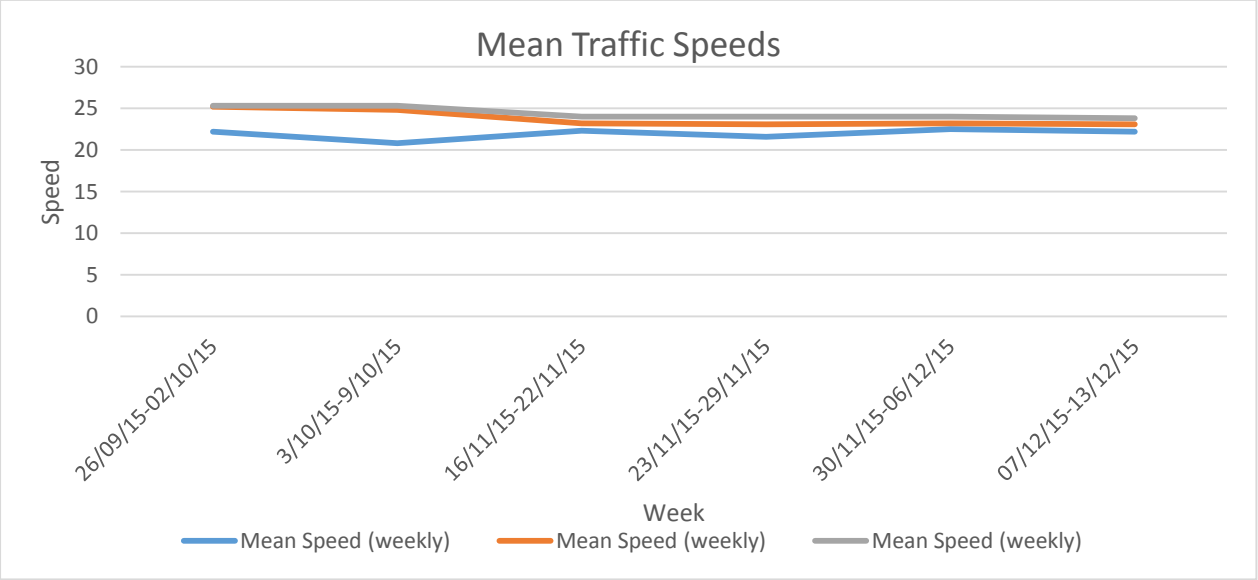

Figure 18: Mean traffic speeds along Pevensey Road

Traffic speeds in the PM peak hour, and the weekly mean speed have slightly decreased along Pevensey Road since the introduction of the scheme. Speeds in the AM peak hour however did dip slightly and fluctuate but have since returned to pre-closure levels.

