Memo to: **Walton to Halliford Transport Study Steering Group**

From: **North East Area Team**
Local Highways Services
Surrey Highways

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Date: **11TH March 2018**

Subject: **Walton to Halliford Transport Study – Update on study findings and recommendations**

INTRODUCTION

This note summarises the findings of the Walton to Halliford Transport Study.

BACKGROUND

Following the opening of the new Walton Bridge in 2013, the Surrey County Council agreed to undertake a study to examine the impact of the new bridge on traffic and travel patterns in the Walton to Halliford corridor.

It was anticipated that traffic and travel patterns would change as a direct result of the construction of the bridge itself, together with the new junctions with Walton Lane on both sides of the river. The implementation of the proposed new cycle routes connecting to both sides of the new bridge may also have resulted in changed traffic and travel patterns.

STUDY AREA

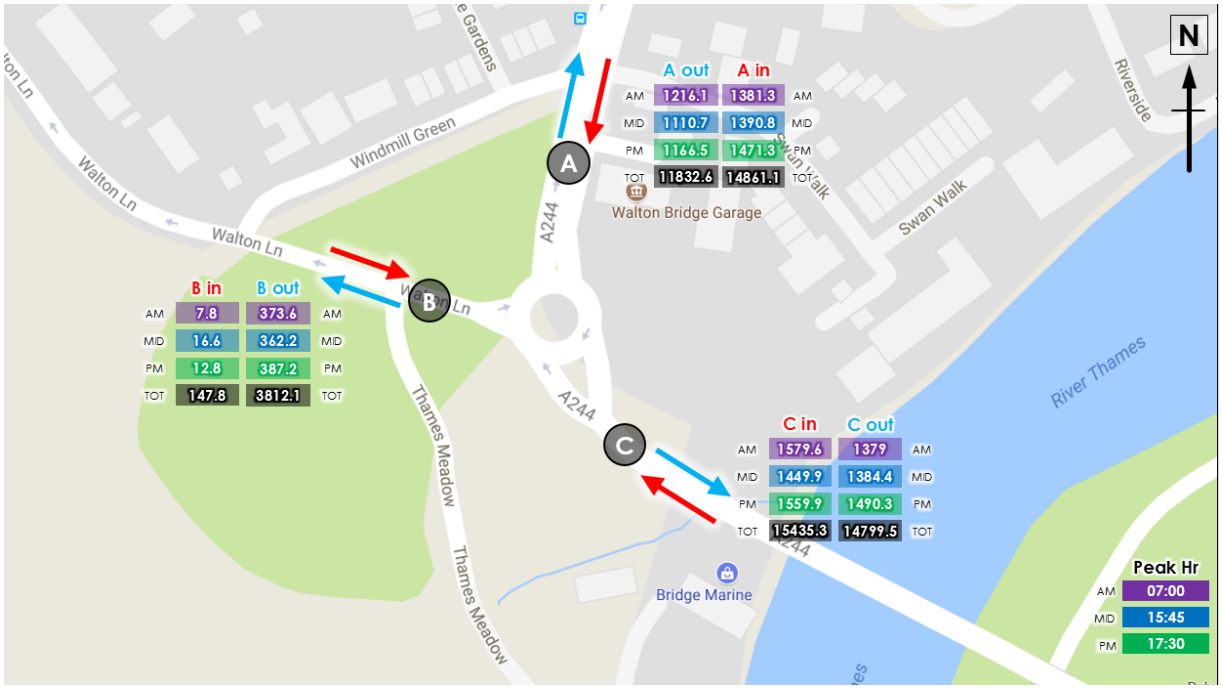
The study area is defined as the A244 (Gaston Bridge Road and Walton Bridge Road), between Charlton Lane and New Zealand Avenue. It includes the primary approach roads of Walton Lane (both sides of the river), Fordbridge Road and Russell Road.

RESULTS OF TRAFFIC SURVEYS

Video surveys were undertaken in September 2017. Analysis of the surveys provided vehicle counts, including turning movements and classification. The results are summarised below.

