COBHAM AND SOLE STREET, GRAVESEND

Traffic and Future Options Feasibility Study

Prepared on behalf of Cobham Parish Council

COBP/2019/5197/FS01 REVC

April 2020

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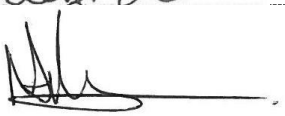
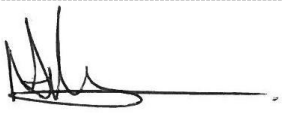
Checked by:	NDR		Date	21/04/2020
Approved by:	NDR		Date	21/04/2020

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Executive Summary

RGP has completed a Study on behalf of Cobham Parish Council to provide support relating to the existing traffic conditions experienced in Cobham village and Sole Street, particularly during peak periods. The current heavy traffic flows through the villages results in severe congestion and road safety concerns, which are having a detrimental impact on the historic character of the village and particularly the day-to-day amenity of local residents. From baseline evidence presented in this report, which highlights the issue, 4 potential mitigation options are outlined for further discussion with relevant stakeholders.

The report has used information from several different traffic data sources collected within Cobham which have been analysed and summarised to illustrate the extent of the traffic problems within The Street and Sole Street. The results of this analysis have concluded that the level of vehicular traffic experienced in Sole Street and The Street, Cobham is significantly higher than other roads in the UK with similar road type designations. The peak hour periods are particularly high and data shows that approximately 600 two-way vehicle movements use The Street in a peak hour period and up to 800 in the same period in Sole Street, a significant proportion of which is through-traffic and have been displaced from the A2 to avoid queues and delays. This is made more substantial given the significantly constrained road width in The Street, which does not facilitate two-way simultaneous movements, but still experiences a two-way hourly flow in the morning peak hour of almost 600 vehicle movements.

It is evident from the data collected and analysed that the two roads surveyed (The Street and Sole Street) are both detrimentally affected by traffic displaced from the A2 during peak hour periods. This is likely to be further exacerbated by the plans for the Lower Thames Crossing (LTC) on the A2 immediately north of Cobham. Concern is raised that the plans will increase traffic flows in the area when the new crossing opens, leading to further displacement of traffic from the LTC/A2 attempting to make its way through Cobham and Sole Street.

A series of four options have been presented in this Study consisting of varying degrees of severance of The Street with the aim of reducing/removing displaced traffic using inappropriate routes through Cobham and Sole Street rather than the Strategic Road Network. However, these works will also affect local residents to varying degrees as well as through traffic. It is hoped that the supporting evidence and information in this report along with the presented series of options will facilitate discussion and engagement with Kent County Council as Highway Authority as well as Highways England to consider the future options for traffic management in Cobham with a view to improving the traffic conditions for local residents.

CONTENTS

PLANS

APPENDICES

1 INTRODUCTION

1.1.1 RGP is instructed by Cobham Parish Council to provide transport and highway support relating to the existing traffic conditions experienced within Cobham village, particularly The Street and Sole Street in light of continuing congestion during peak hour periods. This results in severe road safety issues, high traffic flows to all road users and local residents whilst also having a detrimental impact on local residential amenity. In addition, concerns are also raised relating to the future impact of the Lower Thames Crossing on the village of Cobham.

1.1.2 This report reviews various sources of information including five sets of traffic surveys collected over the past 2-4 years locally to identify the issues presented by the current traffic conditions. In light of the baseline data and from site observations by RGP on two occasions in the peak hours, the report presents a series of options to address the concerns of residents ranging from low cost to higher cost interventions for discussion with key stakeholders.

1.1.3 It is anticipated that this report will inform a meeting to be arranged with relevant officers at Kent County Council (KCC) and Highways England to discuss potential options to remedy the current traffic situation in Cobham. Subject to the outcome of this meeting it is anticipated that funding options can be discussed and a preferred option (or variation) can be agreed and if necessary progress a series of trials in Cobham village.

1.1.4 The remainder of this report is detailed as follows:

(i) Existing Baseline Conditions;

(ii) Future Options;

(iii) Summary and Conclusions.

2 EXISTING CONDITIONS

2.1 Local Context

2.1.1 Cobham Village is located 10km south east of Gravesend to the immediate south of the A2/M2 motorway accessed from the Brewers Road junction. The town of Chatham also lies to the east of Cobham on the eastern side of the M2. The Street is the main route east to west through the village, whereas Sole Street runs north to south linking The Street to Sole Street rail station as well as to the A227 further south.

2.1.2 Cobham is a medieval village which is populated with numerous historic listed buildings which give the village its character, many of which front onto the road with front doors opening straight onto the footway, creating an historic narrowing to The Street which traverses the village from east to west. The Street at its narrowest point is circa 4.2m in width from kerb to kerb (5.65m between the building frontages). The Street widens to a full carriageway width at the eastern and western extents of the village where two vehicles can pass without obstruction.

2.1.3 The village and Sole Street have long been subjected to use by 'through traffic' often referred to as 'rat-running' traffic from vehicles avoiding the main Strategic Road Network (i.e. M2/A2) and diverting through the village to avoid congestion and delays. The impact of this is that vehicles are regularly recorded mounting the footways to pass one another due to the historic road narrowing (as shown in **Photos 1** & **2** below).

Photos 1 & 2 – Congestion in The Street, Cobham

2.1.4 The existing footways range in width through the village, however through the centre are approximately 1.1m in width. The conflicts between pedestrians and vehicles are illustrated in **Photo 3** whereby vehicles are mounting the footways resulting in daily near misses with pedestrians, many of which are children walking to school, in the east of the village. Further details relating to the local concerns are set out by local councillor Tony Rice in a document attached as **Appendix A** to this document.

Photo 3 - Pedestrian and vehicle conflicts in The Street, Cobham

2.1.5 In addition to the road safety issues, the traffic also detrimentally affects the air quality of local residents and as a result, Gravesham Borough Council has installed a diffuser tube to monitor the situation. Other effects also include increased noise which combine to cause sleep deprivation as well as an effect on mental health and general health complaints of local residents, addressed further in the information in **Appendix A**.

2.1.6 The Street and Sole Street are currently served by bus services 3, 311, 416, 695 which require east and west access along The Street. There is a 7.5T vehicle weight limit 'except for access' restriction on The Street which seeks to limit the number of HGVs using the village route, however the KCC ATC traffic survey results show that there are an average 100 two-way HGV movements a day.

2.1.7 There are a number of interventions that have been implemented in The Street to achieve traffic calming and restrictions to both restrict the volume of traffic as well as ease the flow as follows:

(i) Chicanes – engineered narrowing to the east and west of the centre of the village;

(ii) 20mph speed limit – to reduce the speed which motorists drive through the village due to the restricted width;

(iii) Double yellow lines – to prevent car parking on The Street to prevent further obstruction to vehicle movements;

(iv) Removal of centrelines – These have been removed in the centre of the village to highlight to motorists that the carriageway is narrow;

(v) Non-standard road treatment at junctions – paviors have been instigated at the roundabout junction Halfpence Lane/Cobhambury Road/The Street to highlight the presence of the village;

(vi) Vehicle Activated Sign – operated by the Parish Council this sign is placed within the village to remind motorists of the speed limit as well as record speeds across the year. This incidentally also records vehicle volumes and has been used as a data source in this report.

2.1.8 Despite the above interventions, it is evident that the measures are not proving effective in reducing traffic volumes through the villages of Cobham and Sole Street.

2.1.9 Local observations from residents identify that vehicle traffic is regularly displaced from the A2 westbound in the morning peak period to avoid queuing and congestion. Vehicles are observed to leave the A2 northbound at the Brewers Road junction travelling south on Halfpence Lane, driving westbound along The Street, moving south along Sole Street and turning onto the A227 to re-join the A2 northbound carriageway.

2.1.10 Given the proposed changes to the Strategic Road Network (SRN) in the local area with the Lower Thames Crossing (LTC) (discussed further in this section), RGP questions to what extent cordon surveys/ANPR surveys have been completed locally to input into the strategic traffic model to forecast the future traffic flow on local roads as well as the SRN. From the publicly available assessments undertaken, it appears that little consideration has been given to the likely impact of the LTC on rural villages south of the A2 through traffic re-distribution on the network.

2.1.11 Notwithstanding this information, cordon surveys/ANPR surveys through Cobham village are considered an important next step to evidence the routing practices of vehicles displaced from the A2. The results would also help the future SRN proposals as well as informing the best solution for relieving Cobham of the impacts of displaced traffic from the A2.

2.2 Department for Transport A2 Traffic Flow Data

2.2.1 Data from the Department for Transport (DfT) has been downloaded to ascertain the level of traffic flow increase on the mainline A2 in each direction. There are two count points on the A2 which are considered relevant, namely count point id 56098 and count point id 36100 which are shown on the **Figure 2.1** below.

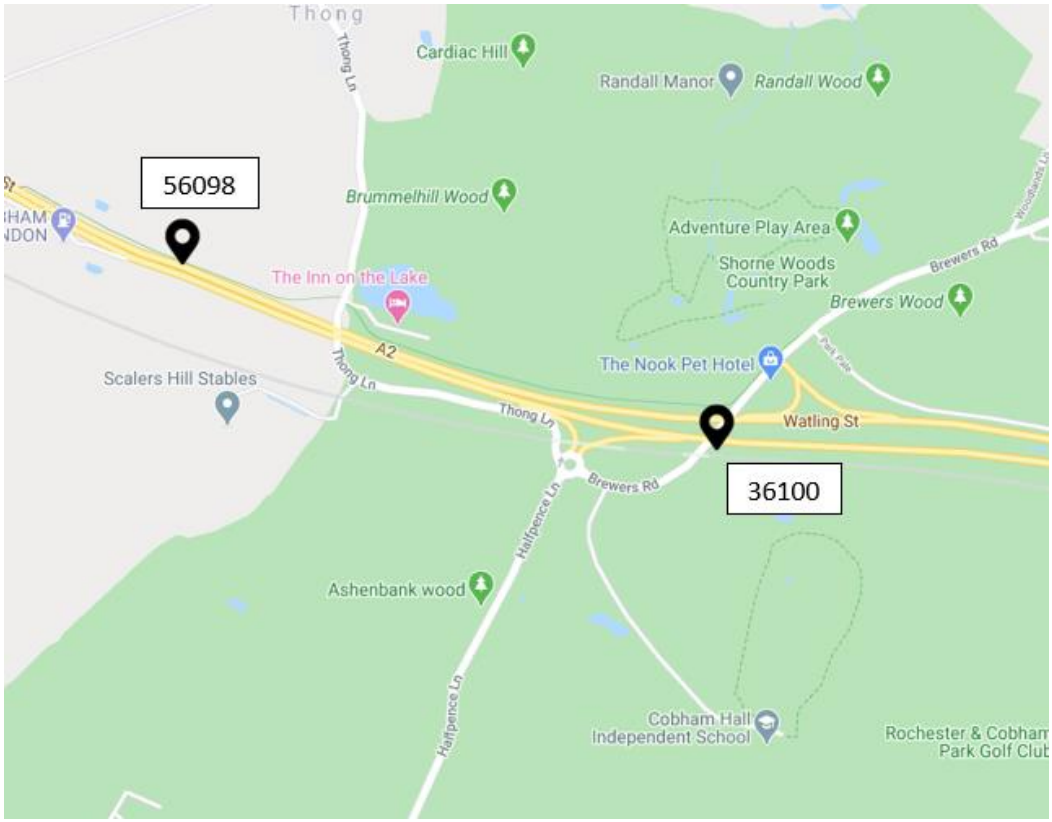

Figure 2.1 - DfT count point id locations

2.2.2 The data comprises information relating to the annual average daily traffic flows (AADT) in both directions on the A2 as well as hourly traffic flows on sample days. The AADT data is included in **Appendix B** to this report with a summary of the 2018 data below in **Figure 2.2**. It should be noted that the count point id 36100 was estimated in 2018 rather than derived from actual survey data.

Year	DfT count id point	Traffic Flow by direction of travel AADT (vehicles)	Two-way AADT (vehicles)
2018	56098	69,402 (E)	135,976
		66,574 (W)	
	36100	66,255 (E)	127,146
		60,891 (W)	

Figure 2.2 - A2 AADT vehicle flows (DfT)

2.2.3 The traffic on the A2 continues to increase year on year with an increase in two-way traffic of 7.9% at count point id 56038 between 2016 and 2018 and 3.8% at count point id 36100 over the same period which amounted to an additional 9,995 vehicles recorded through count point 56038 during the period.

2.3 Local Traffic Surveys

2.3.1 A series of traffic surveys have been made available to RGP collected locally within Cobham. Data has been derived from three different types of datasets firstly a local roadside Radar device used by Cobham Parish Council in Sole Street and The Street to monitor flows and speeds which covers dates in 2018 and 2019. Secondly, there are 2 sets of Automatic Traffic Count (ATC) data which cover periods in 2016 and 2019 on The Street and Sole Street.

Figure 2.3 - Radar and ATC Survey Locations

Radar Data – Overview

2.3.2 Speed and traffic volume data was collected from the local roadside Radar device which is operated by Cobham Parish Council. The device collected data during 2018 and 2019 in both directions on The Street to the west of the village centre as well as both directions on Sole Street as shown in **Figure 2.3** below.

2.3.3 The data only records one direction at any one time, therefore two-way flows are presented as averages and not recorded on the same day/week, however it is still a valid record of the traffic flow and speed trends on The Street and Sole Street over longer periods of time. Data was recorded at the following locations during the following time periods:

(i) 'Cobham In' (westbound traffic) – September 10th 2018 – November 1st 2018 and August 12th 2019 – October 4th 2019;

(ii) 'Cobham Out' (eastbound traffic) – January 14th 2019 – March 7th 2019, July 15th 2019 – August 9th 2019 and October 7th and November 15th 2019;

(iii) Sole Street (southbound traffic) – March 11th 2019 – May 16th 2019;

(iv) Sole Street (northbound traffic) – November 7th 2018 – January 11th 2019.

2.3.4 The data has been extracted and inputted into RGP's *Rate My Road* tool which assesses the traffic conditions of specific roads by comparing them to national averages for the same road type in the UK which is shown in **Appendix C** of this report. Extracts of the data have been used in this report for summary purposes.

Radar Data - The Street, Cobham

2.3.5 Similar to the Sole Street radar data, the data collected from the radar device in The Street has been combined to create an average week and a maximum average week for vehicle traffic flow using weekdays only. **Figure 2.4** below identifies that the average level of vehicles using The Street is four times the average and the maximum week's average is almost 5 times the average for this road type.

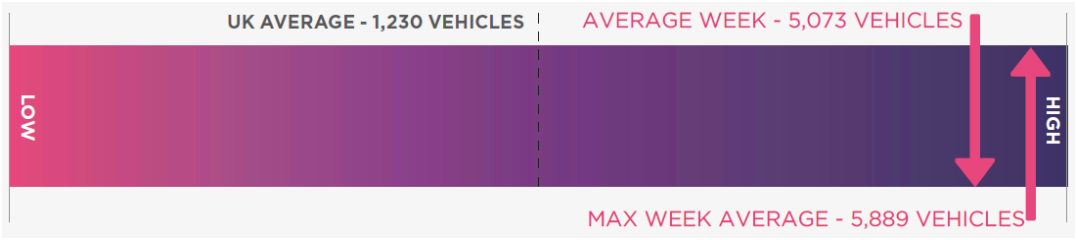

Figure 2.4 - The Street, Cobham – Weekday Traffic Flow

2.3.6 It should be noted that the comparable roads within the assessment that derives the UK Average in **Figure 2.4** above will be assumed to have a width to allow two-way traffic to pass one another i.e. above 5.0m in width, rather than the significantly constrained widths which are currently experienced through The Street in Cobham village further exacerbating the detrimental impact from the level of vehicles.

2.3.7 Looking at the vehicle flow by hour from **Figure 2.5** below, the hourly weekday peak periods are observed 0700-0900hrs in the morning and 1700-1800hrs in the evening. The average maximum week (shown in purple on the graph) from the data shows that the morning peak hour periods have high two-way flows of just under 600 two-way vehicle movements in both peak hour periods, with 0800-0900hrs slightly higher. The average of all of the Radar data (shown in pink on the graph) indicates that in fact 0700-0800hrs is the general morning peak hour with around 550 two-way vehicle movements.

2.3.8 These vehicle flows are high considering that The Street cannot sustain two-way vehicle flows through its centre which causes the constant stream of slow-moving vehicles from 0700hrs each weekday morning. The additional peak of vehicles between 2100-2300hrs noted in the average maximum week suggests that there is likely to have been overnight roadworks on the A2 had which has caused 250-300 vehicles an hour to displace onto the local road network through Cobham village.

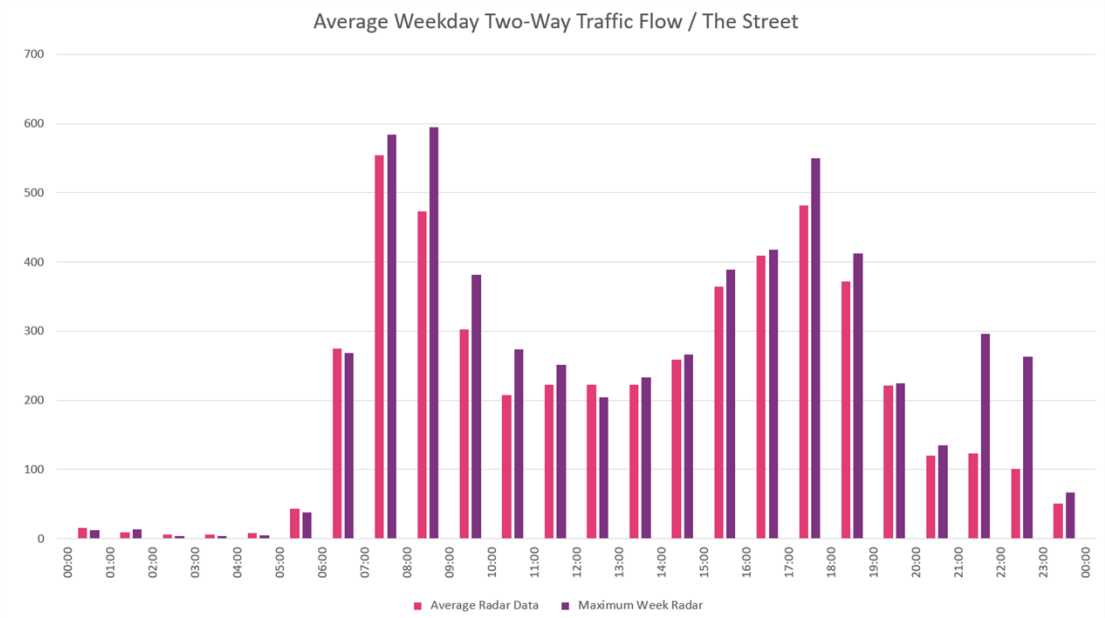

Figure 2.5 - Average two-way traffic flow, by hour, The Street, Cobham

2.3.9 The average speed data collected from the radar suggests that the average speed is 30mph with an almost even split of vehicles driving less than the speed limit to those exceeding it (shown in **Figure 2.6**). The position of the radar to the west of the village within the 30mph speed limit zone explains the higher prevailing speeds compared with the KCC ATC data presented later in this section which was positioned in the centre of The Street where the road is narrower and also has a 20mph speed limit.

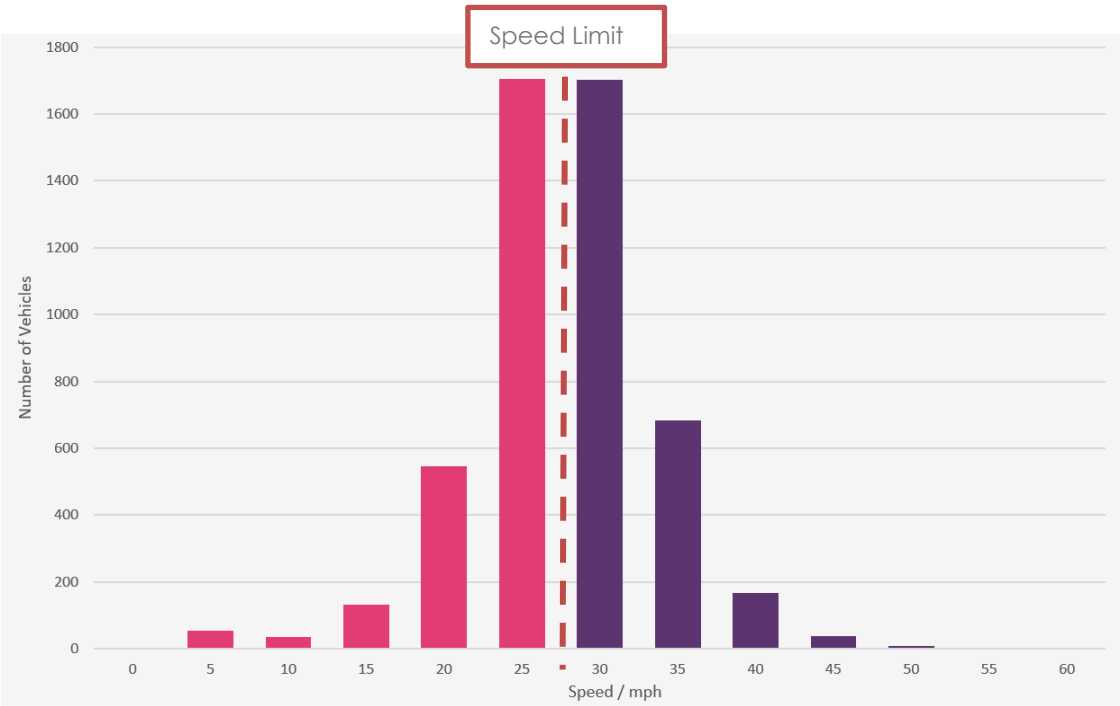

Figure 2.6 - The Street, Cobham - Average Speeds

Radar Data - Sole St

2.3.10 The whole radar dataset collected for Sole Street has been combined to create an average week and a maximum average week to identify the level of vehicles which are using Sole Street on a daily basis. **Figure 2.7** identifies the average weekday two-way traffic flow across the survey period on Sole Street is over 5 times the national average for the same type of road and almost 6 times for the maximum recorded week.