10. Burnham Lane (north of Station Road)

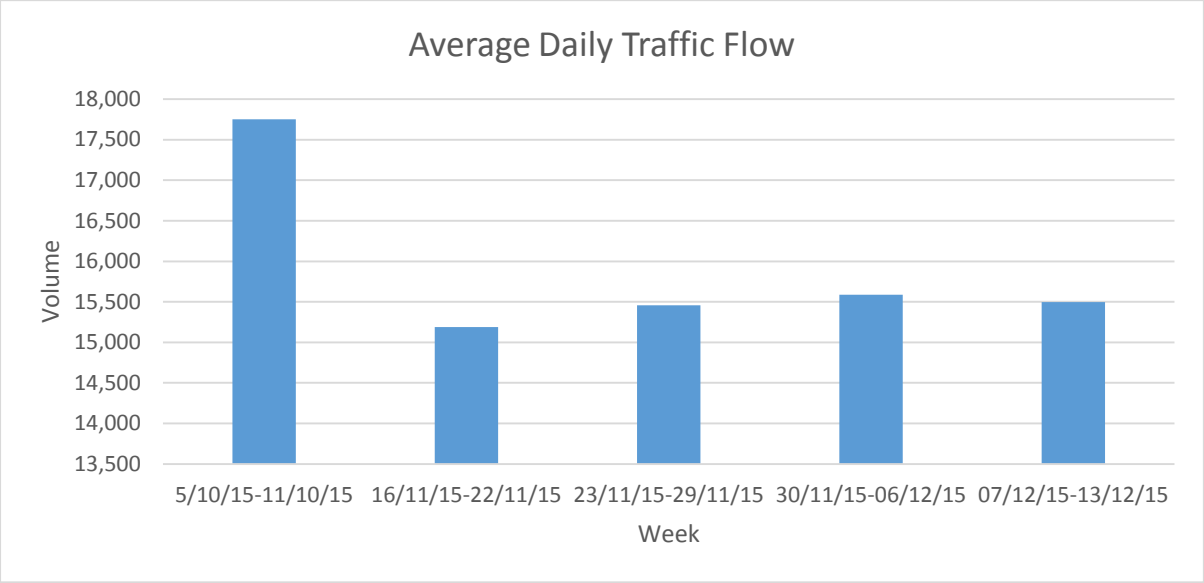

Figure 19: Average daily traffic flow for Burnham Lane

Burnham Lane north of Station Road has seen a reasonable large decrease in the average daily traffic flow since the closure of station road, as would be expected. The decrease in traffic is in the region of 13%.

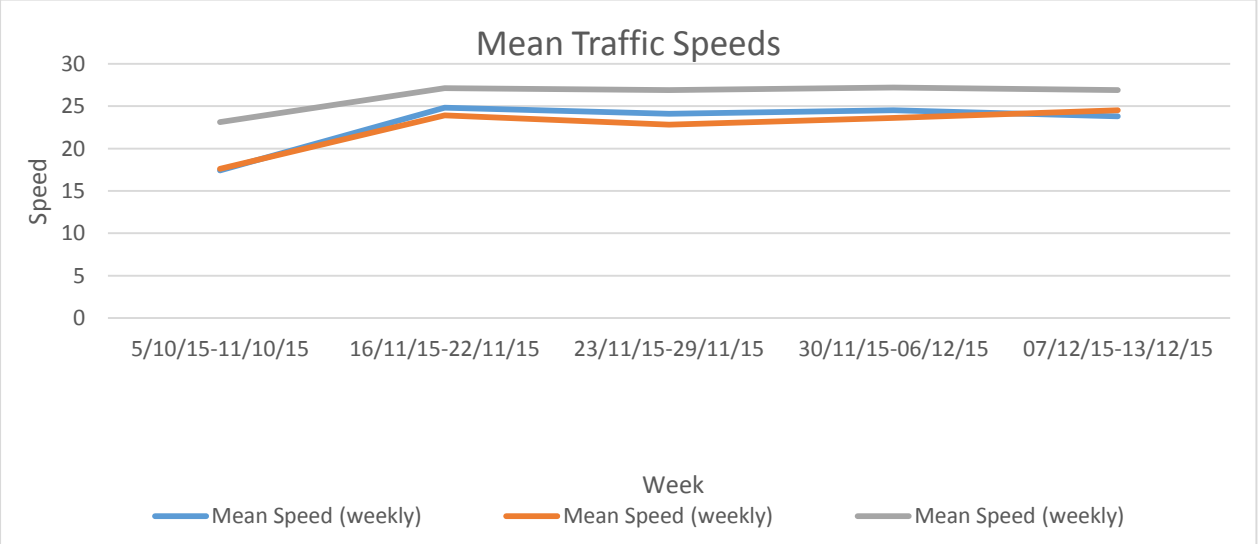

Figure 20: Mean traffic speeds along Burnham Lane

There was a rise in traffic speeds along Burnham Lane north up to and including the week of the closure of Station Road. Since then speeds have stayed relatively constant and above pre- closure levels as would be expected along this road.

