

Bradford on Avon Traffic Study Modelling

Wiltshire Council (Atkins) & Bradford on Avon Town Council

1. BACKGROUND AND OBJECTIVES

Bradford on Avon has suffered from problems related to traffic congestion for decades. The narrow streets and large volumes of traffic have given rise to air quality and safety concerns. The town is an AQMA for NO₂ and was a AQMA for particulates until 2021. There are frequent accidents involving pedestrian and cyclists in collision with vehicles in the town centre. This results in pedestrian intimidation with an impact on the accessibility of the town centre and its businesses to many potential users, especially those with mobility issues and with young children in pushchairs.

Following the temporary introduction of a one-way system to allow for social distancing in 2020-21, there was a comprehensive consultation on the 'Future of Transport' which drew a total of 2,750 responses. (The population of the town is c.10,000).

The key concerns revealed by the consultation were; -

- Traffic Volumes
- Air Quality
- Pedestrian and Cyclist Safety

All three priorities are key concerns that we seek measures to address. However, because of the immediate threat of injury (or worse) the Town Council has identified Pedestrian and Cyclist Safety as the number one priority. Making the town more attractive for walkers, cyclists and wheelers will also help reduce traffic volumes and improve air quality.

Two other key findings were popular support for a new pedestrian bridge (69% of respondents) and reduction in the speed limit to 20mph on all main routes within the town.

Following discussion with Wiltshire Highways the Town Council asked the Wiltshire to examine possible schemes involving a switch to one way working on some streets in order to achieve the three key objectives from the consultation.

It should be stressed that safety is the number one priority on all routes and that where some roads on a diversion route are likely to experience increased traffic loads, safety measures should be embedded from the outset.

It should also be emphasised that any measures taken should not increase overall traffic flow as this is very likely to draw in additional through traffic which is the opposite of our intentions. The aim is to create a new traffic management system that moderates traffic speeds (ideally to c.20mph) but creates enough space for vehicles and walkers/cyclists to co-exist safely.

Based on these considerations, it was agreed that Wiltshire Council officers would prepare a brief to Atkins for the development of a traffic model which would be able to identify, quantify and test possible traffic system interventions.

This brief aims to request a methodology which is capable of quantifying the existing traffic problems in Bradford on Avon and forecasting possible interventions to mitigate those problems by using a suitable traffic model.

The model will then be used to test up to three intervention scenarios aimed at addressing the transport issues identified.

Whilst the Model Area (below) encompasses the key routes and intersections, we also need to maintain awareness of potential implications on routes beyond this area.

Traffic Study/Model Area.



2. OUTLINE DESCRIPTION OF WORKS TO BE UNDERTAKEN

This brief is to:

- To build and use a suitable traffic model of Bradford on Avon in order to:
 - Use the model to test up to three interventions which address the identified traffic issues.
 - Determine the intervention most likely to achieve the optimum traffic system in Bradford on Avon which will achieve the three key aims identified by the Future of Transport consultation.
 - Provide a cost per additional intervention test.