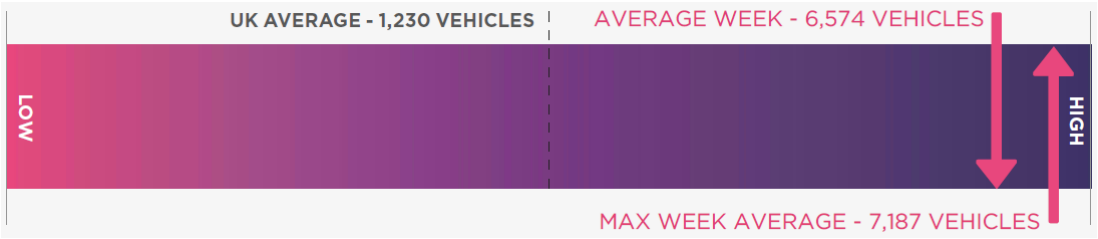

Figure 2.7 - Sole Street – Weekday Traffic Flow

2.3.11 Assessing the data further, the weekday peak hour data in **Figure 2.8** shows similar trends to the data in The Street which identifies that the peak hour period in the morning is 0700-0800 and 1700-1800 in the evening. The average weekday from the maximum week shows that there were on average almost 800 two-way vehicle movements along Sole Street, 60% higher than the average week, although interestingly this occurred in the 0800-0900hrs peak hour. The evening peak hour period is also higher than The Street, with just over 600 two-way vehicle movements each hour.

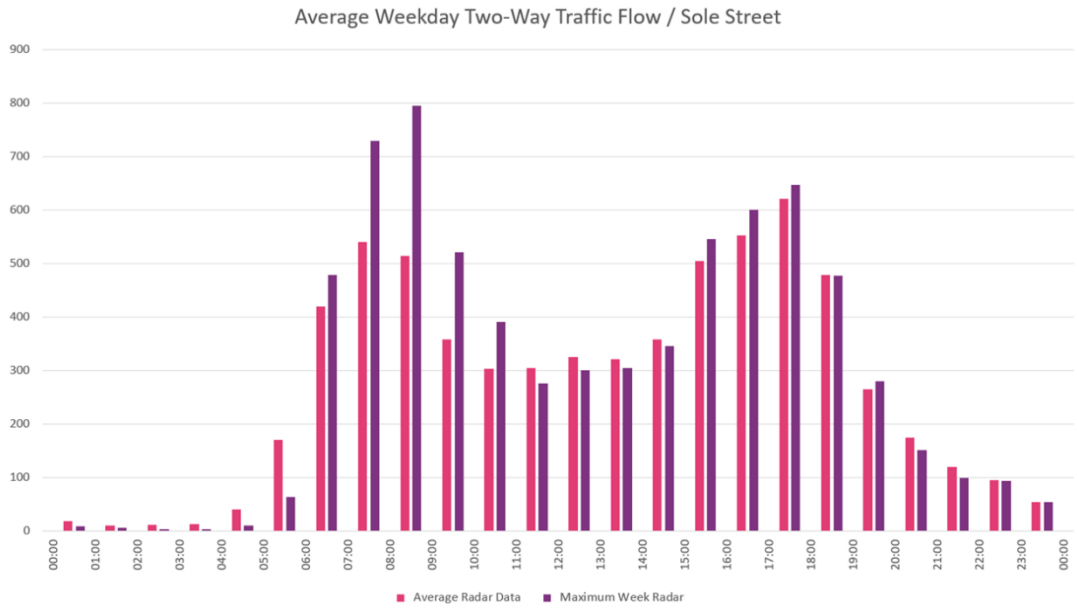

Figure 2.8 - Average two-way traffic flow, by hour, Sole Street

2.3.12 The radar data collects vehicle speeds and places them into 5mph speed bands('bins'), using this data it has been possible to establish that the prevailing speeds along Sole Street in both directions. The graph in **Figure 2.9** shows the average number of vehicles travelling above and below the speed limit in the given bands show the majority of vehicles travel in the 25-30mph speed band with pink representing vehicles travelling below the speed limit and purple for vehicles travelling above the speed limit. This data can be compared to the KCC average speed data collected from the ATC results later in this section.

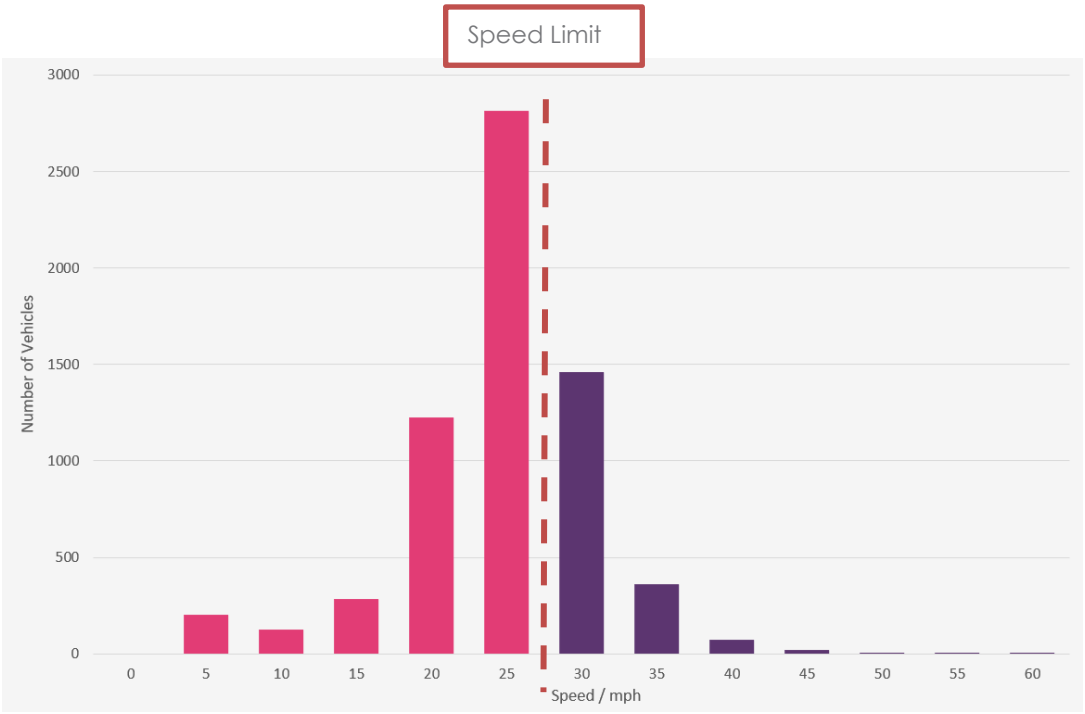

Figure 2.9 - Sole Street - Average Speeds

2.3.13 Further to the information outlined above, an example day (13th February 2020) has been extracted from the data whereby congestion was heavier than normal due to an incident. This caused vehicles to queue more than normal back to the Cuxton/Strood junction and therefore caused additional vehicles above the average level experienced. Figure 2.10 shows the data from 13th February compared to the Average weekday flow for the 'Cobham Out' radar position.

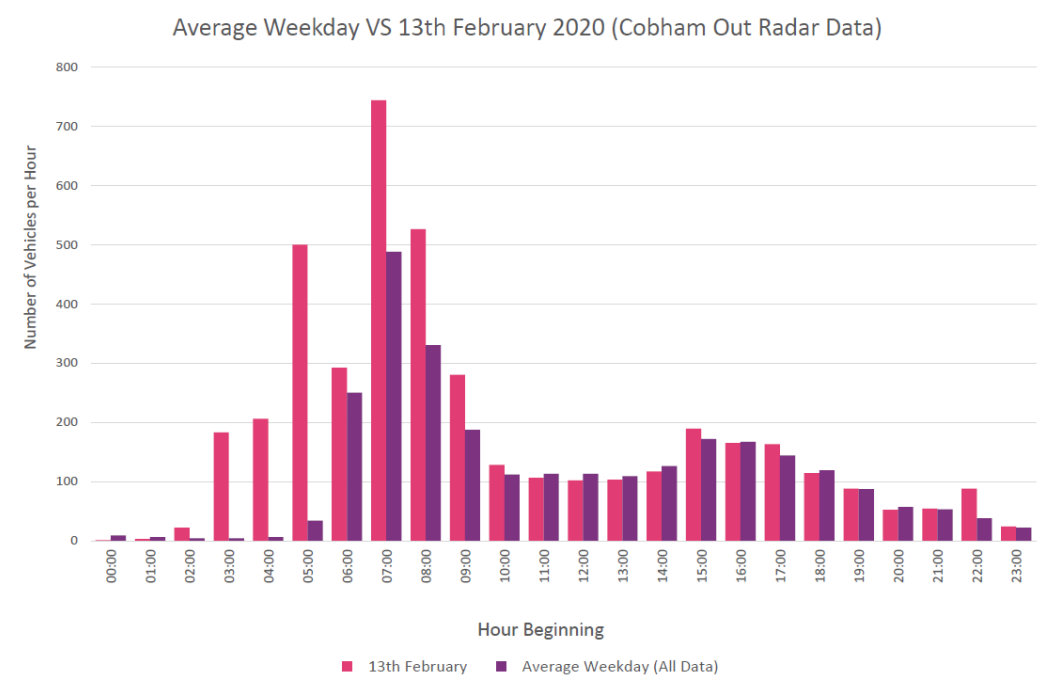

Figure 2.10: Average Weekday vs 13th February 2020 (Cobham Out radar)

2.3.14 The information shows that there were a significant number of additional vehicles in the early hours of the morning moving through the village through to circa 10:00hrs. The most significant are the 0500-0600hrs and 0700-0800hrs periods whereby there were an additional 500 vehicle movements and 250 movements respectively. This comparison illustrates how vulnerable the road network in Cobham is to fluctuations on the A2 road network and how vehicles move from the Strategic Road Network to the village roads when incidents occur.

2.3.15 Finally, an extract from the Cobham out radar has been taken on 30th March 2020 to demonstrate how the impact of the UK going into lockdown in response to the COVID-19 situation has changed the level of vehicles going through the village compared to the average weekday. **Figure 2.11** shows that there is a significant reduction in vehicles during the peak morning and evening hours in particular. The average weekday has been kept in purple for continuity with the previous graph.

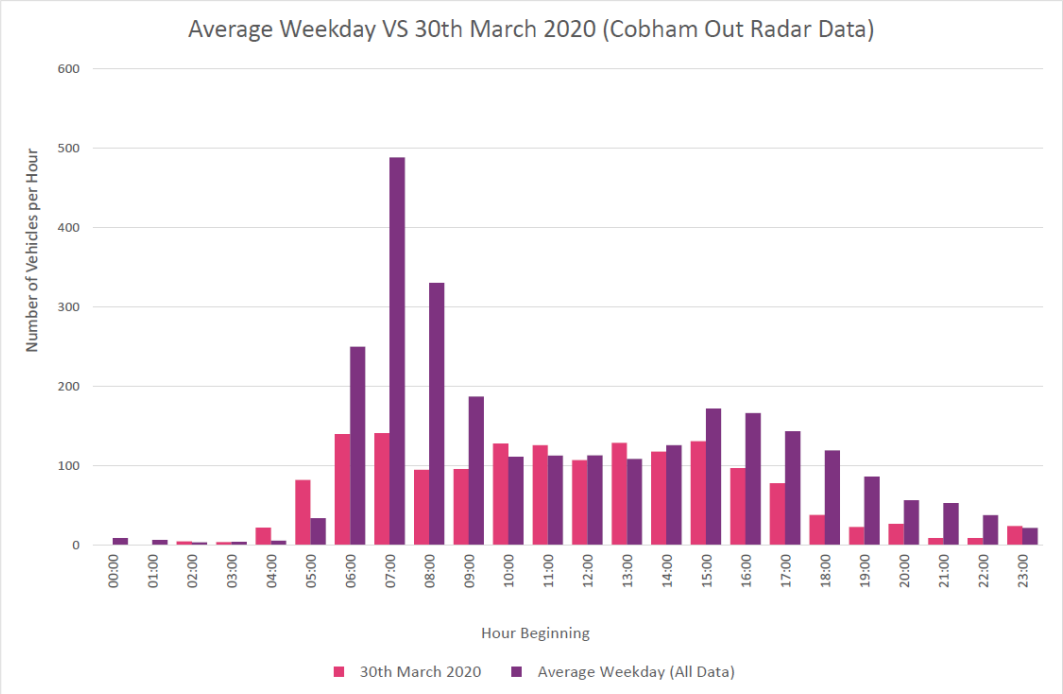

Figure 2.11: Average Weekday vs 30th March 2020 (Cobham Out radar)

KCC ATC data – The Street, Cobham

2.3.16 In 2016, an ATC survey was carried out on The Street by KCC which provided an initial baseline indicator relating to speed and traffic volume and has been used as a comparison for the other two datasets collected more recently.

2.3.17 It is noteworthy that the two-way vehicle flow has increased by 37% between 2016 and 2019 ATC datasets which is significantly more than the main A2 traffic flows which have increased by only 8% in a similar time period. This demonstrates that traffic through Cobham has disproportionately increased at a faster rate than the A2.

2.3.18 The data collected from the 2019 KCC ATC surveys in The Street (conducted by KCC) has been extracted and inputted into RGP's *Rate My Road* tool which assesses the traffic conditions of specific roads by comparing them to national averages for the same road type in the UK. The Rate My Road outputs are included in **Appendix C** and key extracts from the report are discussed further in this Section. For completeness, 'your road' refers to The Street in the outputs and extracts below.

2.3.19 The ATC data was collected over the course of 7 days in September 2019. The weekday data recorded from the survey highlighted that The Street, Cobham experiences on average traffic flow of almost four times more than other similar roads as shown in **Figure 2.12** below.

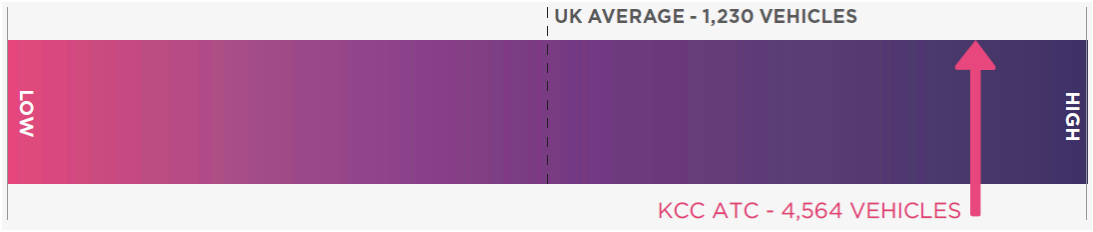

Figure 2.12 – The Street, Cobham Weekday Traffic Flow

2.3.20 Looking further into the data, the combined peak hour weekday traffic is shown to be over 20% higher than roads with a similar classification to The Street. As noted earlier in this section, the data should be considered in the light that the comparable roads have a width to allow two-way traffic to pass one another i.e. above 5.0m in width, rather than the significantly constrained widths which are experienced through The Street in Cobham village, which significantly exacerbate the detrimental impact from the volume of vehicles using it in a peak hour.

2.3.21 Cobham Village is subject to a 20mph speed limit along The Street in the centre of the village and another indicator of the level of congestion experienced is shown in **Figure 2.13** below which shows that during the heavy traffic flow during the peak periods, particularly the morning, the average speed reduces from above 25mph during the free flow conditions overnight to below 20mph during the peak periods. It is also noted that there is a tidal flow of westbound traffic in the morning and eastbound traffic in the evening, however the morning flows show a significantly higher tidal flow than the evening, possibly because the evening peak hour is generally spread across a longer time period.

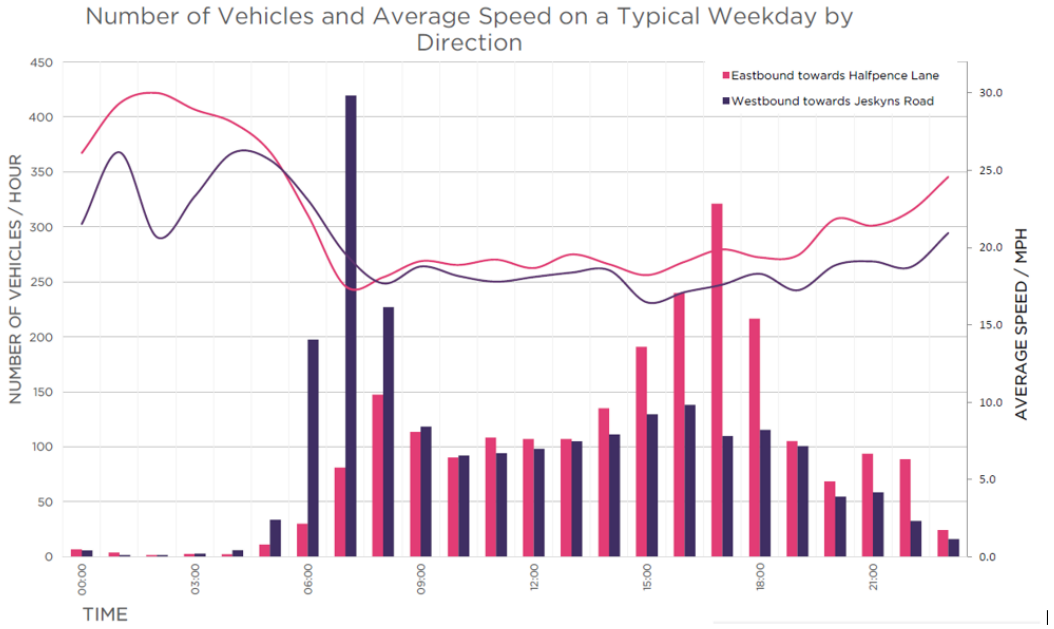

Figure 2.13 - Weekday number of vehicles and average speed, The Street

2.3.22 Finally, a comparison of the traffic flow at weekends and weekdays to the average traffic flow for the road type is shown in **Figure 2.14** below.

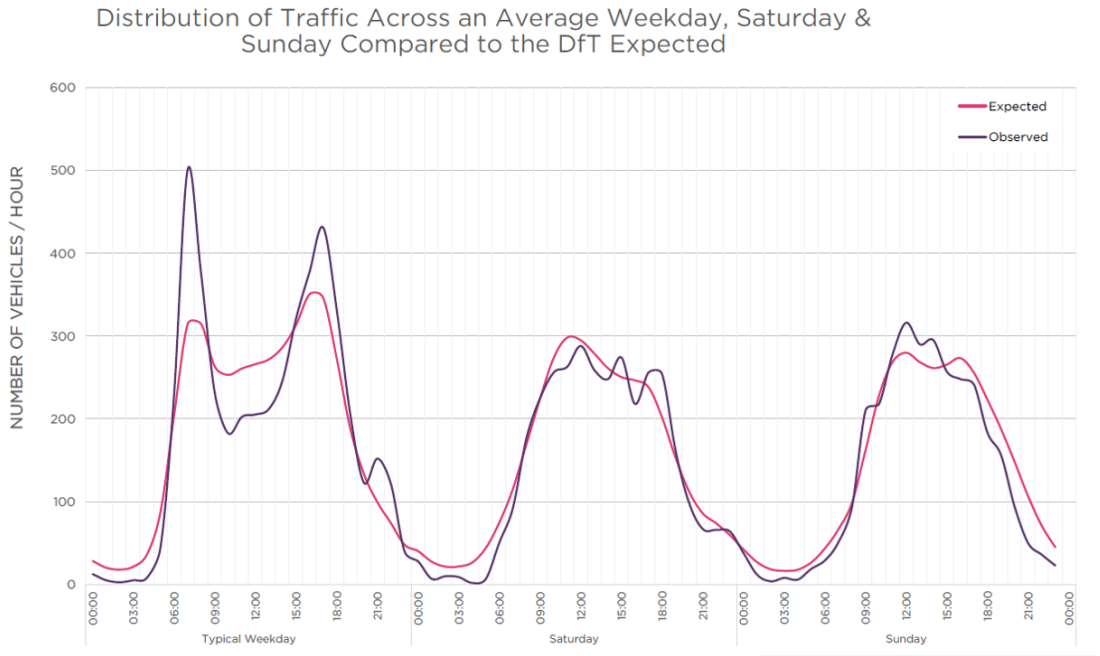

Figure 2.14 - Weekday number of vehicles, The Street

2.3.23 The graph in **Figure 2.14** shows that whilst the level of traffic recorded in The Street at weekends is comparable to the Department for Transport average for this type of road, the weekday average is 65% higher than the UK average, comprising approximately 200 vehicles per hour higher in the morning peak hour.

2.3.24 This traffic flow information in conjunction with the road width constraints strongly indicate that commuting motorists are using Cobham village as an alternative to the Strategic Road Network which should be addressed given the strategic importance of this area in the delivery of the Lower Thames Crossing and the additional unsustainable pressures this is likely to put on Cobham village.

KCC ATC data – Sole Street

2.3.25 ATC surveys were carried out on Sole Street in 2019 by KCC. This data has been extracted and inputted into RGP's *Rate My Road* tool which assesses the traffic conditions of specific roads by comparing them to national averages for the same road type in the UK. The Rate My Road outputs are included in **Appendix C** and key extracts from the report are discussed further in this Section.

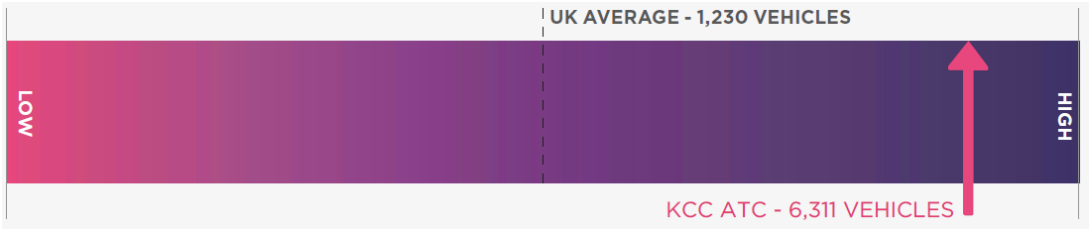

Figure 2.15 – Sole Street Weekday Traffic Flow

2.3.26 The average data shown in **Figure 2.15** above is slightly lower than the Radar data average, however this is probably due to the shorter time period that this has captured compared to the Radar data. The data does show a high level of comparison however and again identifies that the Sole Street traffic flow is over 5 times higher than the average for this type of road.

2.3.27 Sole Street is subject to a 30mph speed limit and the information in **Figure 2.16** below identifies the impact that the level of vehicles has on the average speed along Sole Street across a daily period. The data shows that the traffic speeds are generally below 30mph during the day, with traffic speeds increasing at night as is generally the case on many rural roads. The peaks in traffic flow however are not correlated with any specific reduction in speed, in part due to the width of Sole Street being sufficient to accommodate two-way traffic.

