Western Rail Link to Heathrow – possible closure of Mansion Lane/Hollow Hill Lane

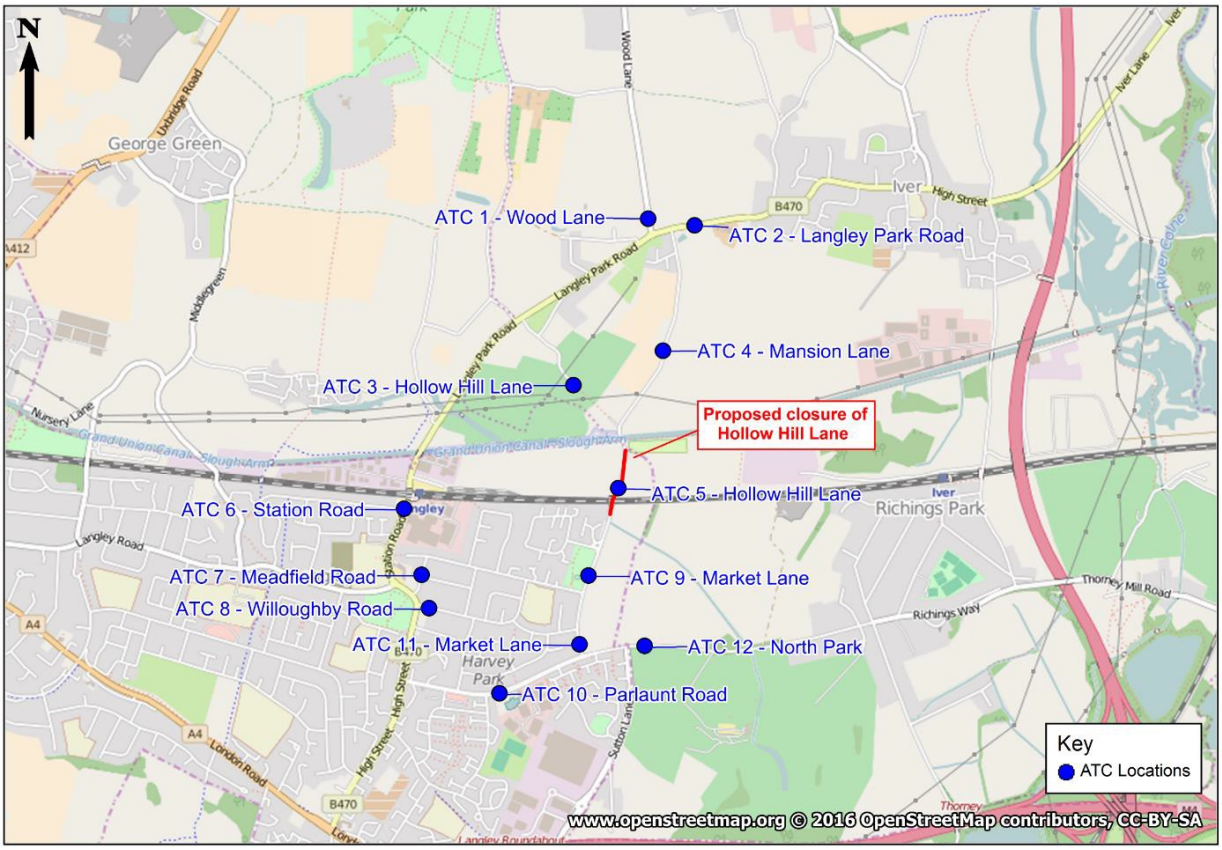
Summary of data collection for road traffic, cyclists and pedestrians

In June 2015 Network Rail carried out traffic surveys to assess the impact of the possible closure of Mansion Lane/Hollow Hill Lane as a consequence of the proposed new Western Rail Link to Heathrow (WRLtH).

