Otley Bridge Footbridge Replacement

Traffic Lights Impact

Detailed explanation why traffic signals on Otley Bridge should be avoided:

Bridge St – B6451 is designated as a Traffic Sensitive Street 06.30 to 09.30hrs and 15.30hrs to 19.00hrs every week day and 08.00hrs to 17.00hrs on Saturdays. This sensitivity is due to the volume of traffic using the road, the numbers of buses, proximity/routes to the hospital and proximity/routes to local schools.

- Traffic volume – 16000 vehicles per day, split approximately equally over the day.
- 54 scheduled bus movements daily. These two services provide a local route between the centre of Otley, the hospital and the residential estates to the north of the river.
- 16 school bus movements daily serving students at Prince Henrys between school and the wider area. Prince Henry's has over 1600 pupils, many of whom live outside Otley.
- It is part of the winter maintenance routes providing vital access to more rural areas north of the river.

Traffic queues under <u>normal</u> conditions:

- Traffic heading south into Otley regularly queues in the peak periods up Billams Hill/Newall Carr Road to the vicinity Prince Henry's school.
- Farnley Lane typically queues back to the Riverside estate.
- The Manor Square signals in the centre of Otley regularly experience queuing:
  - A659 from Pool – back to Walkergate (Manchester Square).
  - A659 Westgate – back to Waitrose but observed back to the A660 roundabout, where it impacts on by-pass traffic as well.
  - Kirkgate/Bondgate – back to Gay Lane.

Previous experiences of works on or near the bridge:

Emergency works that have impacted traffic during peak hours created extensive queuing throughout Otley. At the beginning of October 2024 minor drainage works with temporary traffic lights during peak hours had a significant impact on traffic in Otley with complaints being received.

During works in November 2022 complaints were received as temporary signals that were not removed during traffic sensitive times. It was reported that to the south traffic backed up to Manor Square and occasionally blocked the junction. To the north traffic backed up past the hospital with a queue time of 30 minutes. There were also similar delays on the east and west routes north of the river.

Temporary signals over the bridge will require a significant hold on traffic in each direction:

Existing controls will need to be suspended at the formal pedestrian crossing points at either end of the bridge and incorporated into the temporary signals. This will add time to the overall signal cycle every time a pedestrian wants to cross the road at either end of the bridge. This is essential to prevent traffic stopping on the bridge for the crossings and preventing opposing traffic from moving on a green light. The potential impacts of temporary signals have been looked at and the following could be established.

- The capacity of the road will be exceeded. This means that at the busiest times the queue length will continue to grow rather than reach a stable maximum or reduce.
- The calculations include a 'Disruption Effect Score'. 0-25 is no impact, 25-50 is low impact, 50-75 is significant impact, over 75 is severe impact. This location scored **130**.
- It is clear, without the need of sophisticated modelling works, during the peak periods waiting times would be significant and concerns are justified given previous experience.

Expectations of having 24/7 temporary signals over Otley Bridge:

- Extensive queuing on the approaches to the bridge at all times. Northbound queuing will quickly impact on Manor Square and exacerbate existing issues within the town centre.
- Extended journey times for public transport with services needing to cross the river and impact on the bus station with congestion in the vicinity.
- Extended journey times for school transport impacting particularly on Prince Henry's pupils. Of particular concern would be journeys into school during May/June when GCSE and A level exams are underway.
- Otley Hospital provides a range of services to the wider area. It has a Minor Injuries unit that takes some pressure off A&E departments in Leeds and Harrogate. This is one of two Minor Injuries units in Leeds (the other being in Middleton) so takes patients from a very wide area, mostly accessing the hospital via Otley Bridge.
- Relocation of traffic: the nearest alternative river crossings are in Ilkley and Pool in Wharfedale. Pool is already very busy and there would be extended queuing on the A659 and A658 because of traffic management on Otley Bridge.
- Possible impact on trade in Otley. If more severe traffic congestion becomes established then people may choose to travel to Guiseley, Cookridge etc for routine shopping to avoid long journey times. Whilst they would likely return after the works are complete, the extended construction time may have a significant negative impact on smaller companies. One of the town's larger car parks is accessed primarily from Bridge Street.