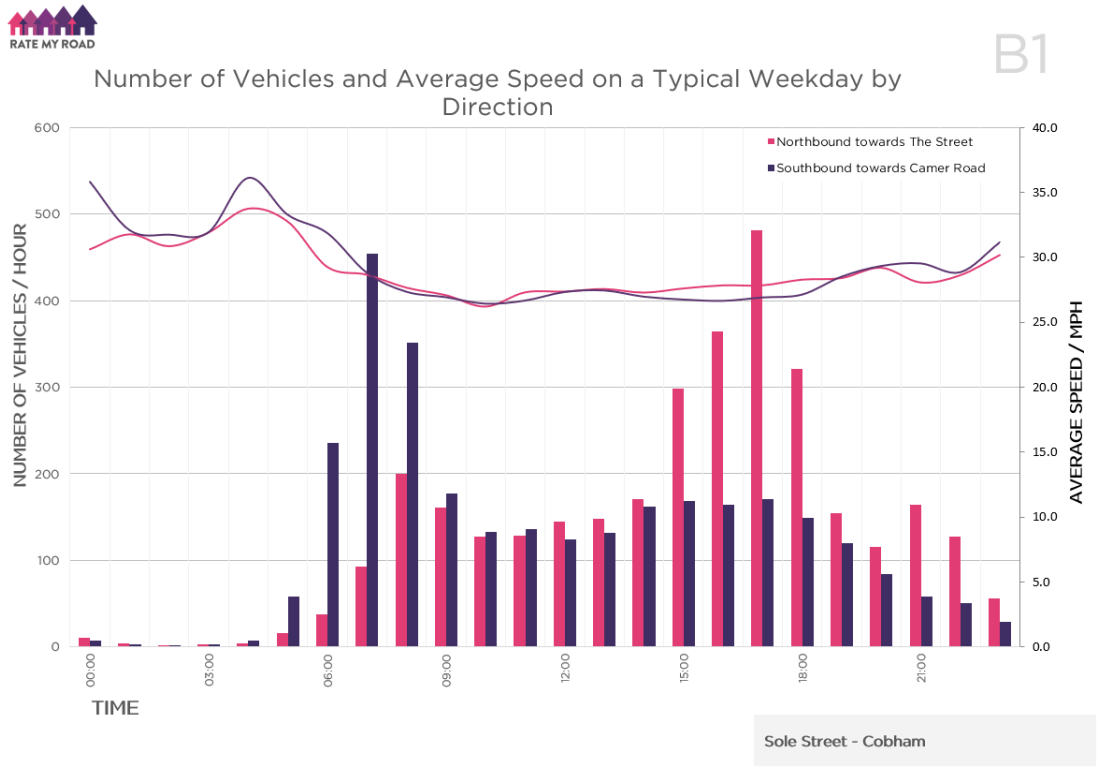

Figure 2.16 - Weekday number of vehicles and average speed, Sole Street

2.4 Radar data vs KCC data

2.4.1 The data presented in this section has shown that the level of traffic experienced in Cobham is significantly above the expected levels for the national road type category that both The Street and Sole Street fall into. The comparison chart in **Figure 2.17** below identifies that the Radar data has recorded a higher average using all of the data collected than the 7-day ATC data from KCC and that the average maximum week recorded is higher still.

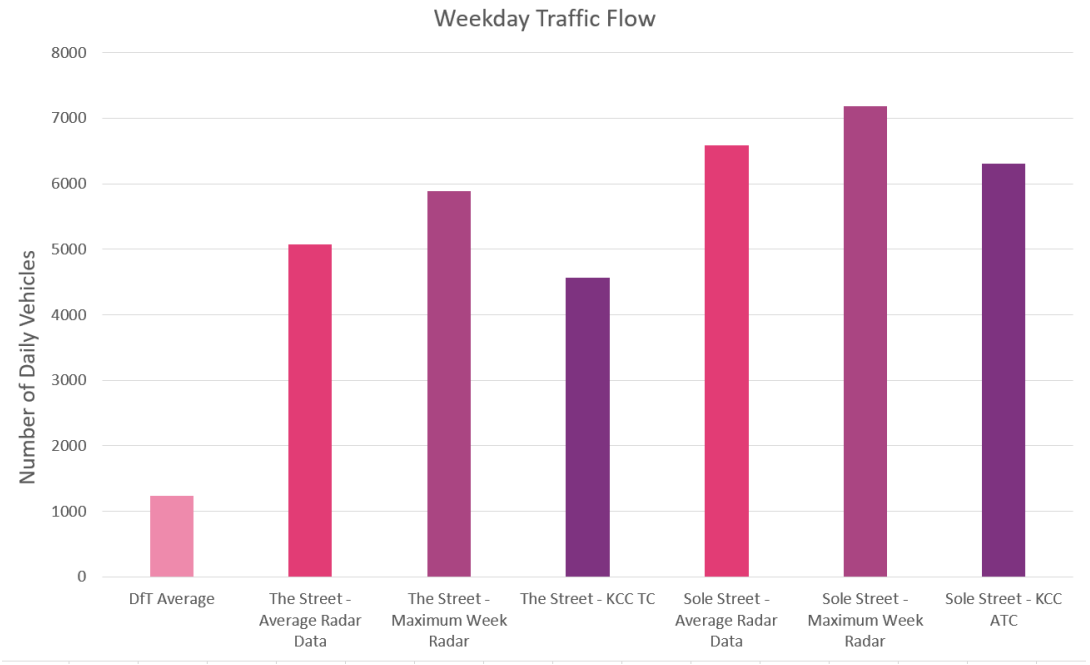

Figure 2.17 – Comparison of traffic flows from DfT average, Radar Data and ATC data

2.4.2 The graph also demonstrates however that across all datasets that The Street and Sole Street carry significantly higher levels of traffic than they should, and this is a direct result of displaced vehicles from the A2 using Cobham and Sole Street to avoid queues and delays. This data demonstrates that there is a clear problem with excessive traffic flow in Cobham that needs to be addressed.

2.4.3 The information in **Figure 2.18** includes comparison of the traffic flows in the various peak hour periods for both The Street, Cobham and Sole Street. The figures show that the datasets are broadly comparable, however the maximum week Radar Data demonstrates the higher vehicle flows which can be experienced above the average peak hour periods, particularly on Sole Street. The Sole Street flows shown are higher than The Street, indicating that vehicles are using an additional route to get to Sole Street, possibly Henhurst Lane and using Sole Street to head south.

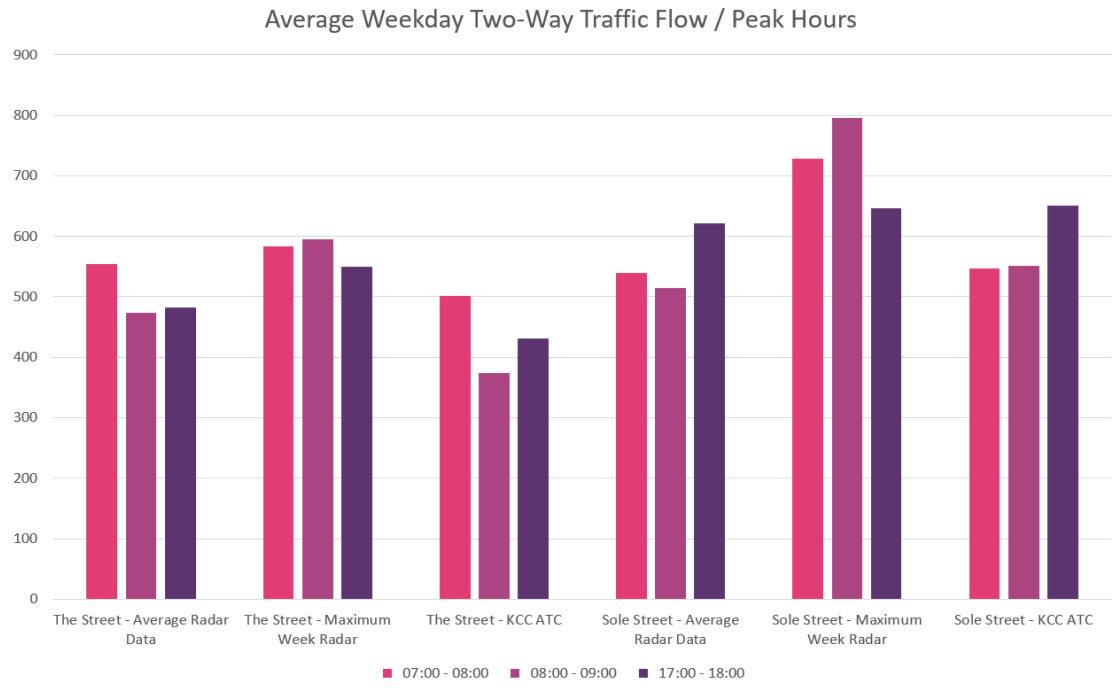

Figure 2.18 - Comparison of peak hour traffic flows from Radar Data and ATC data

2.5 Personal Injury Accidents

2.5.1 The Crashmap website (www.crashmap.co.uk) indicates that there has been one slight accident recorded in the past 5 years along The Street and this involved an incident between a car and a pedestrian. Further details relating to the accident are not known, however this accident is understood to be representative of numerous 'near misses' which occur regularly in The Street due to the constrained road width and vehicles and pedestrians competing for limited road space.

2.5.2 In the same time period, there have been 4 accidents on Sole Street, one serious and three slight. The serious accident occurred at night and involved a vehicle striking a pedestrian as the pedestrian was walking in the road as there are no footways on either side of Sole Street. The slight accidents all involved vehicles; two involved vehicle to vehicle collisions and the other involved a single vehicle and a collision with a bollard.

2.5.3 Near miss and minor accidents whereby there is damage only to the vehicles are not formally recorded, however, from site observations, video evidence from local residents and councillors and the , it is apparent that road safety, particularly that of pedestrians is a significant concern in both The Street and Sole Street.

2.6 Local Buses

2.6.1 Cobham village is currently served by three bus routes which serve local destinations as well as to take children to and from the local secondary schools. These routes use The Street in both directions, however traverse South down Sole Street and north up Halfpence Lane thereafter.

2.6.2 Any changes to the road network need to have regard to the existing bus routes to ensure that these are not detrimentally affected and restrict access for residents to local sustainable travel options.

2.7 National and Local Transport Policy Context

Lower Thames Crossing (LTC)

2.7.1 The Department for Transport announced the preferred route for the Lower Thames Crossing (LTC) in April 2017 comprising a tunnel under the River Thames east of Gravesend and Tilbury linking into the A2/M2 west of M2 junction 1 south of the river. Since then, detailed designs have been developed by Highways England and an 8-week consultation was opened on 29th January 2020 until 25th March 2020 to present the latest plans prior to the examination of the scheme by the Planning Inspectorate. It is anticipated that a decision will be made by the Planning Inspectorate in 2021 and forecast that the LTC will be open to traffic in 2027.

2.7.2 The current 2020 consultation plans show that the new southern junction, which provides access to the Lower Thames Crossing from the A2/M2, would be located immediately north of Cobham village, west of the existing Brewers Road junction. The existing on and off slip roads associated with the Brewers Road junction are proposed to be removed and M2 westbound traffic would in the future be required to leave using a new slip road at the site of the existing A2 service station and head east back to the existing roundabout on Halfpence Lane and Brewers Road.

2.7.3 The congestion on and around the Strategic Road Network east of Cobham on the M2/A2 has over the past few years led to an increased level of traffic through Cobham during the peak hour periods (demonstrated by the traffic data presented earlier in this Section) and there is concern that the position of the southern junction to the Lower Thames Crossing on A2 will draw more traffic offline and through Cobham to avoid the increased congestion.

2.7.4 This report raises a query to Highways England and KCC as to whether the traffic moving through Cobham village has been included within the LTC traffic models since if this is re-routed back to the Strategic Road Network where a large proportion of it should be, it will further add to the level of vehicles using these main routes during peak periods.

2.7.5 Additionally, a request is made for Highways England to release the data from the transport model which accompanies the LTC proposals relating to how the traffic will change in and around the Brewers Road junction as a result of the proposals, both during construction and upon opening and the impact that this has for Cobham and the current traffic flow issues presented in this report.

Kent County Council Local Transport Plan 4 (LTP4) (2016-2031)

2.7.6 The Kent County Council LTP4 (2016-2031) outlines the issues facing Kent and a series of plans to address these concerns. The LTP is strategic document and does not include many local schemes, however it identifies in the Gravesham section of the LTP that there is particular concern with the increasing congestion on the A2 affecting the operation of the local road network. The observed traffic issues in Cobham are thought to stem from the congestion on the A2 and M2 which have pushed motorists to find alternative routes through rural villages to avoid congestion and achieve more reliable journey times, albeit that these routes are unsuitable for high levels of vehicular traffic in the case of Cobham village.

3 FUTURE OPTIONS

3.1 Introduction

3.1.1 Considering the baseline information discussed in full in Section 2 of this report, it is evident that there is a significant issue with through traffic being diverted through Cobham rather than using the Strategic Road Network creating traffic volumes in excess of 5-6 times those that the roads in Cobham are designed for. A series of options are presented in this Section to assist with the current traffic concerns raised by local councillors and residents. These options can be implemented individually or in conjunction with one another, however, are presented as a range of interventions which could be considered further with key stakeholders. Each of the options should be read in conjunction with the Plans 01-04 attached to this Note.

3.1.2 Aside from the 4 options presented below, there is a need for a footway connection between Cobham village and Sole Street, in particular the rail station.

3.1.3 An option to install traffic lights on The Street has been considered by RGP, however this has been discounted since it would cause further detriment to air quality locally with vehicles waiting/queuing through the village, it is likely to increase speeds though the narrow section of road given that the traffic will be unopposed and would also detrimentally affect the heritage aspect of the village to install traffic lights.

3.2 Option 1 (Gateway Features)

3.2.1 This option involves changes to signage upon entering the village and creating a sense that vehicles are entering a village environment through gateway features as well as highlighting the 20mph speed limit with further improved signage and on-road surface treatment. This option will not provide physical measures to deter motorists from using The Street as a through route, rather it is an attempt to highlight the village nature of Cobham and the restrictive nature of the road network and drivers tend to notice and accept the distinction between speed limits when there is a more obvious presence at the entrance to the village.

3.2.2 Gateway features such as those included below in **Figures 3.1, 3.2** and **3.3** could be installed at the eastern and western extents of The Street at the Cobhambury Lane/Halfpence Street/The Street roundabout junction and western chicanes on The Street as indicated on **Plan 01** attached.

Figure 3.1 - Gateway feature example

Figure 3.2 - Gateway feature and surface treatment with speed limit highlight

Figure 3.3 - Gateway example with planting

3.2.3 The gateway features in **Figure 3.3** above have added value of to potentially include planting which could contribute to a 'Village in Bloom' competition to promote the village identity further.

3.2.4 This option is a low cost approach to the problems experienced in Cobham Village and would have a low effectiveness in removing displaced through-traffic from the Strategic Road Network, however it could be used in conjunction with other options.

3.3 Option 2 (Access Only)

3.3.1 Option 2 involves restrictive signage which prevents vehicles entering the village unless accessing properties or adjacent land uses to The Street i.e. the local shop, pubs or Primary School/Nursery. Whilst there are no physical measures associated with this option, the measures could influence some of the drivers choosing this route rather than the Strategic Road Network. The locations of these signs would be as shown on **Plan 02**.

Figure 3.4 - No Motor Vehicles 'Except for access' signage

3.3.2 A Traffic Regulation Order process is not required for this since it is enforceable under the Road Traffic Act, however a further allowance would need be to be made for buses to use The Street. The enforcement however is an issue since drivers can choose to ignore the signage (this is already evidenced by the 7.5t vehicle restriction and that the data shows circa 100 HGVs per day use Cobham village albeit some of these will be the local buses), therefore this would need to be considered when choosing this option and the actual enforcement could be difficult given the number of people needing to gain access to the village to their properties and for the local school.

3.3.3 This option could be extended to include Halfpence Lane and restrict vehicles using Halfpence Lane unless for access to the village which could be instigated at the northern end of Halfpence Lane at the Brewers Road roundabout.

3.3.4 This is a low-cost option, however the effectiveness of it is reliant on the enforcement of the signage which could prove difficult.

3.4 Option 3 (One-way)

3.4.1 This option consists of making The Street and Sole Street one way in the northbound/eastbound direction as shown on **Plan 03** and changing the junction priority at the Jeskyns Lane/Sole Street/The Street junction to support this. The restrictions would prevent westbound traffic using The Street which is shown to be the highest in the morning peak hour when conflicts with pedestrians are at their most prominent when children are heading to school. It would also restrict all southbound traffic using Sole Street and could facilitate some re-allocation of the carriageway to provide a full pedestrian footway on the eastern side of Sole Street to improve pedestrian connectivity between Sole Street and The Street.

3.4.2 Sole Street can either be made one-way (northbound traffic only) from Sole Street Station for its entire length to Jeskyns Lane/The Street, or to limit impact on local residents it could be made one-way from Round Street northwards. This does however introduce the option of displaced through-traffic choosing to instead drive through Henley St to link to drive the southern part of Sole Street still to access the A227.

3.4.3 The one-way option would affect the operation of the local bus services, although they could still operate in the northbound direction on Sole Street and eastbound along The Street. Build outs/signage and pedestrian footway would be provided at the Jeskyns Lane/Sole Street/The Street priority junction to prevent vehicles driving southbound along Sole Street.

3.4.4 The introduction of a one-way system could have the negative side effect of increasing traffic speeds, so traffic calming measures are also likely to be required to ensure vehicle speeds are kept at the speed limit. Additionally, it is likely that the westbound vehicles will be displaced onto other roads locally to continue to avoid the A2 delays.

3.4.5 This option would be a medium to high cost since it would involve physical works to the carriageway, the full footway provision from Sole Street to The Street (up to 2km), Traffic Regulation Order drafting and advertising costs and wider signage locally to support the scheme.

3.5 Option 4 (No Through Road)

3.5.1 Option 4 consists of a no through road feature in the centre of Cobham. This feature could be provided which restricts all vehicles, or alternatively allows emergency vehicle/bus access through the village.

3.5.2 The feature would be located around the Darnley Arms and would work with the existing historic narrowing between buildings and the road would be two-way up to this point in both directions.

Emergency vehicle/bus access permitted

3.5.3 All vehicles other than buses and emergency vehicles would be prevented from travelling east to west and west to east along The Street in Cobham. This would unfortunately have the effect of adversely affecting residents, however it would remove the detrimental impacts of through traffic displaced from the Strategic Road Network onto The Street and Sole Street.

3.5.4 A feature which would retain access for emergency vehicles and buses is likely to be something like a rising bollard or a 'sump-trap' (shown in **Figure 3.5** below) and consists of a feature which buses, ambulances and fire engines can traverse through, however cars cannot.

3.5.5 In the case of the 'sump-trap', it works due to the larger vehicles able to traverse it due to their wheelbase, however cars cannot and if they try to cross it, it causes significant damage to the car. Ether of these physical measures would allow emergency services and buses to still maintain access through The Street. Rising bollards have been used in the past in these situations, however it is understood that Kent County Council is moving away from the use of these due to maintenance and failure rates to a preference for the 'sump-trap' feature.

Figure 3.5 - Sump-trap example

All vehicle access restricted

3.5.6 A permanent roadblock could be installed, either ornate bollards or planters placed within the central zone near the Darnley Arms which restrict all vehicular access through The Street which would remove the detrimental impacts of through-traffic from the local network including Sole Street. However, it does mean that emergency vehicle routes would need to be amended and depending on where ambulances and fire engines originate from, it could affect response times. It would also mean that the bus route would need to be re-routed.

3.5.7 Both versions of this option would sever The Street for residents; however it could create a chance for a more pedestrian friendly zone in the centre of the village. In terms of residents from the west accessing the school, there is an opportunity to use of the pub car parks west of the road closure as a 'park and stride' scheme for example, for school parents to use and walk their children to school since The Street will be safer for pedestrians to walk through.

3.5.8 The option would be a medium cost since it would involve physical works to be carried out to the carriageway to install the no through road feature as well as a supporting Traffic Regulation Order drafting and advertising costs and wider signage locally to support the scheme.

3.6 Options Summary

3.6.1 **Figure 3.6** below outlines the impacts of the four options presented relating to the various concerns which local residents have raised in relation to traffic in Cobham.

Option	Adverse impact on local resident journeys	Effectiveness in removing rat-running traffic	Improvements to local environment	Approximate Implementation Costs
Option 1	-	-	✓	Low £20,000
Option 2	-	-	-	Medium £50,000 (incl. TRO, signage and electricity illumination)
Option 3	✓	✓	✓	Medium - High £100,000 depending on extent of footway provision
Option 4	✓	✓	✓	Medium £20,000

Figure 3.6 - Options Matrix Table

4 SUMMARY AND CONCLUSIONS

4.1.1 This report has presented the existing traffic conditions in The Street, Cobham and Sole Street and through the use of survey data has demonstrated that both these areas experience a considerably high level of vehicle traffic for the type and status of road they are awarded. The high traffic flow has been proven to be due to heavy tidal flows of vehicles in the morning in particular heading in the westbound/southbound direction. Motorists are assumed to be using this route to avoid congestion on the Strategic Road Network (A228/A2/M2) which is forecast to be subjected to further pressures due to the planned position of the Lower Thames Crossing immediately north of Cobham in the near future.

4.1.2 A series of four options have been presented in this report which have been designed to address the impact of through-traffic ranging from soft to hard measures and differing levels of restrictions for local residents. Each of these options have been presented in plan format and described with a view to discussing these options with Parish Council members and Kent County Council Highways.

4.2 Future Steps

4.2.1 A number of steps can now be pursued following on from this report as follows:

(i) It is suggested that a meeting with Kent County Highways and Highways England is arranged to discuss the measures which Cobham Parish Council would like to see implemented in Cobham in light of current and future traffic pressures as a result of displaced vehicles from the Strategic Road Network;

(ii) Further traffic evidence should be collected in the form of a series of cordon surveys/ANPR surveys along Halfpence Lane, The Street and Sole Street to provide information as to the origins and destinations of vehicles using The Street during peak periods. This will allow detailed mapping and an understanding of the current travel trends which lead to motorists using Cobham village and Sole Street instead of the more appropriate Strategic Road Network;

(iii) Cobham Parish Council to make representations to the Highways England Lower Thames Crossing consultation process using information from this feasibility study to ask questions of the proposed detailed design proposals and their effect on Cobham village;

(iv) Query to Highways England as to whether the displaced traffic moving through Cobham village been included within the Lower Thames Crossing (LTC) traffic models and what the forecast impacts on traffic flows at the Brewers Road junction are during and after construction of the LTC.

(v) Finally, Options 3 and 4 could be trialled on a temporary basis by KCC to establish the potential change in vehicle levels as a result of the two sets of physical measures given due collaboration with emergency services, bus operators and local residents. Traffic information collected from such a trial would feed into further evidence to support scheme evolution for solutions to solve the traffic problems experienced in Cobham.