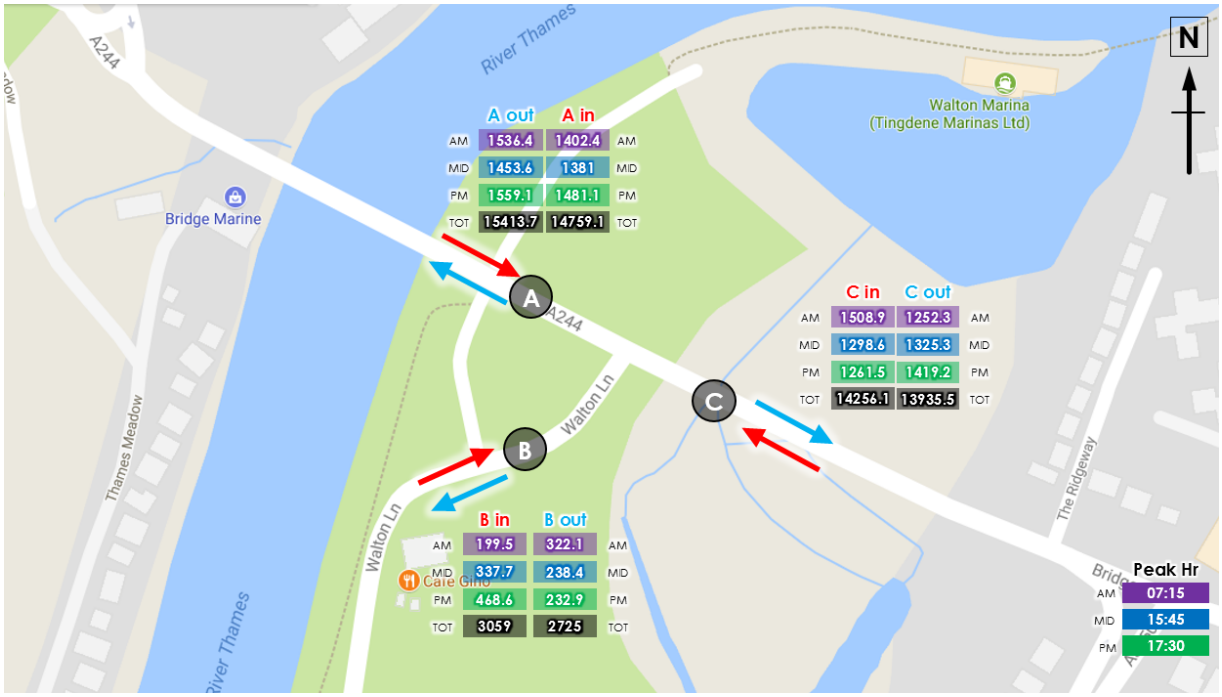
The diagrams refer to Passenger Car Units (PCU's). The PCU is used to assess traffic flow, and the impact of a mode of transport compared to a single car (a single car has a value of 1, heavy vehicles have a higher value and motorcycles and bicycles a lower value).

The video surveys were also analysed to determine the numbers of vehicles making particular turning movements.



The results show:

- Traffic flows on the main approaches, i.e. the A244, are reasonably well-balanced. Throughout the day there is slightly more traffic heading towards the bridge than away from it.
- Almost all of the traffic heading towards the bridge from the Shepperton side continues over the bridge to the Walton side, i.e. not using the roundabout to access Walton Lane (Shepperton side).
- Between 20% and 25% of traffic heading towards the bridge from the Walton side joins Walton Lane on the Shepperton side.
- A negligible amount of traffic uses the roundabout to 'U-turn' on any of the approaches.
- The distribution of turning movements is consistent throughout the day, including peak times.
- Approximately 4% of the traffic on the A244 is made up of heavy goods vehicles.



