

A435 Studley HGV Routing Study: Executive Summary

Warwickshire County Council

October 2017

Contains *sensitive* information

Executive Summary

Project Background and Purpose

Following a stakeholder meeting held in May 2016 at Studley Village Hall, Warwickshire County Council (WCC) commissioned a heavy goods vehicle (HGV) origin and destination survey along the A435 corridor between M42 Junction 3 and Alcester. The survey was undertaken in response to local concerns that traffic problems in Studley are getting worse, particularly in relation to an apparent increase in the volume, noise, speed and vibration caused by HGVs passing through the village.

The survey has established the number and proportion of HGVs passing through the study area via the A435 without stopping as part of a strategic through trip, relative to those with a local purpose serving businesses in the Studley/Alcester/Redditch area.

Survey data provides a robust evidence base from which to gain a more detailed understanding of the nature of the HGV problem, and to inform the development of a range of potential improvement options, which are outlined later in this report.

Atkins Limited (a transport consultancy with previous experience of carrying out studies of a similar nature), was commissioned by WCC to conduct independent analysis of the survey results and produce a list of suggested options for further consideration.

The study has also considered concerns expressed by local residents that the A435 through Studley appears to be increasingly used as an alternative route by longer distance HGVs when there are closures on the Strategic Road Network (SRN) which is managed by Highways England. An example of this occurred during the recent night-time closures on the M5 as part of the Smart Motorways Project between Junctions 4a and 6, despite a signed diversion route being in place via the A38 near Bromsgrove.

Data and Methodology

The surveys took place over a 'typical' 24-hour period commencing at 06:00 on Tuesday 29th November 2016. This period was selected to represent a typical day during a neutral month (in accordance with Department for Transport guidance (TAG Unit M 1.2) Data Sources and Surveys). No road closures due to planned works took place over the survey period nor were there any reported major incidents on the network.

Origin-destination surveys (based on vehicle registration plates) were carried out 19 sites (both directions surveyed) across the study area, together with a series of traffic counts. These sites

were positioned along the A435 corridor between the M42 Junction 3 and Alcester. This data was captured using Automatic Number Plate Recognition (ANPR) cameras which recorded the number plate of each vehicle at each of the 19 sites. Each number plate is time-stamped by time and date and enables the identification of vehicle routings through the study area.

Key Findings

The following key findings were drawn from the survey results:

- Over a typical 24-hour period, most HGVs travelling within the study area had a local purpose, serving the local economies of Redditch, Studley and Alcester.
- Strategic through trips (journeys made along the entire length of the A435 without stopping within the local area) accounted for approximately 7% of all HGV trips.
- The number of HGVs that were observed to be making complete through trips (travelling the full length of the A435 between the M42 and Alcester without stopping) was 154 during the 24-hour survey period.
- In excess of 70% of HGVs and 80% of all other vehicles are using the study area for local trips.
- It is appreciated however, that incidents or planned road closures on other roads (A46, M42, M5 and M6) can often increase the volumes of HGVs/other traffic making through trips and routing via the A435 through Studley, Mappleborough Green and other communities along the route.
- The proportion of HGVs to total traffic varies throughout the study area. It ranges from 9% at Site R (to the south of M42 J3) to 5% at Site F (A435 south of Studley) to 1% at Site S (B4092 Station Road, Studley).

Option Development

In the light of the survey findings, Atkins has put together a list of 21 potential options which seek to consider how the impact of HGVs can be minimised (where possible) and/or mitigated for further consideration. These options cover different types of measure (addressing speed, noise, air quality, and volume of HGVs) all of which vary in terms of their likely ease of implementation, cost and time required to implement.