PLANS

(example)

Surface Treatment with
20mph Speed Limit Signage

New Gateway Feature

(example)

LEGEND

RGP

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Client: Cobham Parish Council

Project: Cobham Traffic and Feasibility Study

Title: Signage and Features Plan – Option 1

Plan No:	Job No:	Date:	
01	5197	04/02/2020	
Drawn By:	**Checked By:**	**Approved By:**	**Rev:**
DWW	CAC	CAC	-

LEGEND

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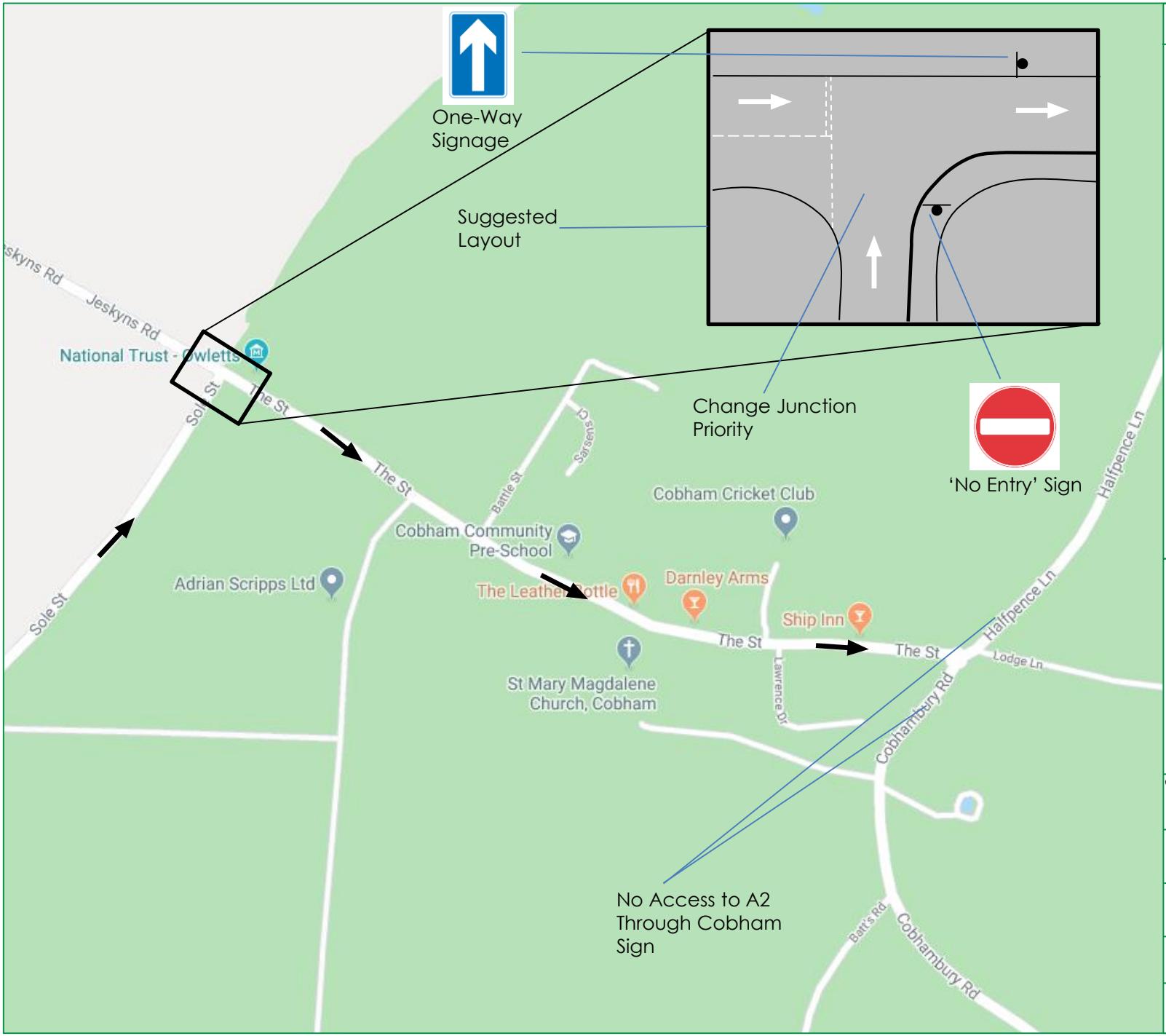
Client: Cobham Parish Council

Project: Cobham Traffic and Feasibility Study

Title: Signage and Features Plan – Option 2

Plan No:	Job No:	Date:	
02	5197	04/02/2020	
Drawn By:	**Checked By:**	**Approved By:**	**Rev:**
DWW	CAC	CAC	-



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Client:	Cobham Parish Council
Project:	Cobham Traffic and Feasibility Study
Title:	Signage and Features Plan – Option 3

Plan No:	Job No:	Date:	
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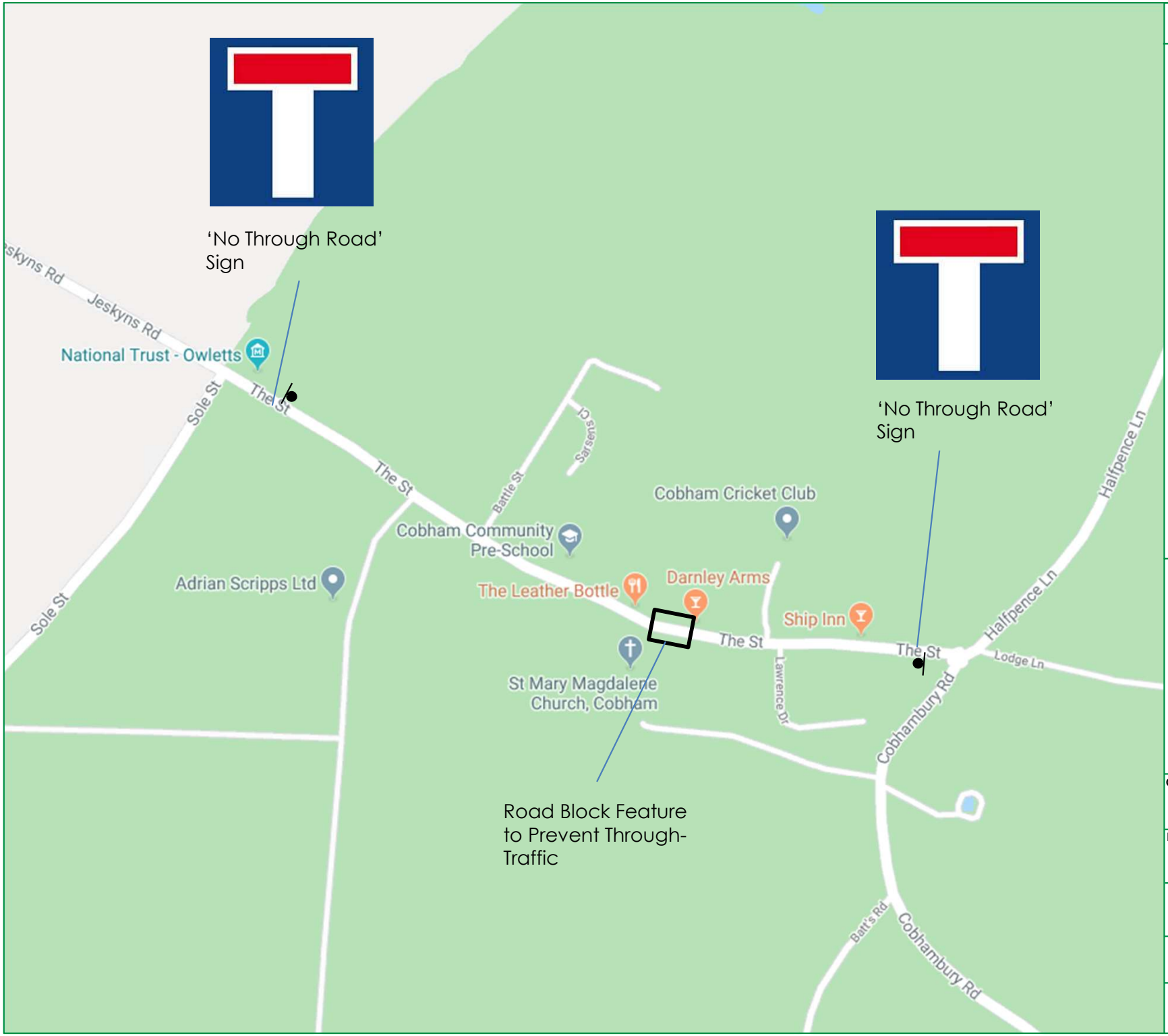
Drawn By:	**Checked By:**	**Approved By:**	**Rev:**
DWW	CAC	CAC	-



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Client: Cobham Parish Council

Project: Cobham Traffic and Feasibility Study

Title: Signage and Features Plan – Option 4

Plan No:	Job No:	Date:	
04	5197	04/02/2020	
Drawn By:	**Checked By:**	**Approved By:**	**Rev:**
DWW	CAC	CAC	-

APPENDIX A

Comments from Cllr Tony Rice, Shorne, Cobham & Luddesdown Ward

Gravesham Borough Council

The primary school has 220 children all living within 2 miles. The headmistress reports inconsiderate drivers, frequent speeding and kerb mounting, wing mirrors at the height of children's heads, with 2 or 3 near misses every week. Traffic is the biggest safety problem for the school.

Elderly and infirm residents of Cobham College, where there are around 50 occupants in sheltered housing, situated just off The Street, feel insecure using the village shop, the only amenity in the village where they can easily walk to and buy morning news papers and provisions.

These are representative quotes from a local impact survey I completed in 2019 -

“It’s dangerous walking along the pavements with impatient drivers having mounted the kerb behind you”

“We have a 3 year old daughter and we are so nervous to open the door, it’s not only the volume of traffic but the speed at which they travel through. We are unable to use our front door (which is ridiculous) as we feel it’s far too dangerous”

“Almost every morning as we leave for pre school there are cars mounting the pavement, radios blaring, people peering into the house and a blocked road”

“Our family who visit us are too nervous to walk through the village with their babies in buggies as they fear cars knocking them with their wing mirrors and that’s walking on the path”

“The noise of the traffic sheer speed startles me, there hasn’t been a night that it hasn’t woken me. There is beeping almost every morning due to road rage starting before 7am when traffic builds up”

“Noise pollution due to the loud car radios and Bluetooth calls of which we can hear every word. We cannot hear our television due to the cars, sadly we feel that we cannot relax in our own front room”

“The step of our front door has completely eroded and we have heard tyres squeeze down the curb and wing mirrors touch the house when cars mount the curb. The house feels like it shakes when heavy vehicles speed through this cannot be good for our homes. We have seen people throw rubbish out the windows of the cars onto our pavements as they are sat in traffic through the village”

“I was hit by a wing mirror while walking on the pavement by the side of The Leather Bottle”

“As we are opposite the shop, cars, trucks, 4x4 are always bumping down from the pavement causing the house to shake. Also coming close to our front room window as if they are coming in”

“The traffic affects my sleep if I am off work as it is a constant line which starts about 6.45a.m. my wife is suffering from cancer and sleeps downstairs, she is always woken up either by the noise or cars bumping off the pavement”

Daily kerb-mounting from motorists in the morning in The Street as two-way traffic is not possible in the narrowest part

Injury to a local resident from wing mirror damage from an incident in the Street

APPENDIX B

Annual Average Daily Flow - A2 Count Point id 56098

count_point_id	year	road_name	start_junction_road_name	end_junction_road_name	easting	northing	estimation_method_detailed	pedal_cycles	two_wheeled_motor_vehicles	cars_and_taxis	buses_and_coaches	lgvs	hgvs_2_rigid_axle	hgvs_3_rigid_axle	hgvs_3_or_4_articulated_axle	hgvs_4_or_more_rigid_axle	hgvs_5_articulated_axle	hgvs_6_articulated_axle	all_hgvs	all_motor_vehicles
56098	2018	A2	Singlewell ↓	Halfpence l	567000	170000	Automatic counter	0	1680	100398	347	21835	2319	395	555	759	6586	1102	11716	135976
56098	2017	A2	Singlewell ↓	Halfpence l	567000	170000	Manual count	0	1511	95074	339	19666	2150	371	519	696	6145	1032	10914	127503
56098	2016	A2	Singlewell ↓	Halfpence l	567000	170000	Estimated using pr	0	1372	93452	387	19900	2762	331	371	743	2017	4647	10871	125981
56098	2015	A2	Singlewell ↓	Halfpence l	567000	170000	Manual count	0	1320	90737	379	18427	2603	342	355	655	2098	4443	10497	121360
56098	2014	A2	Singlewell ↓	Halfpence l	567000	170000	Manual count	0	1205	84704	378	19185	2020	331	378	470	2062	3667	8927	114398
56098	2013	A2	Singlewell ↓	Halfpence l	567000	170000	Manual count	0	1008	86270	367	15475	1669	730	255	689	1102	4435	8879	111999
56098	2012	A2	Singlewell ↓	Halfpence l	567000	170000	Manual count	0	985	82233	384	15279	1933	355	401	563	1398	3664	8314	107195
56098	2011	A2	Singlewell ↓	Halfpence l	567000	170000	Manual count	0	1260	82525	378	16389	2033	443	363	458	1351	4216	8864	109416
56098	2010	A2	Valley Drive	Halfpence l	567000	170000	Manual count	1	989	82109	334	13949	2453	340	344	525	2969	1840	8471	105852
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56098	2007	A2	Valley Drive	Halfpence l	567000	170000	Estimated using pr	4	812	69439	660	14801	2081	332	436	620	2560	2032	8061	93773
56098	2006	A2	Valley Drive	Halfpence l	567000	170000	Manual count	4	807	69928	699	13358	2042	325	501	553	2661	1954	8036	92828
56098	2005	A2	Valley Drive	Halfpence l	567000	170000	Estimated using pr	15	1217	68829	564	13622	2258	315	596	559	2130	1777	7635	91867
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56098	2003	A2	Valley Drive	Halfpence l	567000	170000	Estimated using pr	3	1156	68030	671	13213	2127	394	785	662	2379	1867	8214	91284
56098	2002	A2	Valley Drive	Halfpence l	567000	170000	Manual count	4	1065	66566	679	11936	2046	358	815	583	2658	1680	8140	88386
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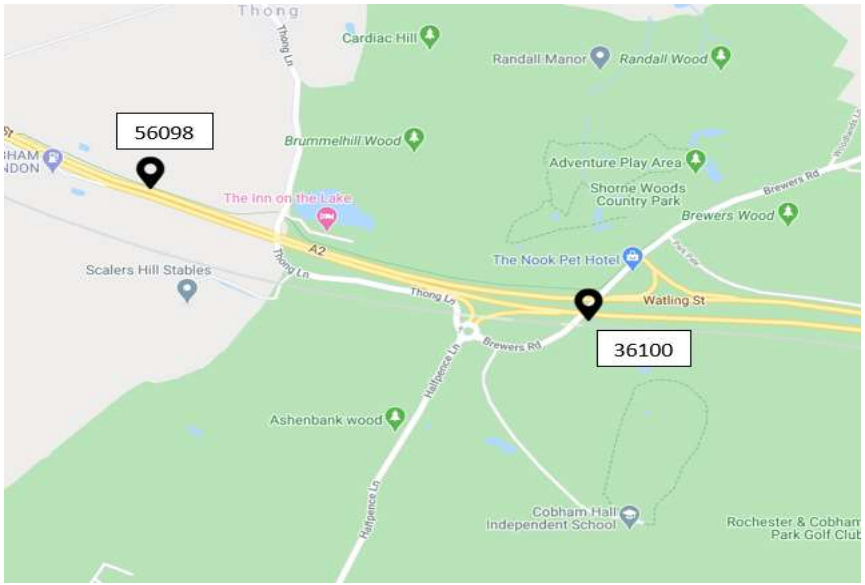

Annual Average Daily Flow - A2 Count Point id 36100

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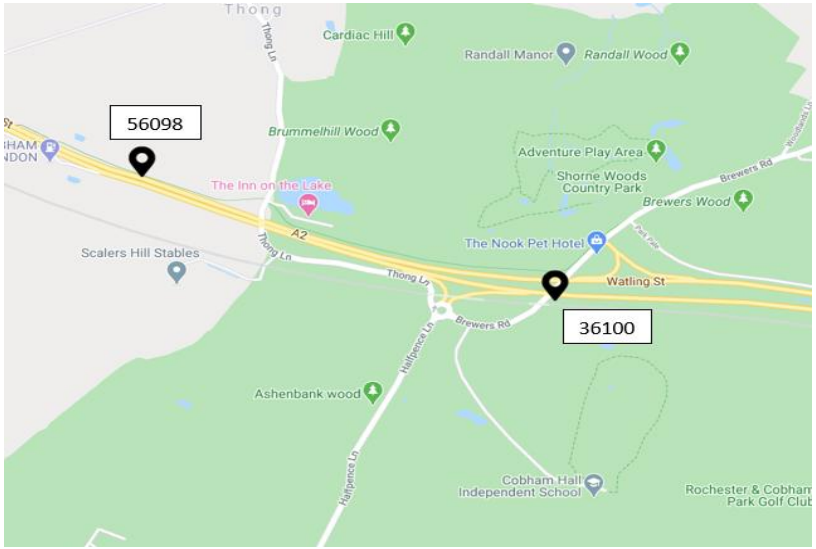
36100	2018	A2	Halfpence	A2 split	568260	169610	Estimated	0	1195	93958	308	21333	1979	383	499	730	5646	1114	10351	127146
36100	2017	A2	Halfpence	A2 split	568260	169610	Manual cou	0	1139	94278	317	20373	1944	382	493	709	5585	1104	10217	126325
36100	2016	A2	Halfpence	A2 split	568260	169610	Estimated	1	912	93434	393	17932	2073	461	337	736	2206	4062	9875	122547
36100	2015	A2	Halfpence	A2 split	568260	169610	Manual cou	1	878	90719	386	16604	1953	477	323	649	2295	3883	9581	118168
36100	2014	A2	Halfpence	A2 split	568260	169610	Manual cou	0	761	87862	584	17596	2092	297	333	513	1760	3143	8138	114941
36100	2013	A2	Halfpence	A2 split	568260	169610	Manual cou	2	1176	82019	345	17534	2030	498	358	565	1661	3823	8935	110008
36100	2012	A2	Halfpence	A2 split	568260	169610	Manual cou	0	790	80078	355	15500	1920	441	745	301	1687	3818	8911	105635
36100	2011	A2	Halfpence	A2 split	568260	169610	Manual cou	1	1321	81113	337	17027	1997	501	331	446	1772	3653	8700	108498
36100	2010	A2	Halfpence	A2 split	568260	169610	Manual cou	1	1078	91878	298	12703	2649	389	206	678	3220	1963	9105	115062
36100	2009	A2	Halfpence	A2 split	568260	169610	Manual cou	3	1206	78382	416	14098	2385	317	540	548	2910	2331	9031	103133
36100	2008	A2	Halfpence	A2 split	568260	169610	Estimated	0	1410	68886	677	14774	2046	424	477	685	2852	2555	9039	94786
36100	2007	A2	Halfpence	A2 split	568260	169610	Manual cou	0	1452	69371	667	14744	2101	386	508	661	3012	2429	9097	95331
36100	2006	A2	Halfpence	A2 split	568260	169610	Estimated	1	1605	73010	603	14820	2426	388	525	873	2579	1955	8746	98784
36100	2005	A2	Halfpence	A2 split	568260	169610	Manual cou	1	1480	71789	627	14142	2358	387	578	803	2882	1805	8813	96851
36100	2004	A2	Halfpence	A2 split	568260	169610	Estimated	0	1327	65177	499	14114	2222	396	579	1073	2043	1877	8190	89307
36100	2003	A2	Halfpence	A2 split	568260	169610	Manual cou	0	1307	64087	603	12681	2081	351	603	920	2291	1695	7941	86619
36100	2002	A2	Halfpence	A2 split	568260	169610	Estimated	6	1279	71143	812	12700	2315	368	692	675	2476	1851	8377	94311
36100	2001	A2	Halfpence	A2 split	568260	169610	Manual cou	6	1253	69138	786	12599	2256	332	742	609	2773	1644	8356	92132
36100	2000	A2	Halfpence	A2 split	568260	169610	Manual cou	11	1449	62691	889	12112	2025	291	826	474	2445	1456	7517	84658



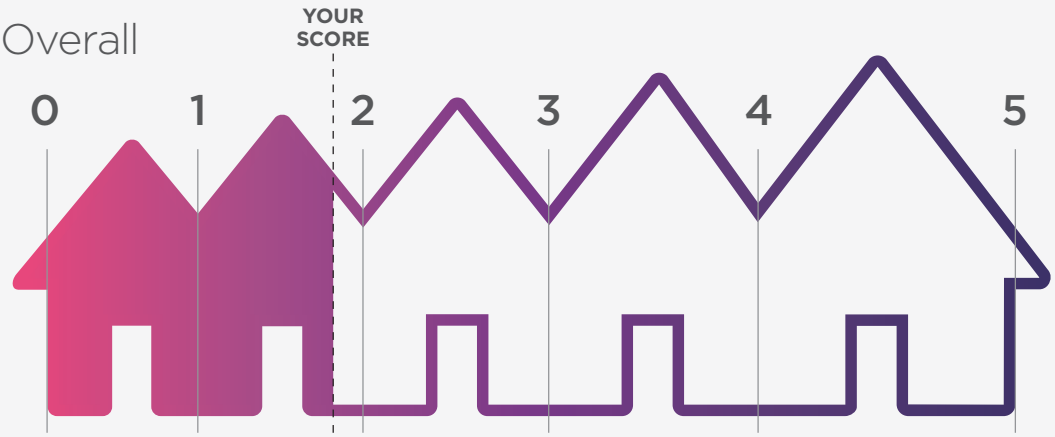
APPENDIX C

RATE MY ROAD

SITE ADDRESS

The Street (Average Radar Data) - Cobham

Overall

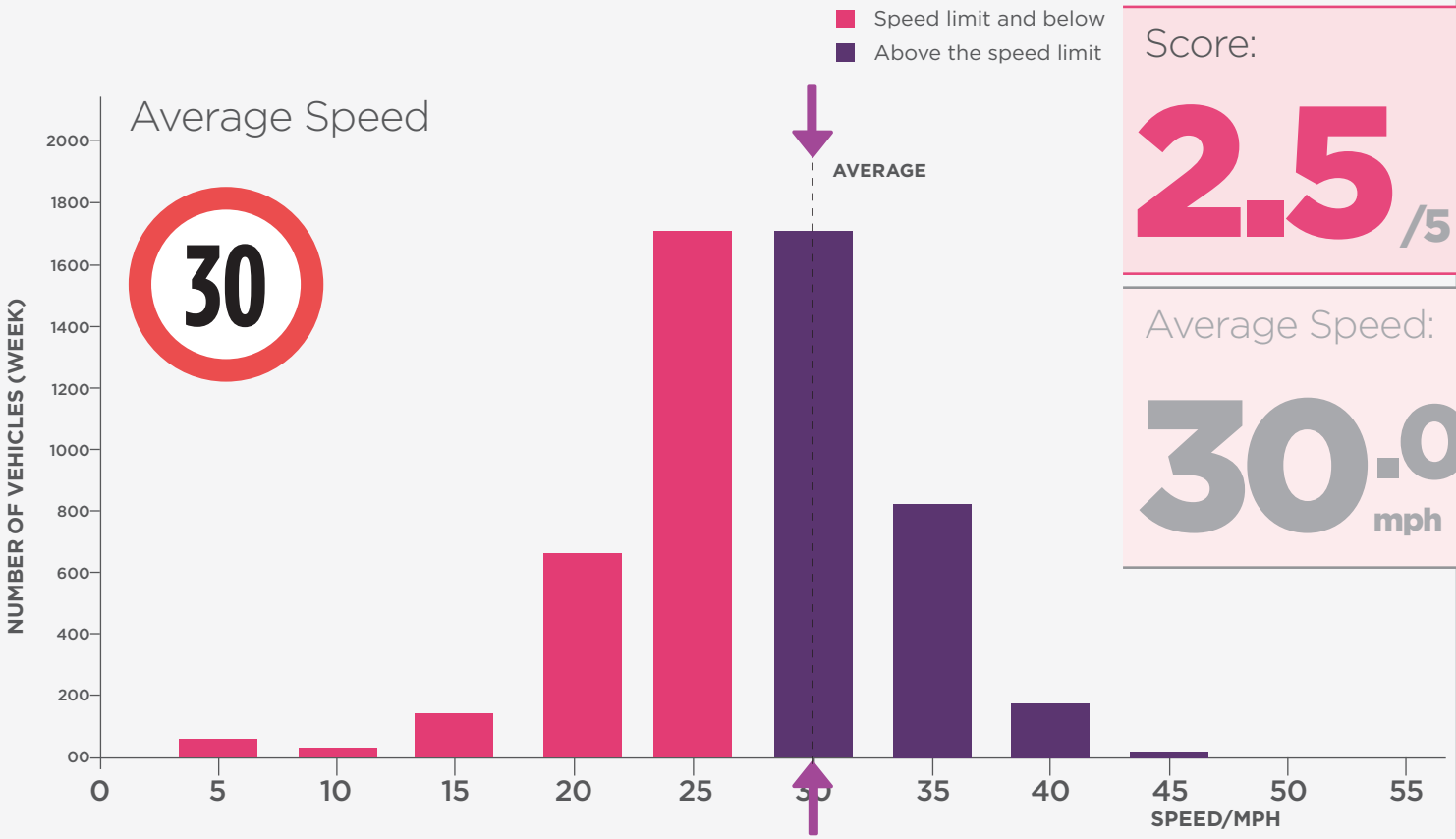


Overall Score:

1.8 /5

This shows the overall score for your surveyed road. This takes into account all the surveyed characteristics. All scores are out of 5, where **0 = poor** & **5 = good**. If the overall score is poor then you should review in detail the following scores to establish the main reason(s) for the low score and whether these reasons are important to you individually.