11. Buckingham Avenue (west of junction with Farnham Road)

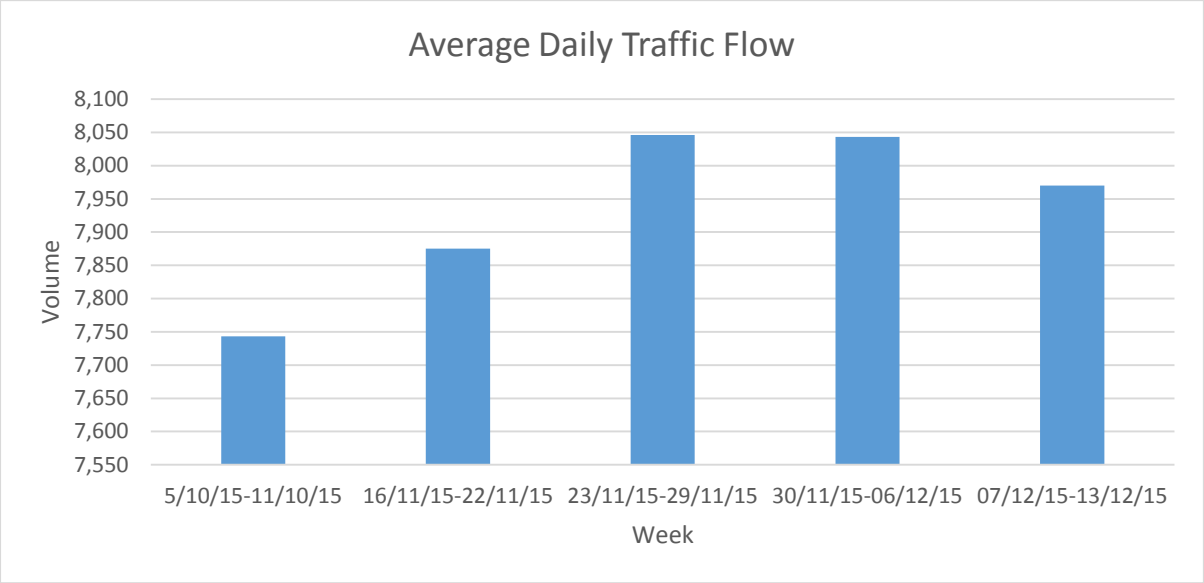

Figure 21: Average daily traffic flow for Buckingham Avenue

An increase in the average daily traffic flow along Buckingham Avenue of 4% has been recorded. This is particularly apparent in the two weeks that immediately followed the road closure.

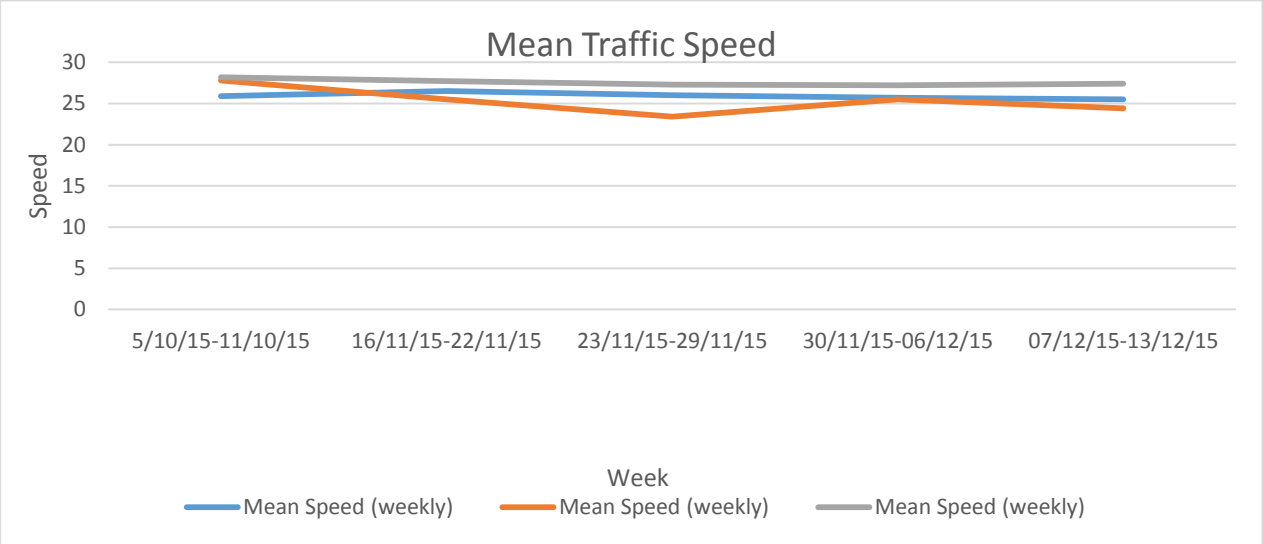

Figure 22: Mean traffic speeds along Buckingham Avenue

Speeds along Buckingham Avenue have stayed relatively consistent throughout the changes. In the PM peak hour there was a slight dip in speed in the week following the closure of Station Road and it remains just slightly lower than pre- closure levels. However, speeds in the AM peak hour and mean weekly speeds remain at approximately the same level.