Week long Automatic Traffic Counts (ATCs) were undertaken commencing on 22nd June 2015 at the 12 locations shown in Figure 1 and specified below. The road traffic survey was carried out in a so-called 'neutral' month in order to avoid school holidays and other abnormal traffic periods, in line with good practice. This typically covers mid-September to November and mid-March to June, excluding school holidays and bank holiday weeks. Neutral months are assumed to be representative of a typical flow across the year.

The area surveyed extended to Wood Lane to the north (ATC 1), Langley Park Road to the east (ATC 2), Parlaunt Road to the south (ATC 10) and Station Road to the west (ATC 6). The ATCs are located at positions to specifically monitor the changes at Mansion Lane/Hollow Hill Lane. Impacts beyond this area are assessed as part of the traffic modelling study.

Figure 1 - Locations of Automatic Traffic Counts (ATCs)



The ATC sites are:

1. Wood Lane (between Bellswood Road and Langley Park Road)
2. Langley Park Road (between Mansion Lane and Love Lane)
3. Hollow Hill Lane (between Mansion Lane and Langley Park Road)
4. Mansion Lane (between Hollow Hill Lane and Iverdale Close)
5. Hollow Hill Lane (between Market Lane and Mansion Lane)
6. Station Road (between Alderbury Road and Waterside Drive)

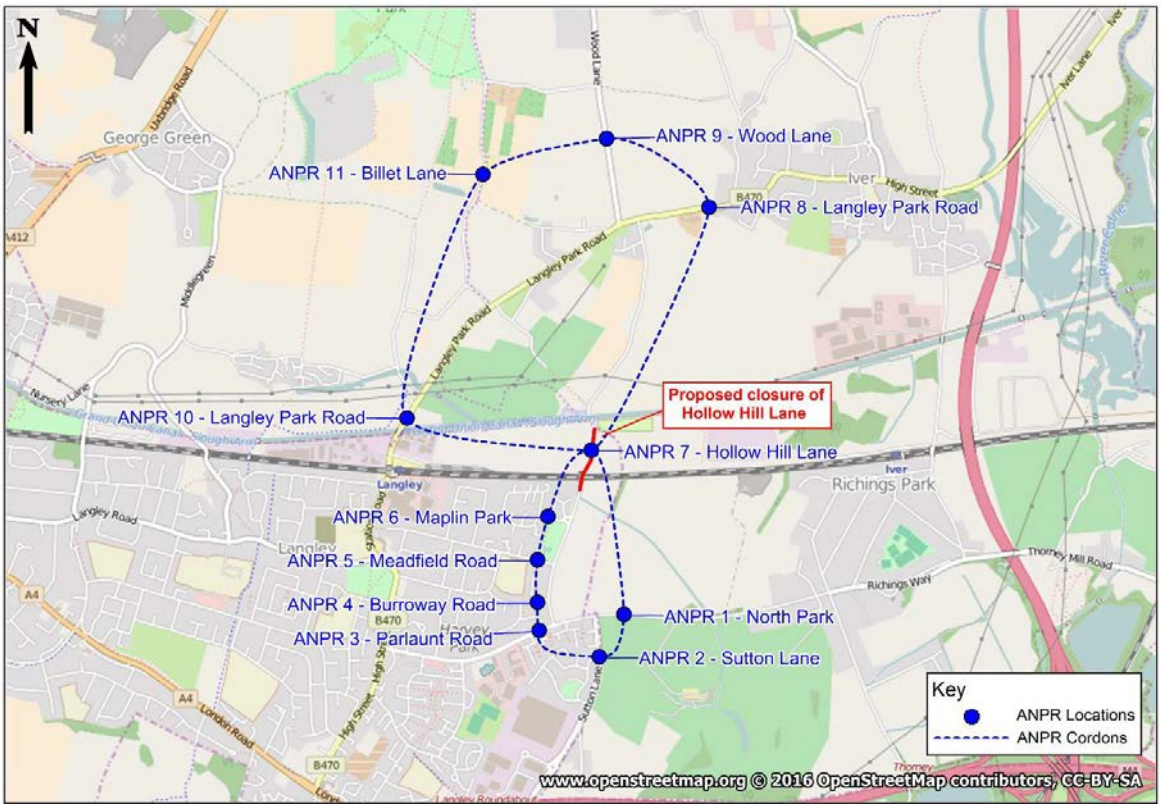
7. Meadfield Road (between Meadfield Avenue and New Road)
8. Willoughby Road (between High Street and Thames Road)
9. Market Lane (between Maplin Park and Meadfield Road)
10. Parlaunt Road (between Thames Road and Heron Drive)
11. Market Lane (between Burroway Road and Parlaunt Road)
12. North Park (between Sutton Lane and Main Drive)