Average Speed



Score:

2.5 /5

Average Speed:

30.0 mph

This graph shows the number of vehicles travelling at ranges of speeds. The score is based on the average speed recorded compared to your road's speed limit.

Customer name & address:

Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**

Dates of survey:

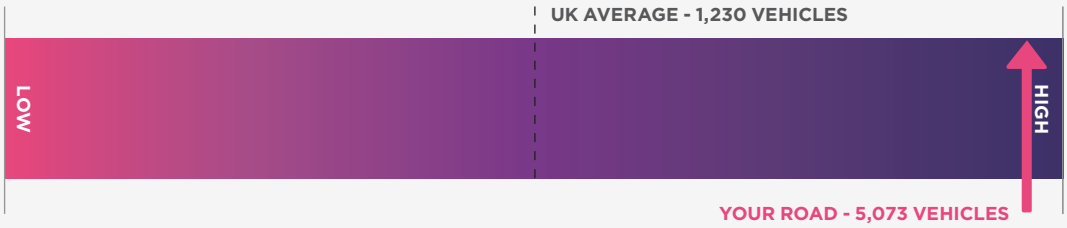
NA (Average of all recorded radar data.)

RATE MY ROAD

SITE ADDRESS

The Street (Average Radar Data) - Cobham

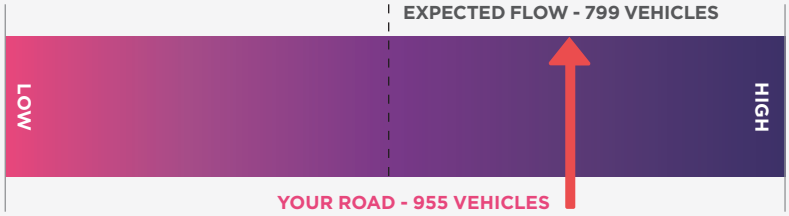
Weekday Traffic Flow



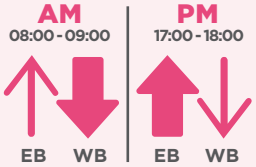
Score: **0.0** /5

This chart shows how your road's average weekday total traffic flow (24h) compares with the UK average for that road type. A score of 2.5 means that your road is average for the road's classification.

Peak Hour Weekday Traffic Flow



Direction of Traffic Flow



Score: **1.8** /5

This chart shows how your road's average weekday peak hour traffic (AM & PM) compares to what is expected according to the Department for Transport for a road with the level of traffic recorded. This identifies whether peak traffic is greater or less than expected peak hour conditions. The peak hours surveyed are **08:00-09:00** & **17:00-18:00**. The second chart shows whether or not the direction of traffic flow is tidal (i.e. traffic flow is greater in one direction) and in which direction. **EB = Eastbound** (towards Halfpence Lane) & **WB = Westbound** (towards Jeskyns Road).

Speed Limit

General Road Condition

Road Classification

U

4.8 metres

Is the measured width of the road

Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**

Dates of survey:
NA (Average of all recorded radar data.)

RATE MY ROAD

SITE ADDRESS
The Street (Average Radar Data) - Cobham

No roadworks were present during the time of survey

1

footway at **1.4m** in width

0

Visible Cycle Routes

0

Visible Bus Stops

Visible Facilities

0 post boxes

0 petrol station

0 local shops

0 schools

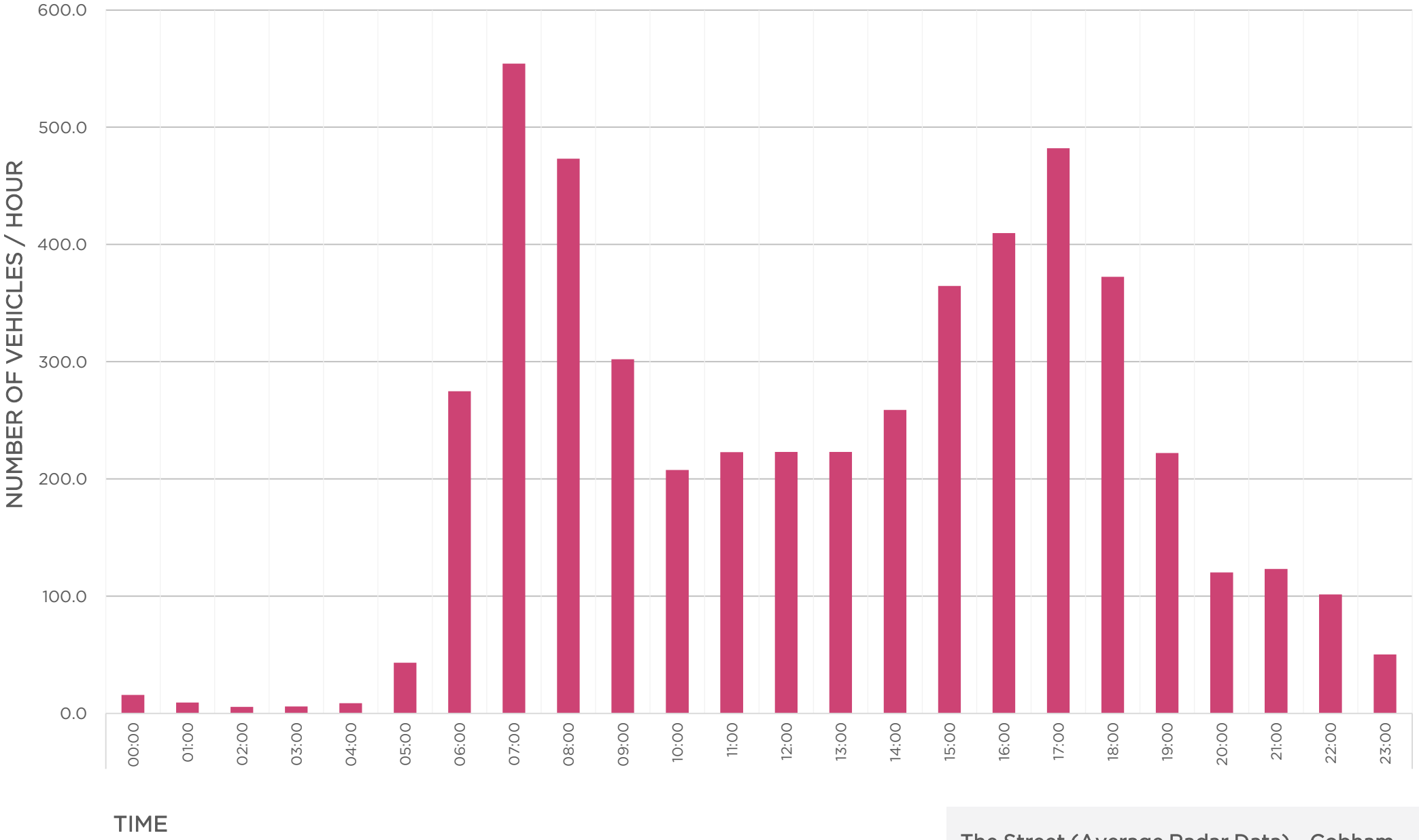
Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**
Dates of survey:
NA (Average of all recorded radar data.)

RATE MY ROAD

A1

Number of Vehicles, Both Directions on an Average Weekday

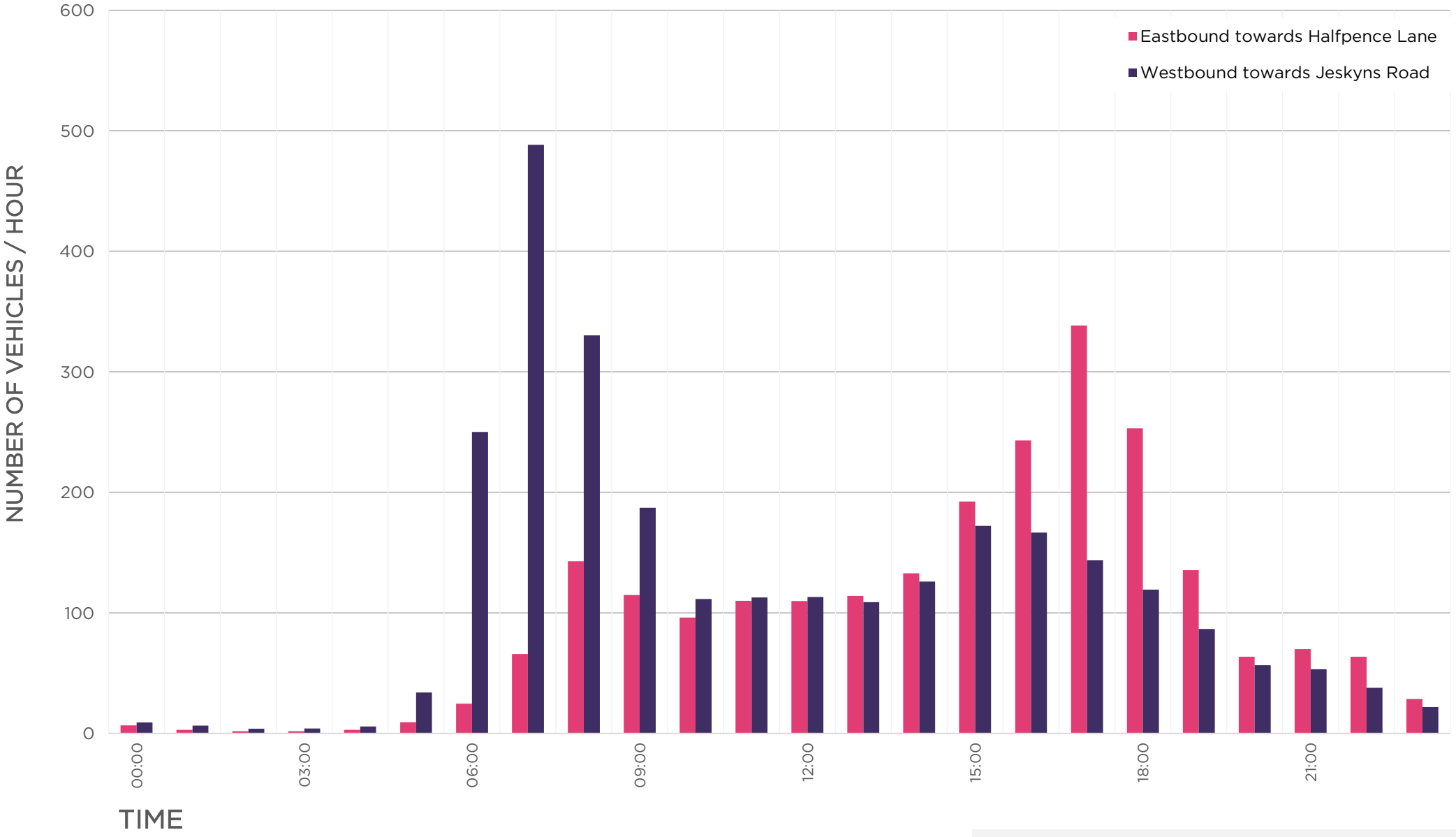


The Street (Average Radar Data) - Cobham

RATE MY ROAD

B1

Number of Vehicles on a Typical Weekday by Direction

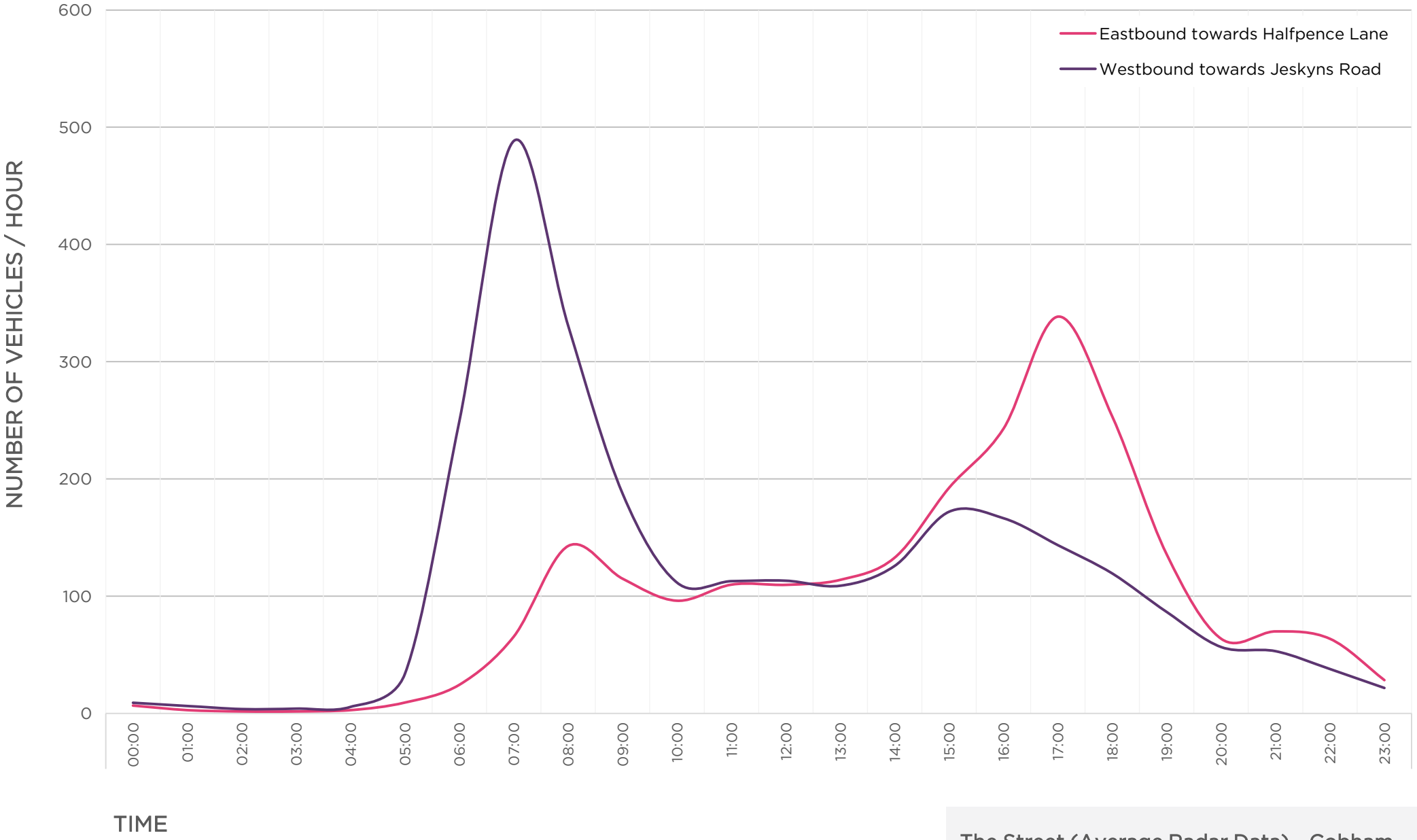


The Street (Average Radar Data) - Cobham

RATE MY ROAD

B2

Total Number of Vehicles by Direction on an Average Weekday

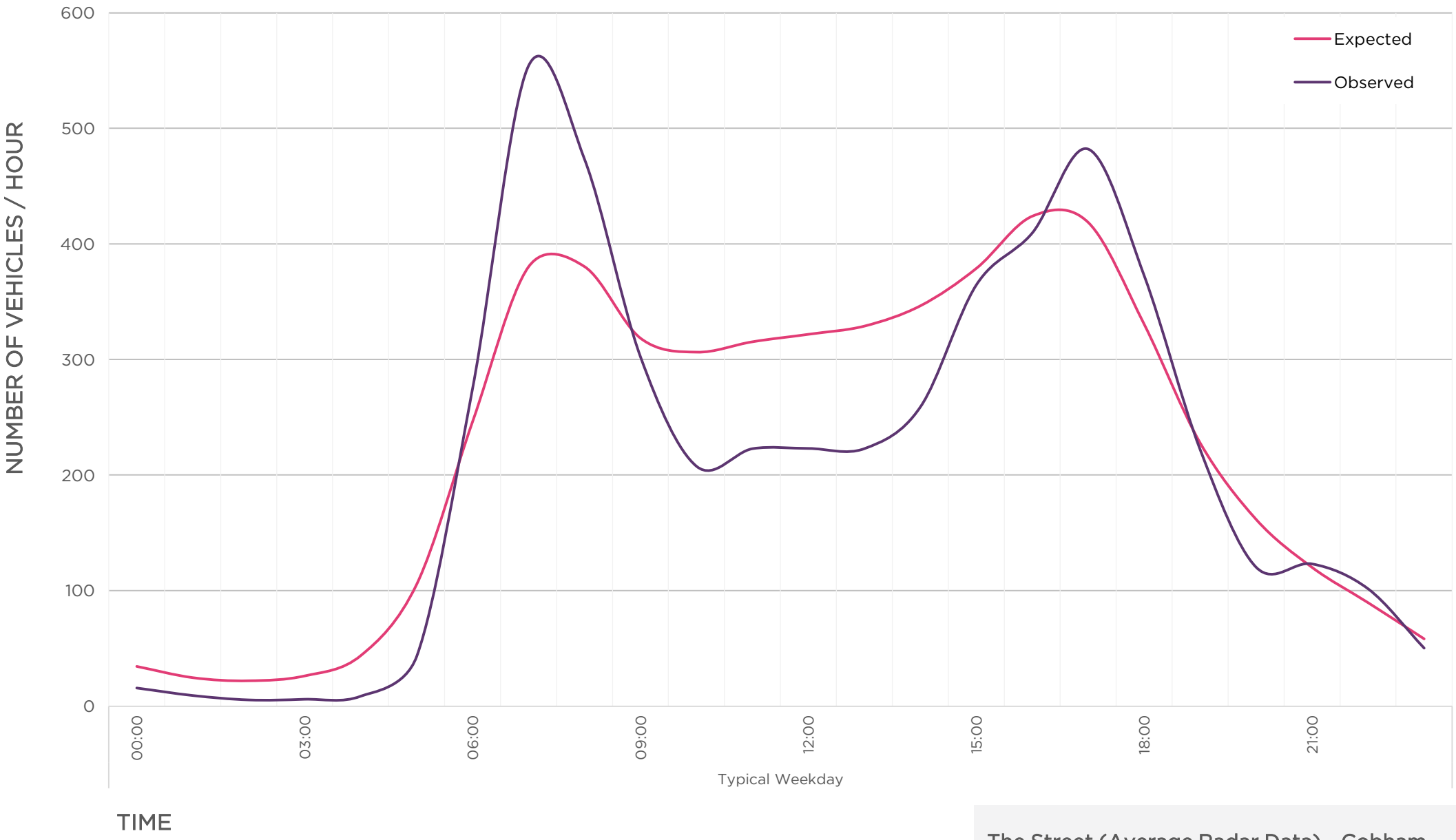


The Street (Average Radar Data) - Cobham

RATE MY ROAD

B3

Distribution of Traffic Across an Average Weekday Compared to the DfT Expected



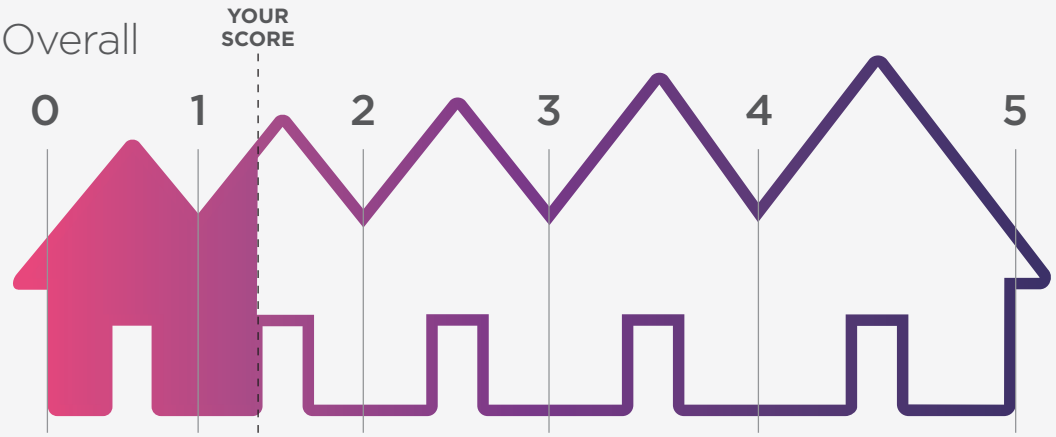
The Street (Average Radar Data) - Cobham