The results show:

- Traffic flows on the A244 are reasonably well-balanced. Throughout the day there is slightly more traffic heading from Walton Lane (Walton side) towards the bridge, than towards Walton.
- On Walton Lane there is an even distribution of traffic towards and away from the junction throughout the day as a whole. However, in the AM peak approximately 40% of traffic is heading towards the junction (i.e. from Weybridge direction) whereas in the MID time period and PM peak this figure is closer to 60% and 70% respectively. The volume of traffic heading towards the junction also rises throughout the day, with the PM peak flow being more than double that of the AM peak. The volume of traffic heading away from the junction (i.e. towards Weybridge direction) decreases throughout the day after the AM peak.
- The distribution of movements from the A244 Shepperton side is consistent throughout the day, with 10-15% of traffic turning right onto Walton Lane and 85-90% continuing towards Walton.
- The distribution of movements from the A244 Walton side is also consistent throughout the day, with 5-10% of traffic turning left onto Walton Lane and 90-95% continuing towards Shepperton.
- The distribution of movements from Walton Lane (from Weybridge direction) is consistent throughout the day. In the AM and PM peaks approximately 80% of traffic turns left towards Shepperton and 20% turns right towards Walton. The volume of traffic heading towards the junction rises throughout the day, with the PM peak flow being more than double that of the AM peak.
- Less than 2% of the traffic on Walton Lane is made up of heavy goods vehicles.

COLLISION ANALYSIS

Surrey Police records data on road collisions that have resulted in injury.

In the period prior to the opening of Walton Bridge (2009, 2010, 2011, 2012 plus first half of 2013) there were 68 collisions resulting in injury. In the period following the opening of the bridge (second half of 2013, plus 2014, 2015, 2016, 2017) there were 56 collisions resulting in injury.

The injury collisions involving cyclists for the same periods before and after the opening of the bridge were 20 and 22 respectively.

The data suggests that there has been a decrease in overall injury collisions although it is not possible to conclude that this is statistically significant, or attributable to any changes to the infrastructure.

COMMUNITY ENGAGEMENT

Countywide interview surveys were undertaken in 2015, seeking residents' feedback on cycling issues including frequency of cycle use and likelihood of taking up cycling.

The surveys found that the proportion of residents who cycle in Spelthorne and Elmbridge were 44% and 53% respectively, with a likelihood of taking up cycling of 19% and 37%. These figures are consistent with the countywide averages. The surveys also found that the single most influential factor which would encourage non-cyclists to cycle is more 'cycle paths separated from traffic'.

Elected Members and residents have made representations regarding the traffic conditions, cycle infrastructure and concerns relating to safety. The key themes are:

- Reported congestion due to traffic blocking at Walton Lane (Walton side), particularly turning right from Walton Lane.
- Reported congestion at the signalised junction of A244/Oatlands Drive/New Zealand Avenue.
- Safety concerns for road users in the vicinity of the scheme, particularly at the junction of A244 and Windmill Green
- Difficulties for pedestrians crossing Walton Bridge Road (Shepperton side).

RECOMMENDATIONS FOR FURTHER MEASURES

To address the above issues raised the following measures are recommended:

Improvements to the signalised junction of A244/Oatlands Drive/New Zealand Avenue
Full review and re-validation will aim to maximise the efficiency of the junction. An efficient junction will encourage drivers to use the main road approaches, particularly Oatlands Drive, which in turn will reduce pressure on the junction of A244/Walton Lane (Walton side).

Revised road layout at Walton Lane, Shepperton
Full investigation of revising the extents of the one way system, to move the start of the one-way section past the junction of Windmill Gardens. This will reduce the risk of collisions at the junction with the A244, as residents from Windmill Gardens and Sherbourne Gardens cannot currently access Walton Bridge via the Walton Lane/A244 roundabout.

Feasibility study for pedestrian crossing improvements in Walton Bridge Road (Shepperton side)

There are currently two places on Walton Bridge Road (Shepperton side), where dropped kerbs and refuge islands have been provided for pedestrians to cross the road. One is at the roundabout junction with Walton Lane on the immediate approach to the bridge. The other is by the Car Wash, which in practice is also close to the roundabout junction with Walton Lane. There is no pedestrian crossing provision between the Car Wash and Marshall Roundabout.

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