This ATC data was analysed to determine traffic profiles such as the peak hour flows, and average daily flows.

Automatic Number Plate Recognition (ANPR) counts were also taken at 11 locations. These were undertaken in the AM and PM peak periods to construct an Origin-Destination matrix and journey times at cordons around the area of impact, this helps to calculate the traffic volumes. The locations produced two traffic cordons, consisting of the following sites, also shown below in Figure 2:

1. North Park
2. Sutton Lane
3. Parlaunt Road
4. Burroway Road
5. Meadfield Road
6. Maplin Park
7. Hollow Hill Lane
8. Langley Park Road (near Iver)
9. Wood Lane
10. Langley Park Road (north of Langley)
11. Billet Lane

Figure 2 - Locations of ANPR counts



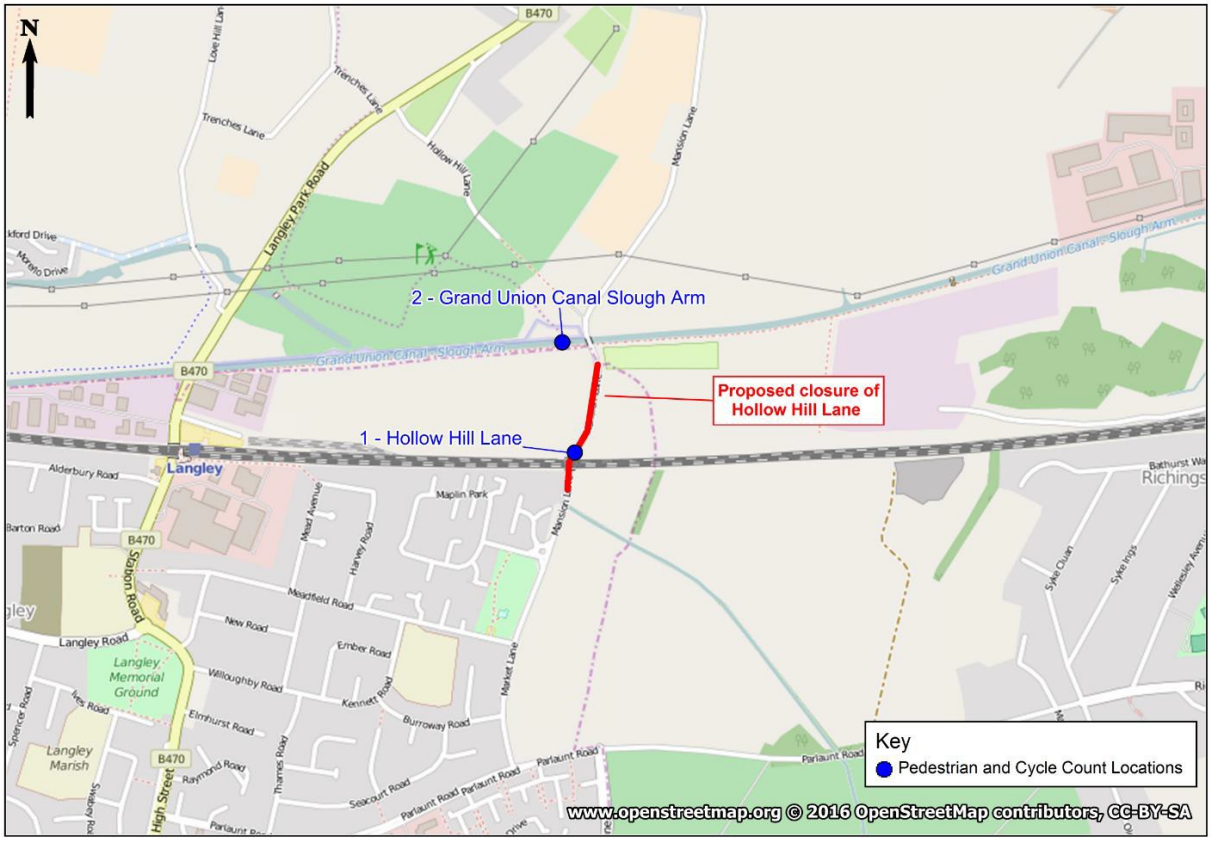
Pedestrian and cycle surveys were also carried out. Pedestrian counts were taken at 2 locations at 15 minute intervals over a 12 hour period from 07:00-19:00. The first location is northbound and southbound along Mansion Lane/Hollow Hill Lane under the rail bridge. A total of 16 pedestrians were counted across the 12 hour period making a northbound trip, compared with 11 making the southbound trip in the same time period.