RATE MY ROAD

SITE ADDRESS

The Street (Maximum Radar Data) - Cobham

Overall

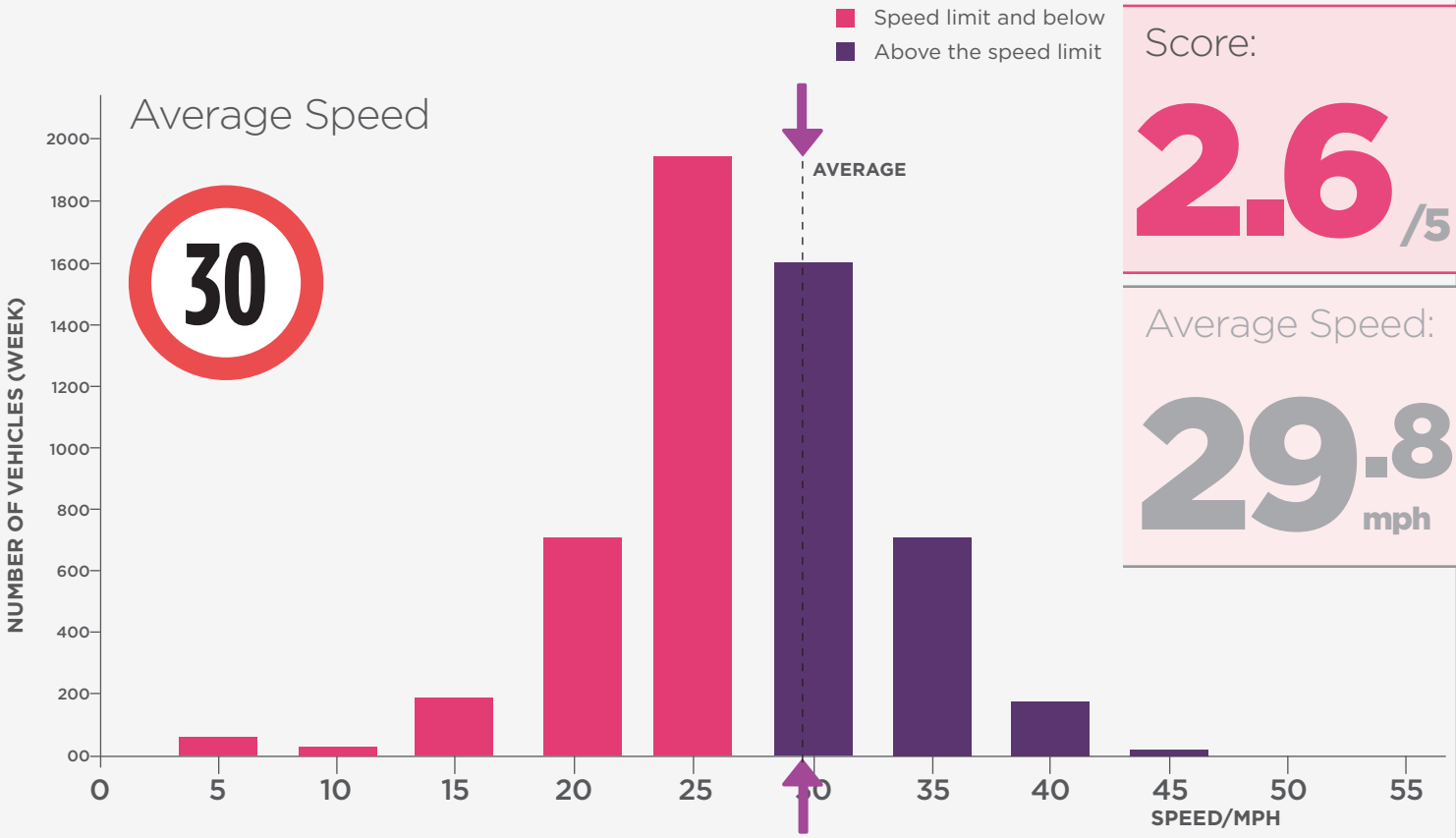


Overall Score:

1.3 /5

This shows the overall score for your surveyed road. This takes into account all the surveyed characteristics. All scores are out of 5, where **0 = poor** & **5 = good**. If the overall score is poor then you should review in detail the following scores to establish the main reason(s) for the low score and whether these reasons are important to you individually.

Average Speed



Score:

2.6 /5

Average Speed:

29.8 mph

This graph shows the number of vehicles travelling at ranges of speeds. The score is based on the average speed recorded compared to your road's speed limit.

Customer name & address:

Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**

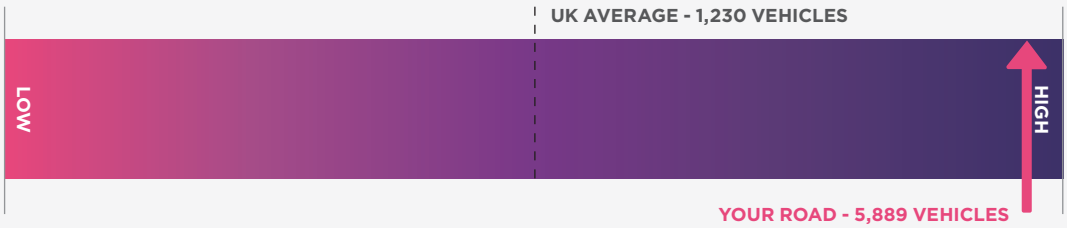
Dates of survey:
16/09/19-22/09/19 (EB) & 04/02/19-10/02/19 (WB)

RATE MY ROAD

SITE ADDRESS

The Street (Maximum Radar Data) - Cobham

Weekday Traffic Flow

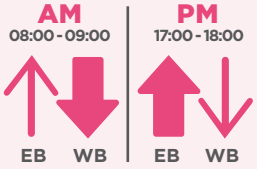


Score: **0.0** /5

This chart shows how your road's average weekday total traffic flow (24h) compares with the UK average for that road type. A score of 2.5 means that your road is average for the road's classification.

Peak Hour Weekday Traffic Flow

Direction of Traffic Flow



Score: **1.4** /5

This chart shows how your road's average weekday peak hour traffic (AM & PM) compares to what is expected according to the Department for Transport for a road with the level of traffic recorded. This identifies whether peak traffic is greater or less than expected peak hour conditions. The peak hours surveyed are **08:00-09:00** & **17:00-18:00**. The second chart shows whether or not the direction of traffic flow is tidal (i.e. traffic flow is greater in one direction) and in which direction. **EB = Eastbound** (towards Halfpence Lane) & **WB = Westbound** (towards Jeskyns Road).

Speed Limit

General Road Condition

Road Classification

U

4.8 metres

Is the measured width of the road

Customer name & address:

Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**

Dates of survey:
16/09/19-22/09/19 (EB) & 04/02/19-10/02/19 (WB)

RATE MY ROAD

SITE ADDRESS
The Street (Maximum Radar Data) - Cobham

No roadworks were present during the time of survey

1 **footway** at **1.4m** in width

0 Visible Cycle Routes

BUS

0 Visible Bus Stops

Visible Facilities

0 post boxes

0 petrol station

0 local shops

0 schools

Customer name & address:
Cobham Parish Council,
The Street, Cobham

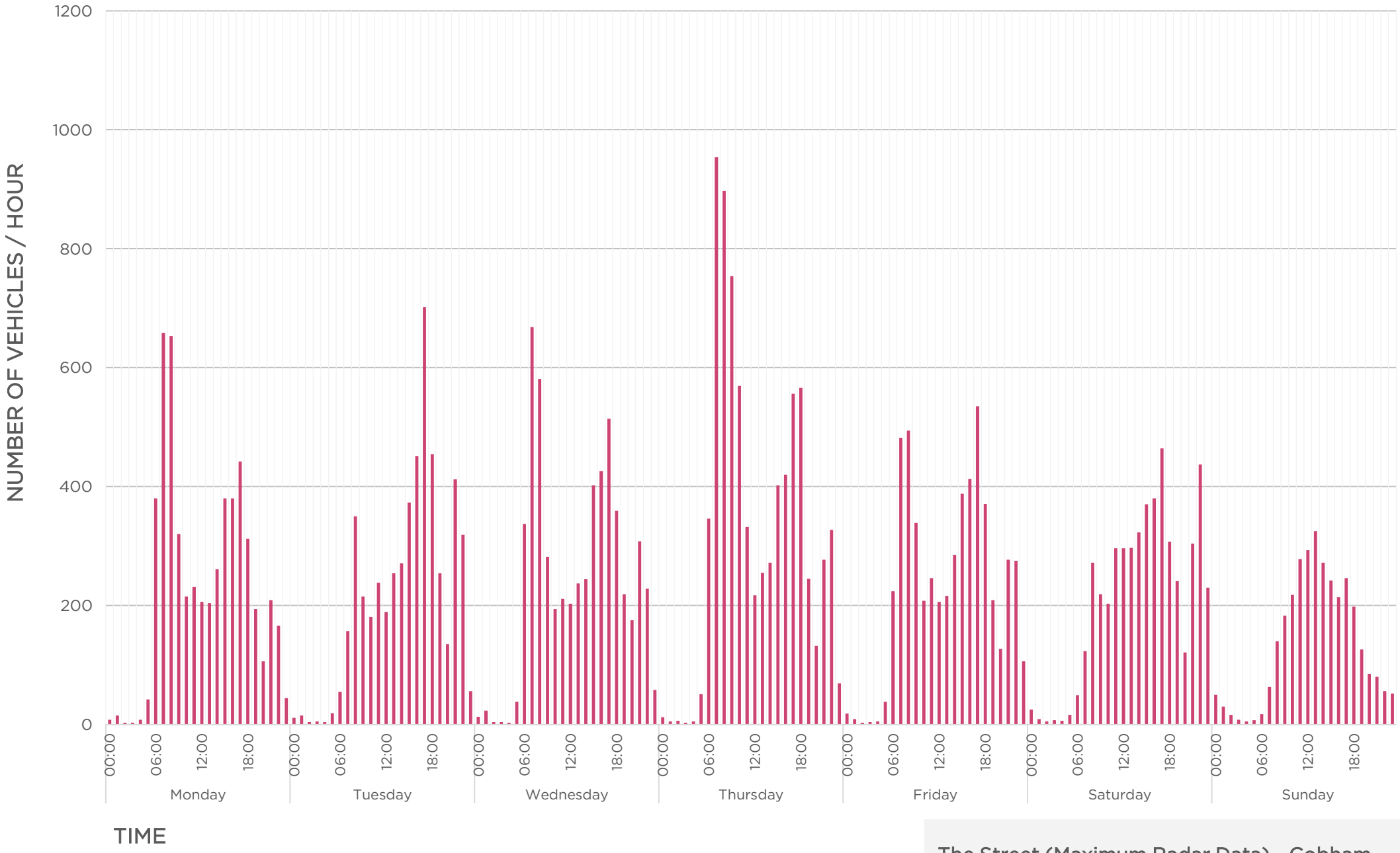
Project reference number: **5197**

Dates of survey:
16/09/19-22/09/19 (EB) & 04/02/19-10/02/19 (WB)

RATE MY ROAD

A1

Number of Vehicles, Both Directions

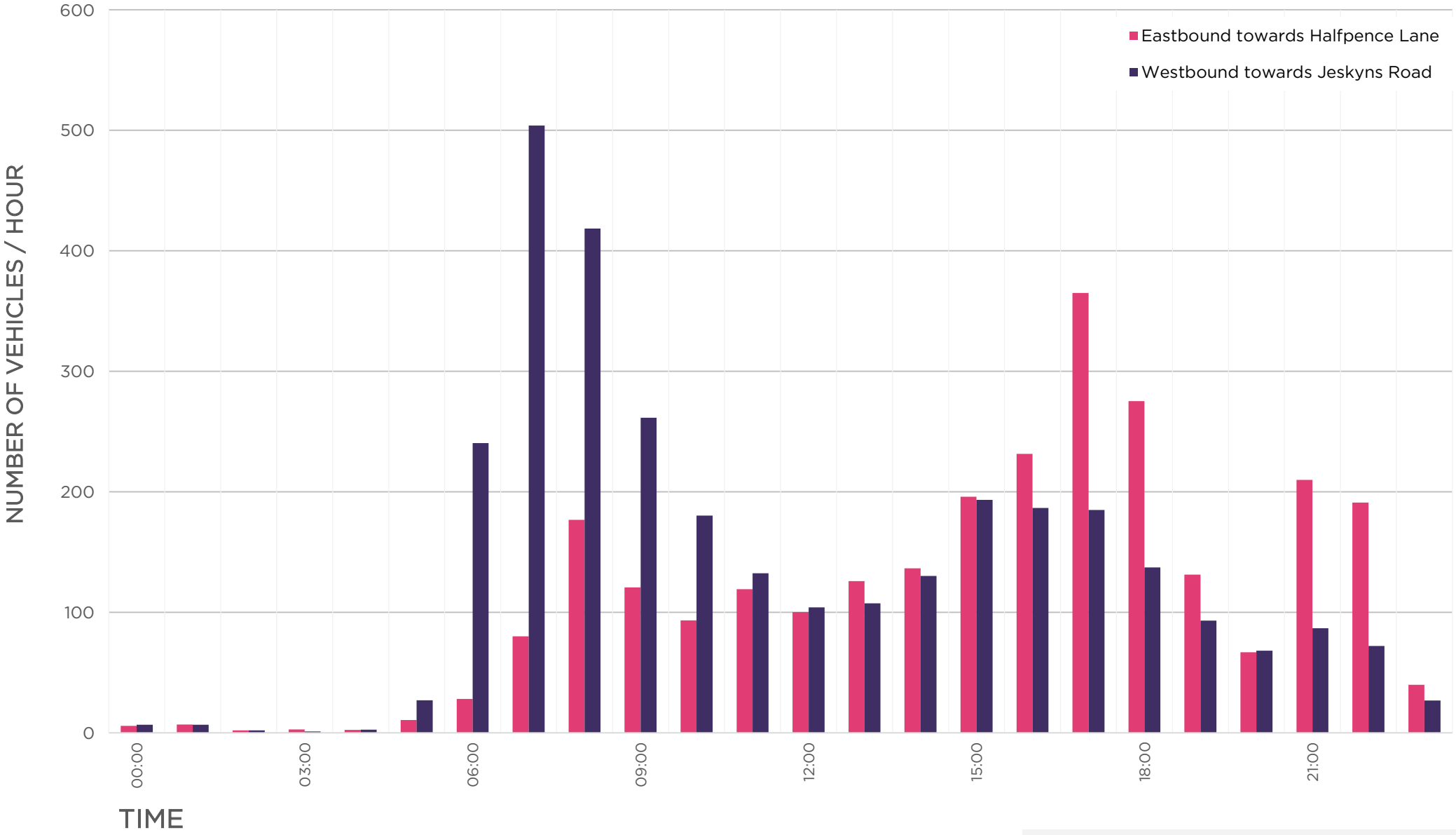


The Street (Maximum Radar Data) - Cobham

RATE MY ROAD

B1

Number of Vehicles on a Typical Weekday by Direction

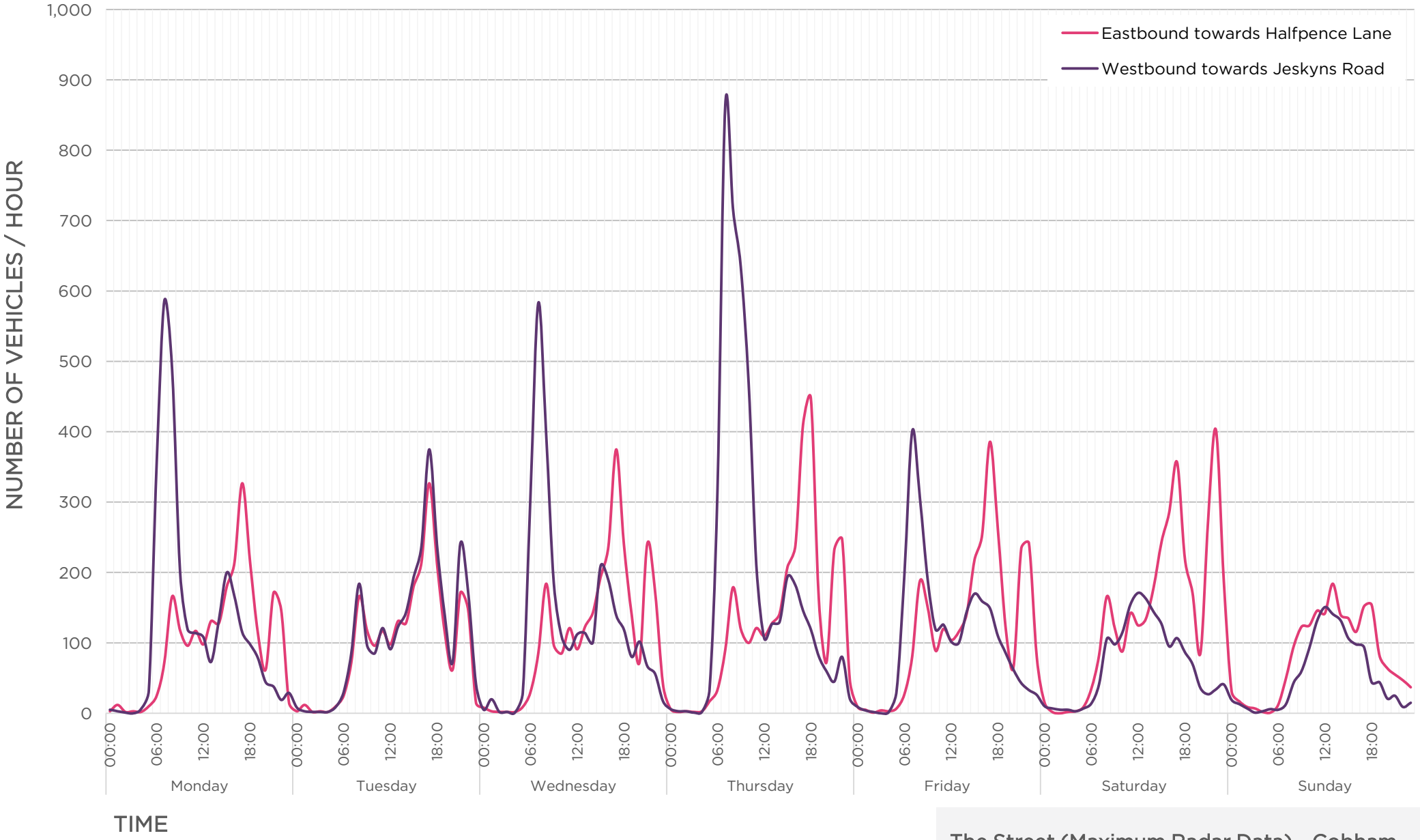


The Street (Radar) - Cobham

RATE MY ROAD

B2

Total Number of Vehicles by Direction

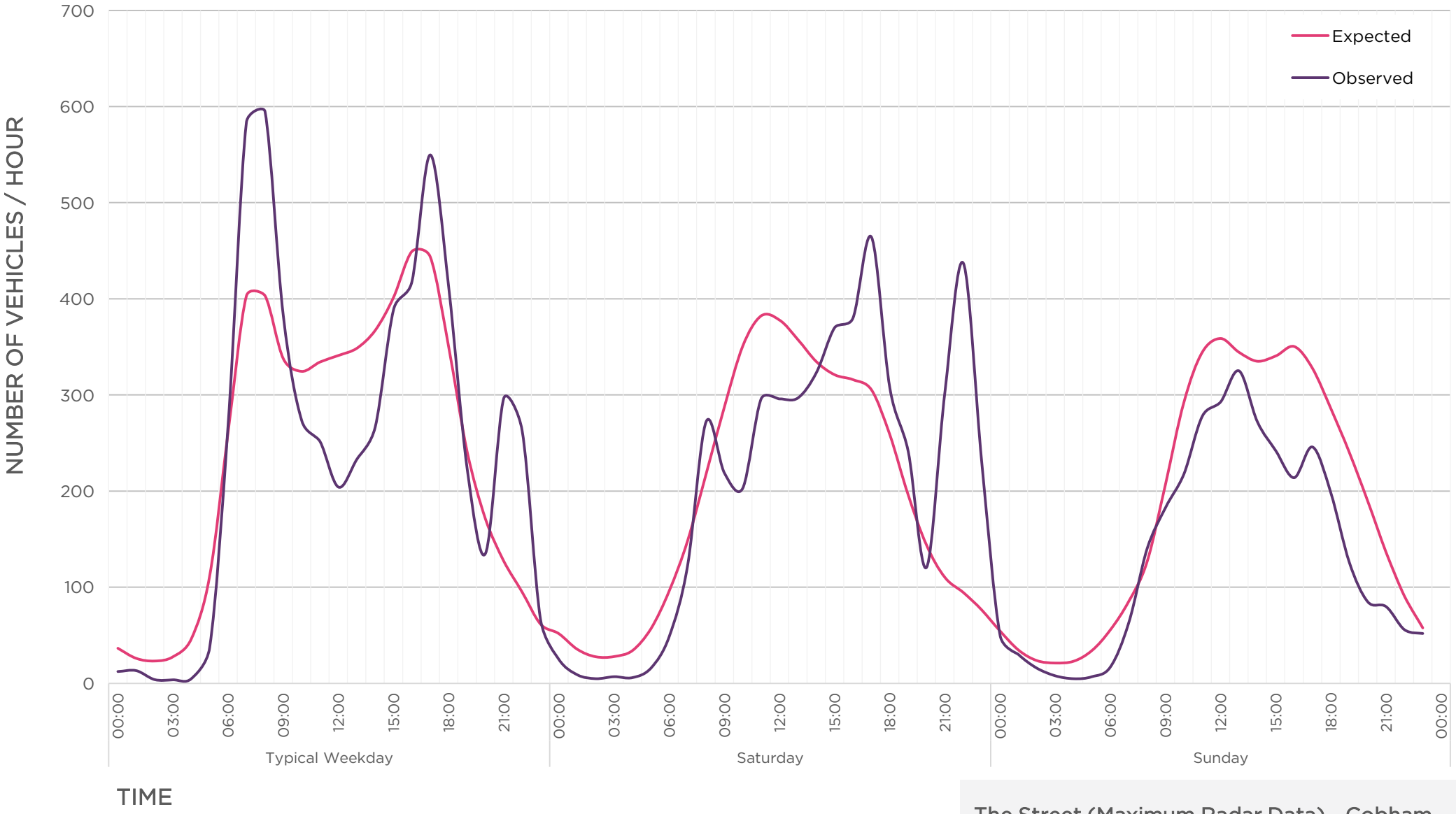


The Street (Maximum Radar Data) - Cobham

RATE MY ROAD

B3

Distribution of Traffic Across an Average Weekday, Saturday & Sunday Compared to the DfT Expected



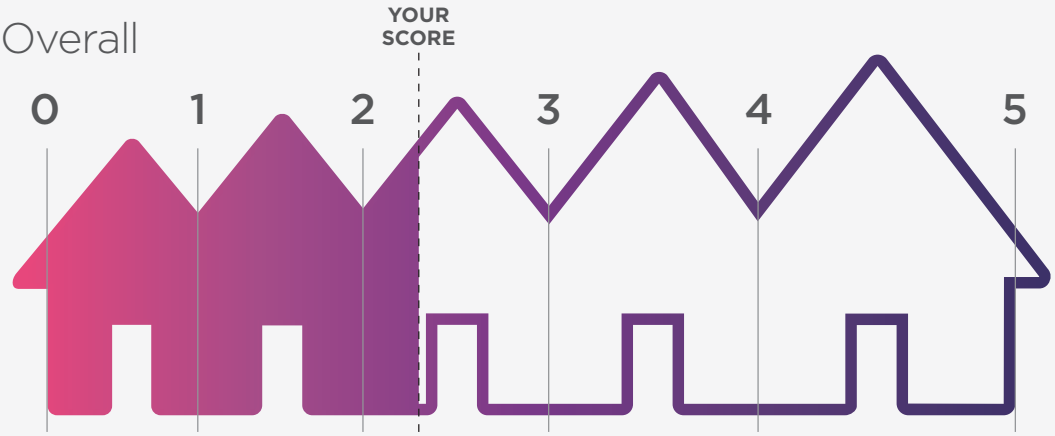
The Street (Maximum Radar Data) - Cobham

RATE MY ROAD

SITE ADDRESS

Sole Street (Average Radar Data) - Cobham

Overall

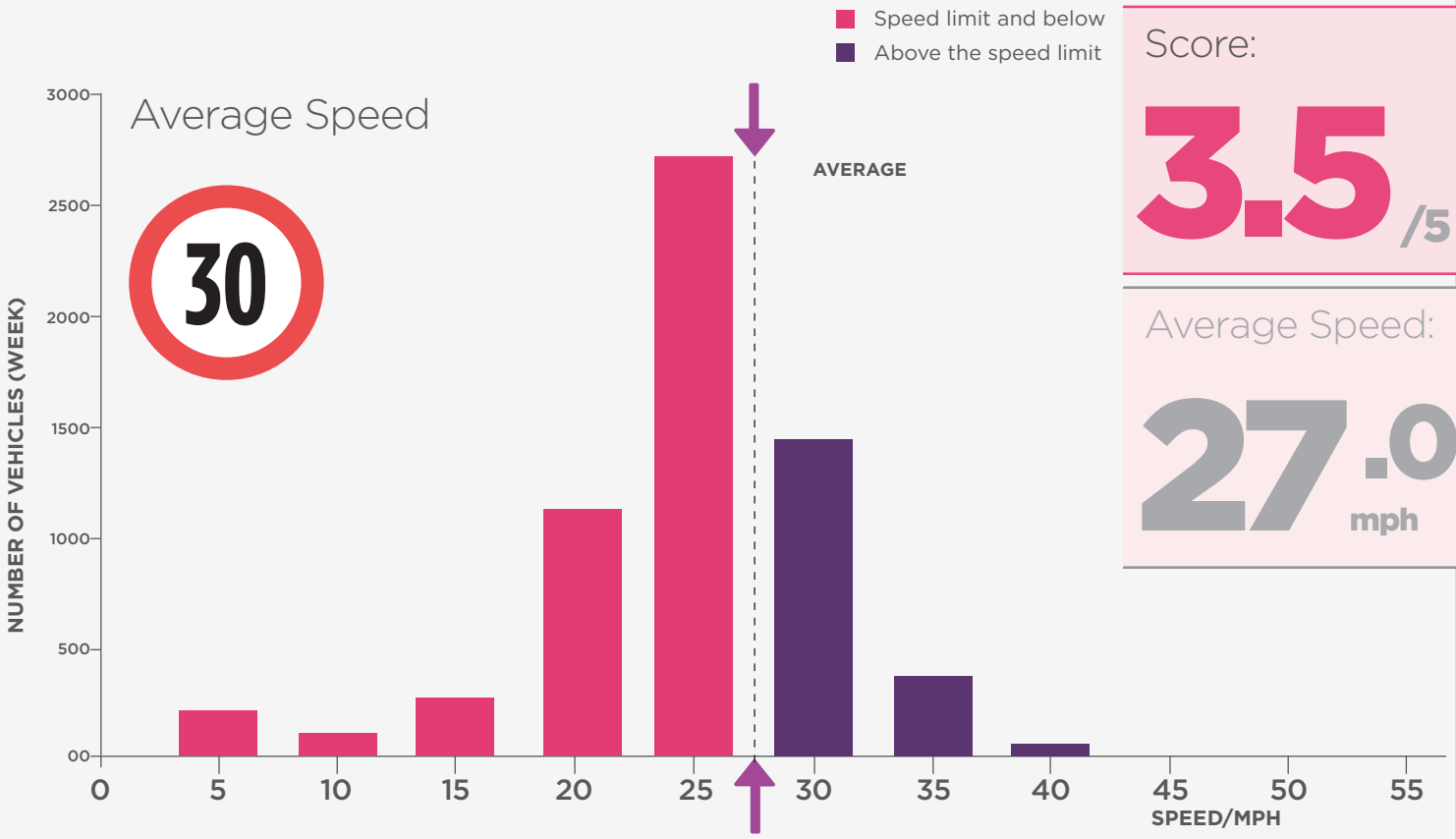


Overall Score:

2.2/5

This shows the overall score for your surveyed road. This takes into account all the surveyed characteristics. All scores are out of 5, where **0 = poor** & **5 = good**. If the overall score is poor then you should review in detail the following scores to establish the main reason(s) for the low score and whether these reasons are important to you individually.

Average Speed



Score:

3.5/5

Average Speed:

27.0 mph

This graph shows the number of vehicles travelling at ranges of speeds. The score is based on the average speed recorded compared to your road's speed limit.

Customer name & address:

Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**

Dates of survey:

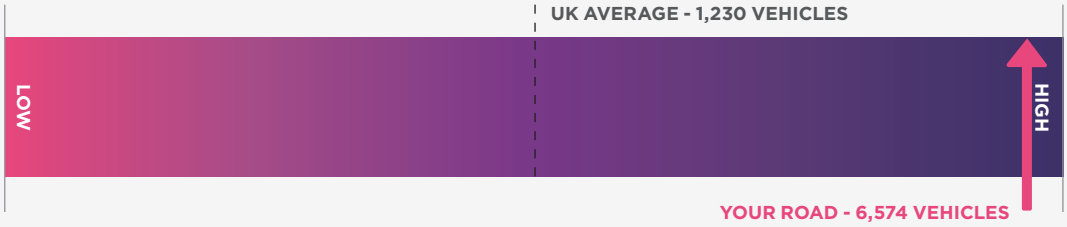
NA (Average of all recorded radar data.)

RATE MY ROAD

SITE ADDRESS

Sole Street (Average Radar Data) - Cobham

Weekday Traffic Flow

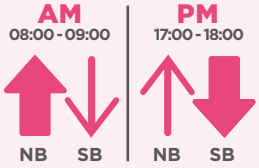


Score: **0.0**/5

This chart shows how your road's average weekday total traffic flow (24h) compares with the UK average for that road type. A score of 2.5 means that your road is average for the road's classification.

Peak Hour Weekday Traffic Flow

Direction of Traffic Flow



Score: **3.0**/5

This chart shows how your road's average weekday peak hour traffic (AM & PM) compares to what is expected according to the Department for Transport for a road with the level of traffic recorded. This identifies whether peak traffic is greater or less than expected peak hour conditions. The peak hours surveyed are **08:00-09:00** & **17:00-18:00**. The second chart shows whether or not the direction of traffic flow is tidal (i.e. traffic flow is greater in one direction) and in which direction. **NB = Northbound** (towards The Street) & **SB = Southbound** (towards Camer Road).

Speed Limit

General Road Condition

Road Classification

U

5.3 metres

Is the measured width of the road

Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**

Dates of survey:
NA (Average of all recorded radar data.)

RATE MY ROAD

SITE ADDRESS
Sole Street (Average Radar Data) - Cobham

No roadworks were present during the time of survey

1 **footway** at **1.2m** in width

0 Visible Cycle Routes

BUS **0** Visible Bus Stops

Visible Facilities

post boxes	petrol station	local shops	schools
0	0	0	0

Customer name & address:
Cobham Parish Council,
The Street, Cobham

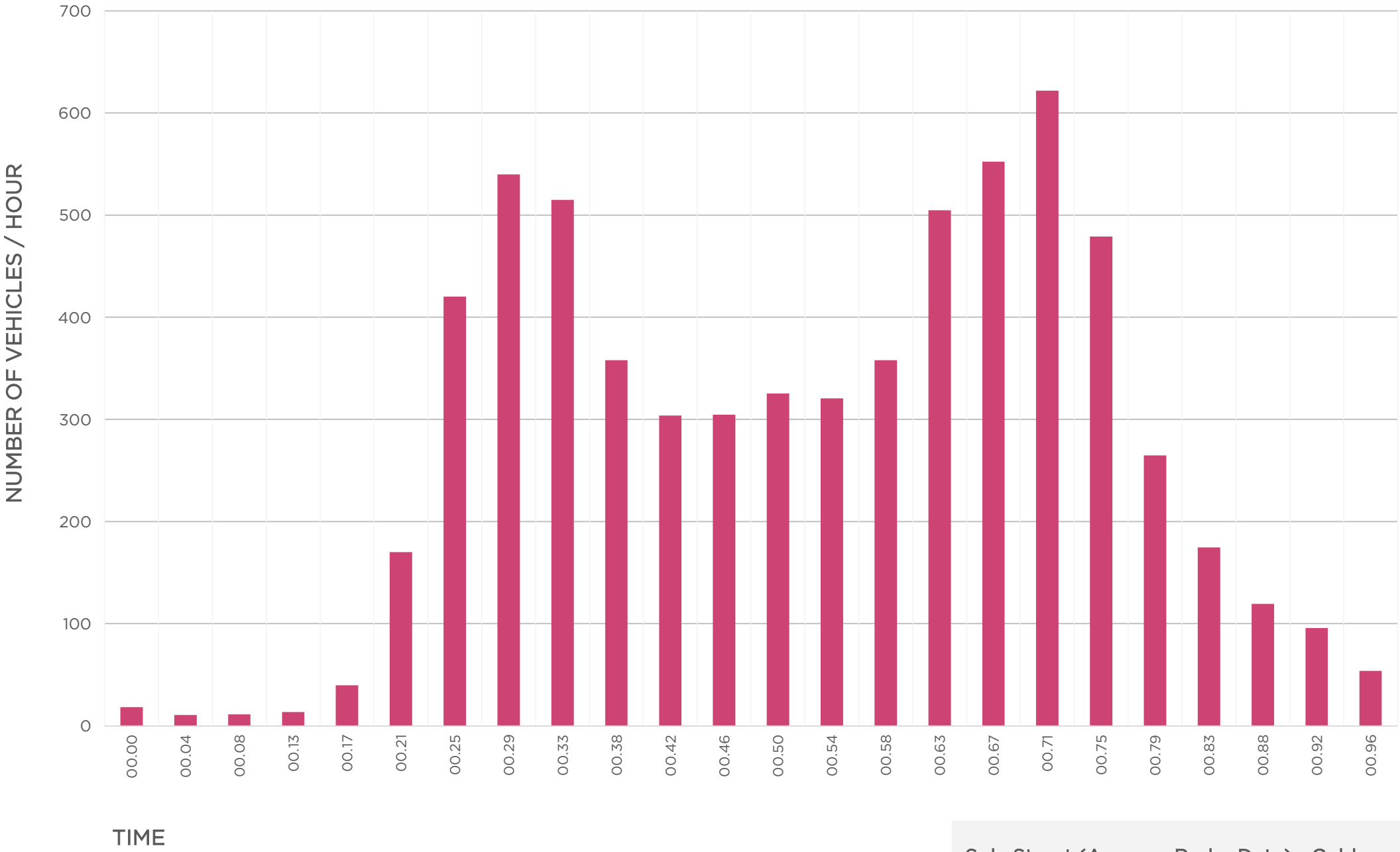
Project reference number: **5197**

Dates of survey:
NA (Average of all recorded radar data.)

RATE MY ROAD

A1

Number of Vehicles, Both Directions on an Average Weekday

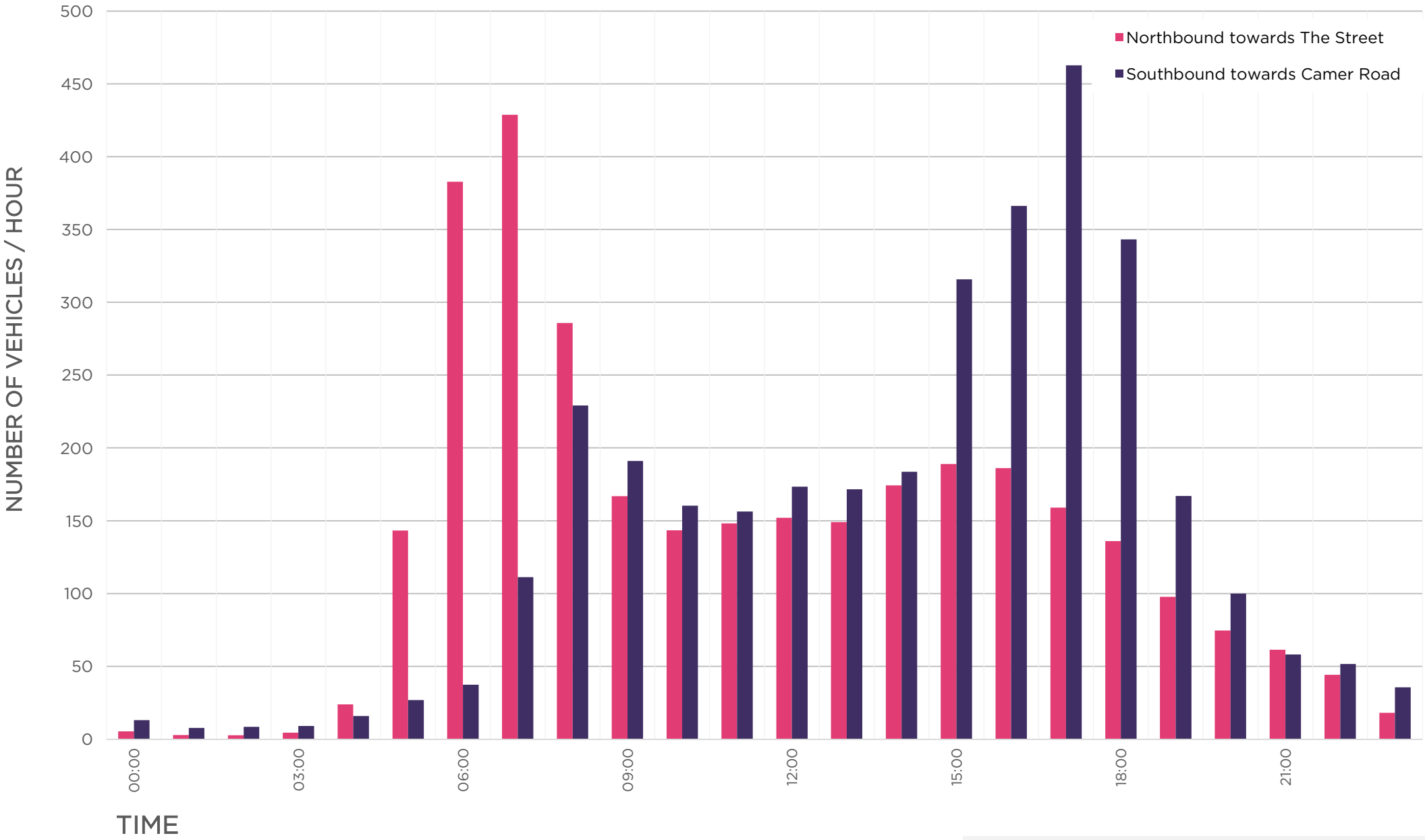


Sole Street (Average Radar Data) - Cobham

RATE MY ROAD

B1

Number of Vehicles on a Typical Weekday by Direction

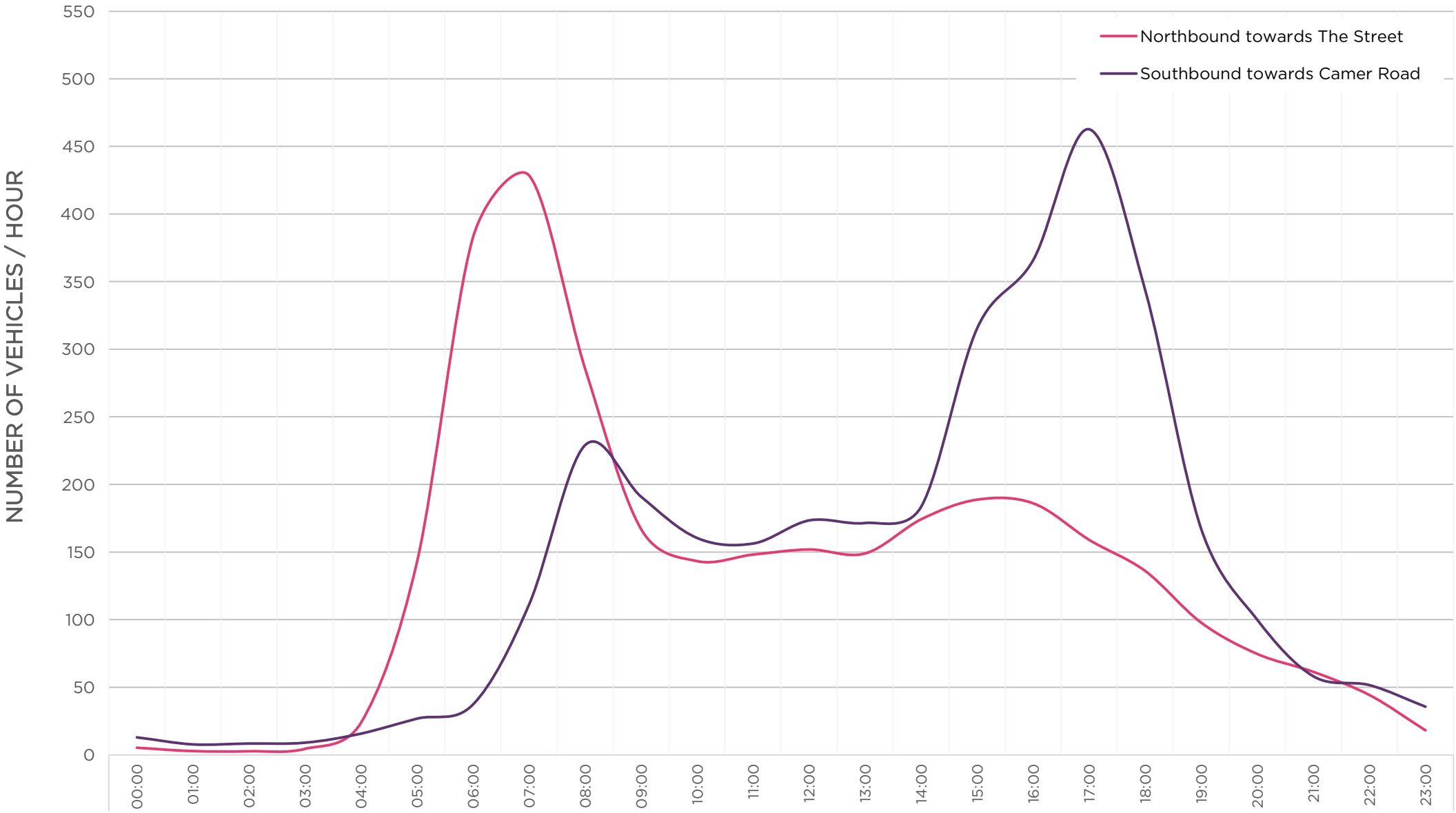


Sole Street (Average Radar Data) - Cobham

RATE MY ROAD

B2

Total Number of Vehicles by Direction

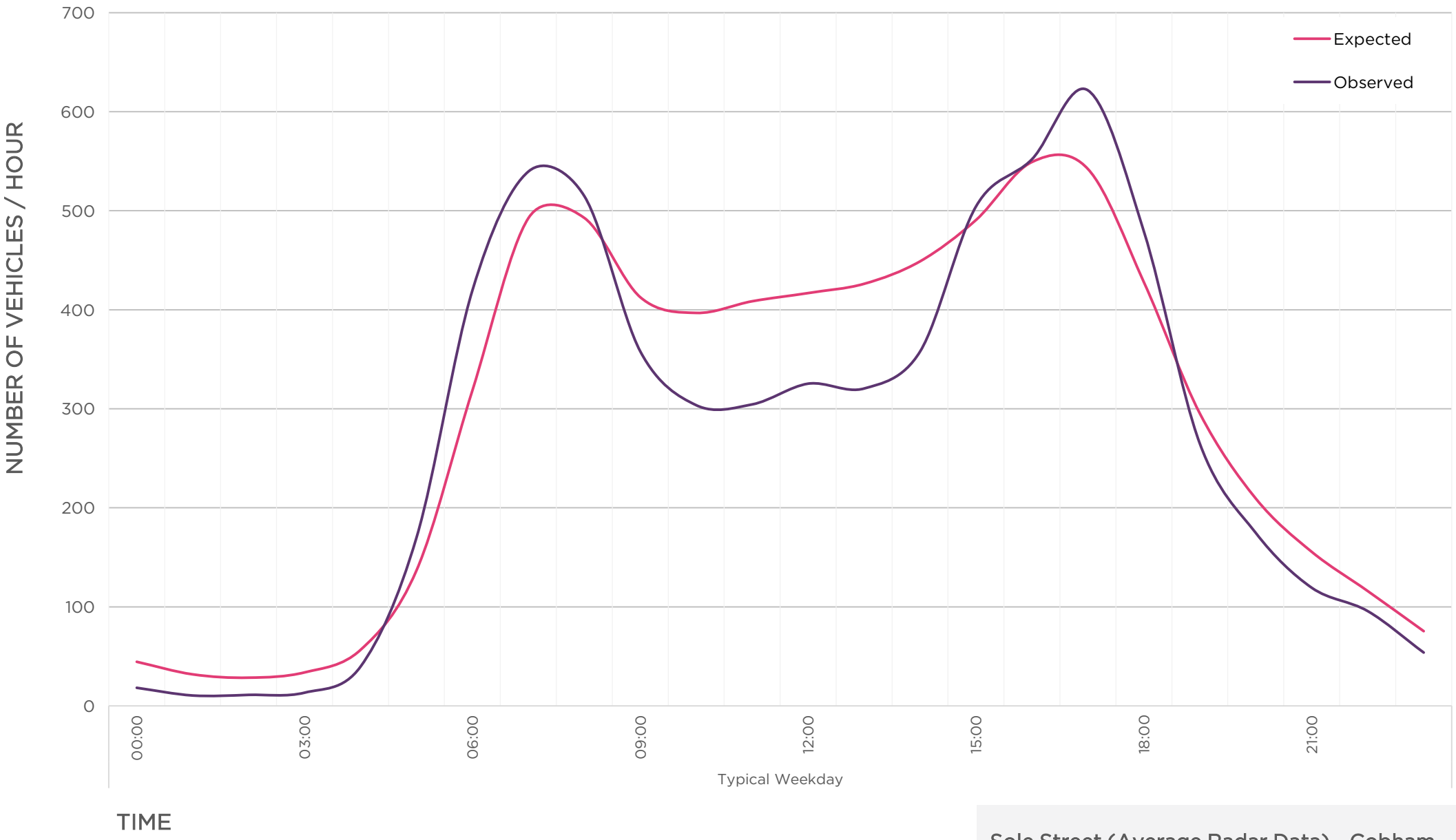


Sole Street (Average Radar Data) - Cobham

RATE MY ROAD

B3

Distribution of Traffic Across an Average Weekday Compared to the DfT Expected



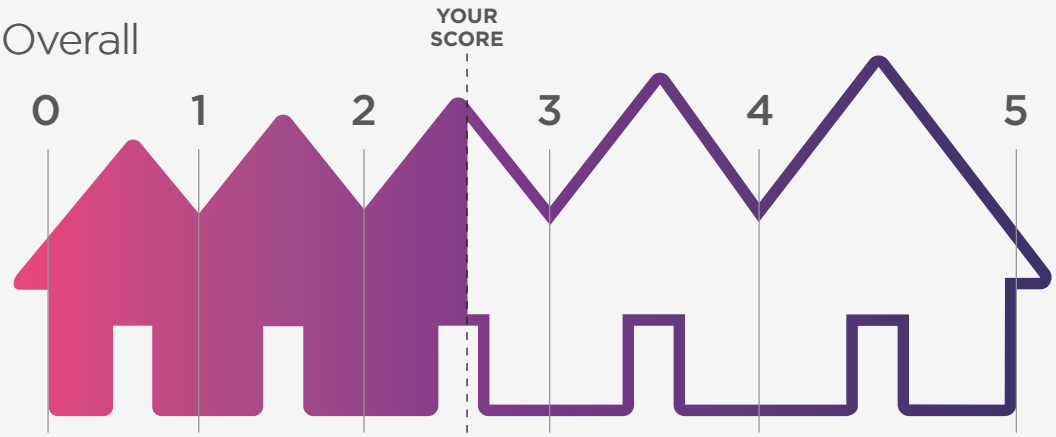
Sole Street (Average Radar Data) - Cobham