The second location concerns movements eastbound and westbound along the banks of the Grand Union Canal Slough Arm. Along the south bank, 16 pedestrians made the westbound movement over the 12 hour period, whilst 12 pedestrians made the eastbound movement in the same time period.

Finally, cycle flows were recorded for the same 12 hour period as pedestrian flows and monitored the same movements as studied in the pedestrian flows. At the first location along Hollow Hill Lane/Market Lane, 1 cyclist was recorded making a northbound trip, whilst there were no southbound trips recorded. At site 2 along the Grand Union Canal Slough Arm, 31 cyclists were recorded making a westbound movement along the southern bank and 35 cyclists making an eastbound movement in the 12 hour period.

The locations of the pedestrian and cycle counts are shown below in Figure 3.

Figure 3 - Locations of pedestrian and cycle counts



Traffic survey and model results

The values below show the peak hour and average daily flows measured on Hollow Hill Lane between Market Lane and Mansion Lane (ATC 5).

Description	Period	Units	South-bound	North-bound	Two-way	Two-way HGV %
Weekday morning peak	07:00–10:00	veh/hour	284	298	582	4.4%
Weekday inter-peak	10:00–16:00	veh/hour	203	184	387	6.8%
Weekday evening peak	16:00–19:00	veh/hour	359	335	693	4.7%
Weekday overnight	19:00–07:00	veh/hour	65	70	135	3.1%
Average weekday total flow*	24 hours	veh/day	3923	3844	7767	4.8%
Average daily total flow	24 hours	veh/day	3508	3385	6893	4.4%

* Average weekday total flow – Monday to Friday
Average daily total flow – 7 day

These traffic volumes were used to update the Slough Traffic Model, so that the impact of the potential closure on neighbouring routes can be roughly estimated. The model indicates that most traffic using Hollow Hill Lane will divert via the following three routes:

- Langley Park Road / Station Road / High Street through Langley
- Thorney Lane / North Park through Iver and Richings Park
- St Mary's Road / Langley Road between George Green and Langley

It is worth noting that the model is likely to give an overestimate of the impact of the closure, as it only considers changes in route choice. In reality, the closure will result in demand responses such as changes to drivers' destination, possibly mode of travel or potentially departure time, to avoid the impact of the closure.

Next Step

This data, along with the initial traffic modelling work, will be examined in more detail to provide further analysis on the impact of closing the road.