RATE MY ROAD

SITE ADDRESS

Sole Street (Maximum Radar Data) - Cobham

Overall

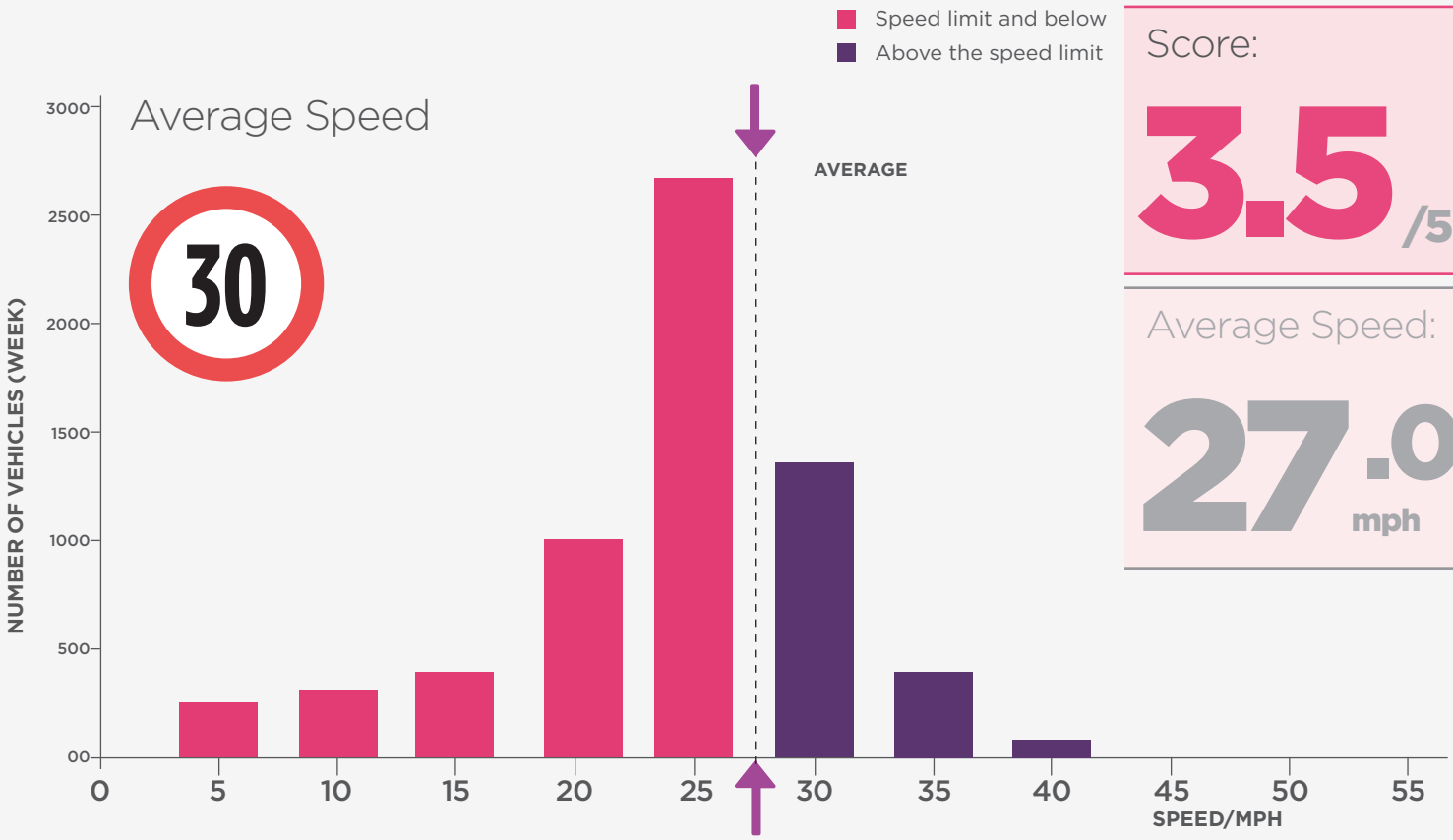


Overall Score:

1.3 /5

This shows the overall score for your surveyed road. This takes into account all the surveyed characteristics. All scores are out of 5, where **0 = poor** & **5 = good**. If the overall score is poor then you should review in detail the following scores to establish the main reason(s) for the low score and whether these reasons are important to you individually.

Average Speed



Score:

3.5 /5

Average Speed:

27.0 mph

This graph shows the number of vehicles travelling at ranges of speeds. The score is based on the average speed recorded compared to your road's speed limit.

Customer name & address:

Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**

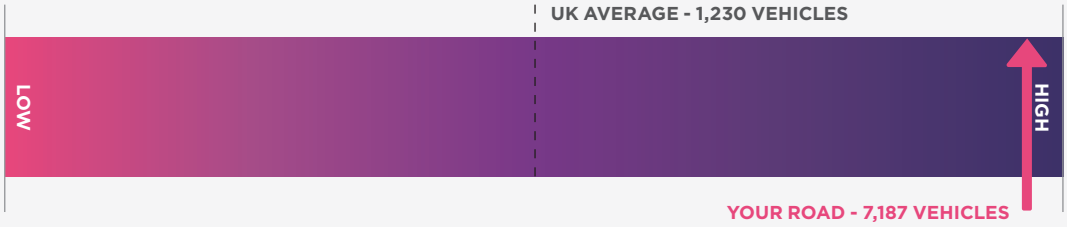
Dates of survey:
16/09/19-22/09/19 (EB) & 04/02/19-10/02/19 (WB)

RATE MY ROAD

SITE ADDRESS

Sole Street (Maximum Radar Data) - Cobham

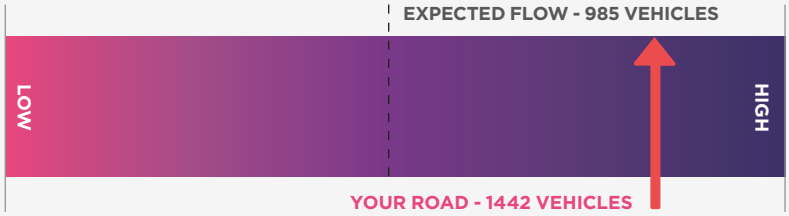
Weekday Traffic Flow



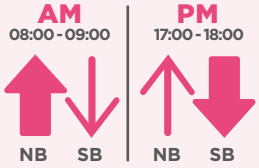
Score: **0.0**/5

This chart shows how your road's average weekday total traffic flow (24h) compares with the UK average for that road type. A score of 2.5 means that your road is average for the road's classification.

Peak Hour Weekday Traffic Flow



Direction of Traffic Flow



Score: **0.3**/5

This chart shows how your road's average weekday peak hour traffic (AM & PM) compares to what is expected according to the Department for Transport for a road with the level of traffic recorded. This identifies whether peak traffic is greater or less than expected peak hour conditions. The peak hours surveyed are **08:00-09:00** & **17:00-18:00**. The second chart shows whether or not the direction of traffic flow is tidal (i.e. traffic flow is greater in one direction) and in which direction. **NB = Northbound** (towards The Street) & **SB = Southbound** (towards Camer Road).

Speed Limit

General Road Condition

Road Classification

U

5.3 metres

Is the measured width of the road

Customer name & address:

Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**

Dates of survey:
16/09/19-22/09/19 (EB) & 04/02/19-10/02/19 (WB)

RATE MY ROAD

SITE ADDRESS
Sole Street (Maximum Radar Data) - Cobham

No roadworks were present during the time of survey

1

footway at **1.2m** in width

0

Visible Cycle Routes

BUS

0

Visible Bus Stops

Visible Facilities

post boxes	petrol station	local shops	schools
0	0	0	0

Customer name & address:
Cobham Parish Council,
The Street, Cobham

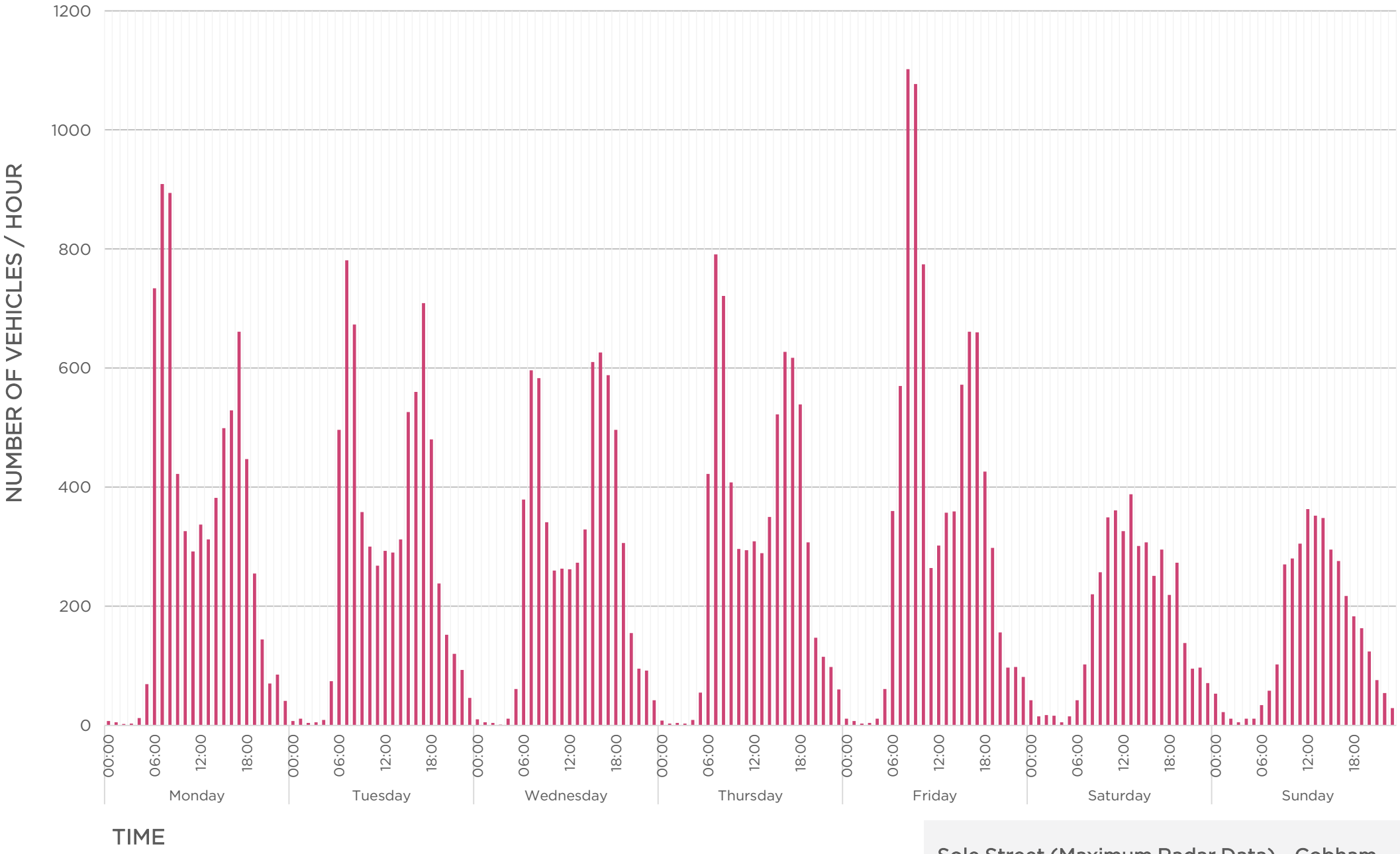
Project reference number: **5197**

Dates of survey:
11/03/19-17/03/19 (NB) & 03/12/18-09/12/18 (SB)

RATE MY ROAD

A1

Number of Vehicles, Both Directions

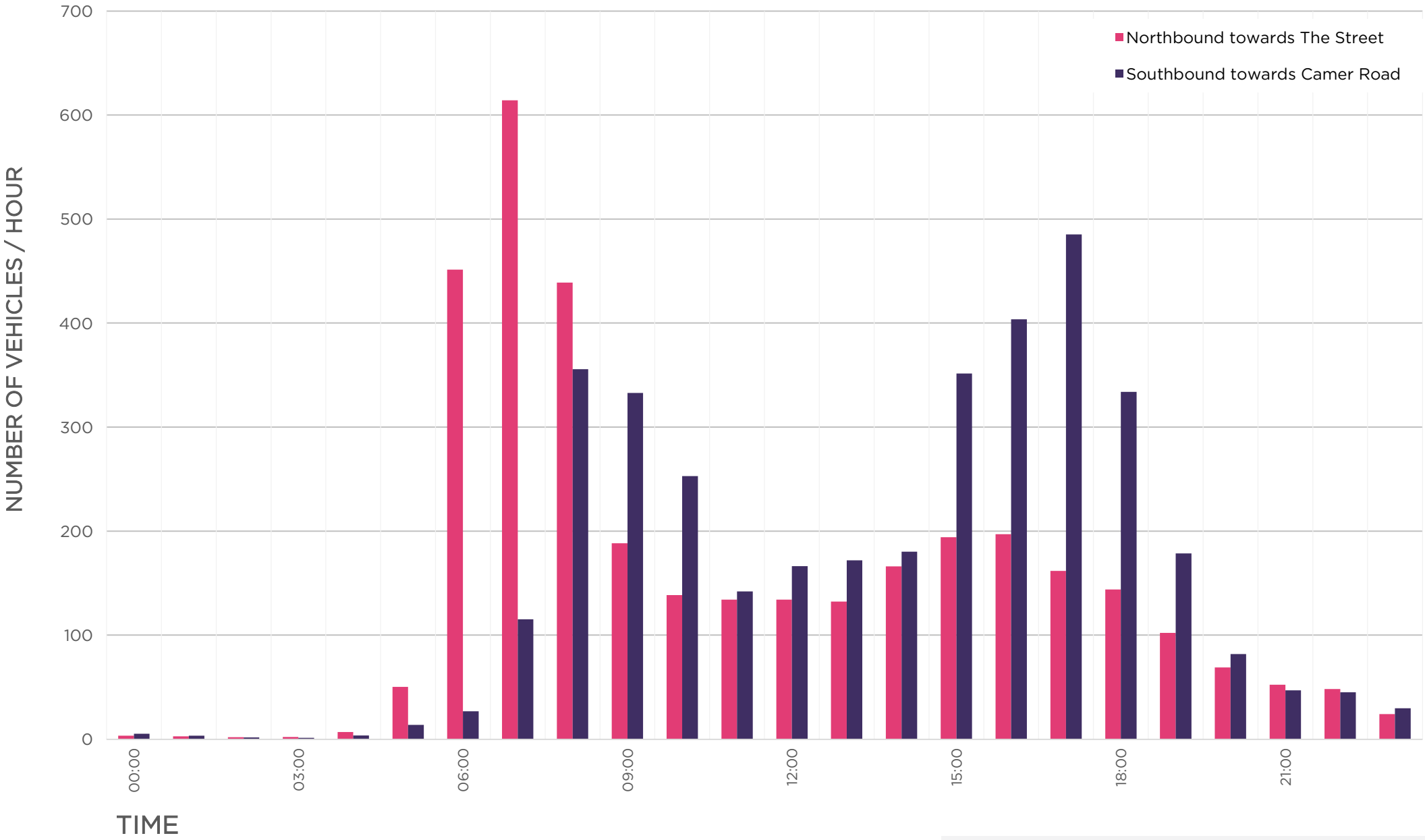


Sole Street (Maximum Radar Data) - Cobham

RATE MY ROAD

B1

Number of Vehicles on a Typical Weekday by Direction

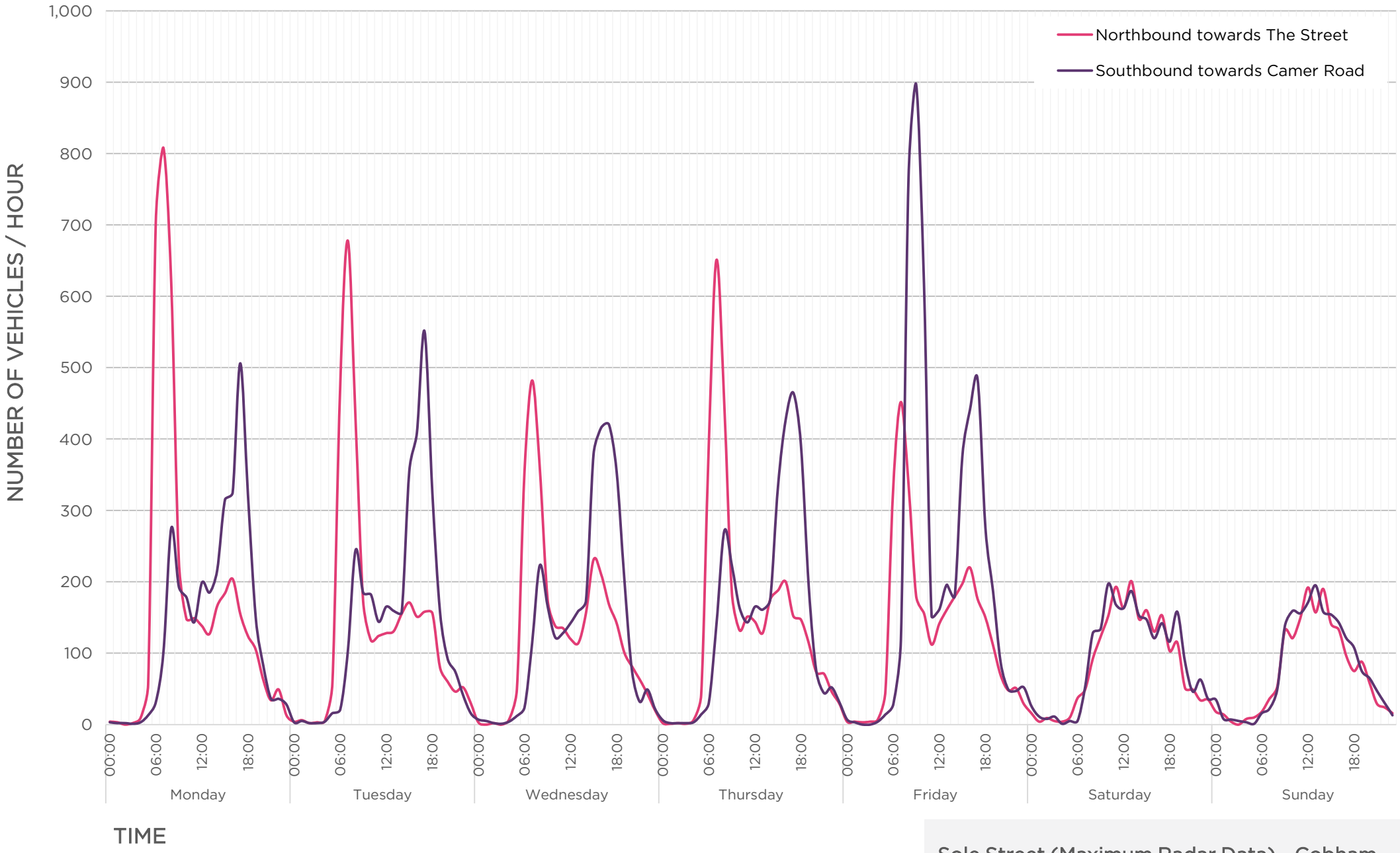


Sole Street (Maximum Radar Data) - Cobham

RATE MY ROAD

B2

Total Number of Vehicles by Direction



Sole Street (Maximum Radar Data) - Cobham

RATE MY ROAD

B3

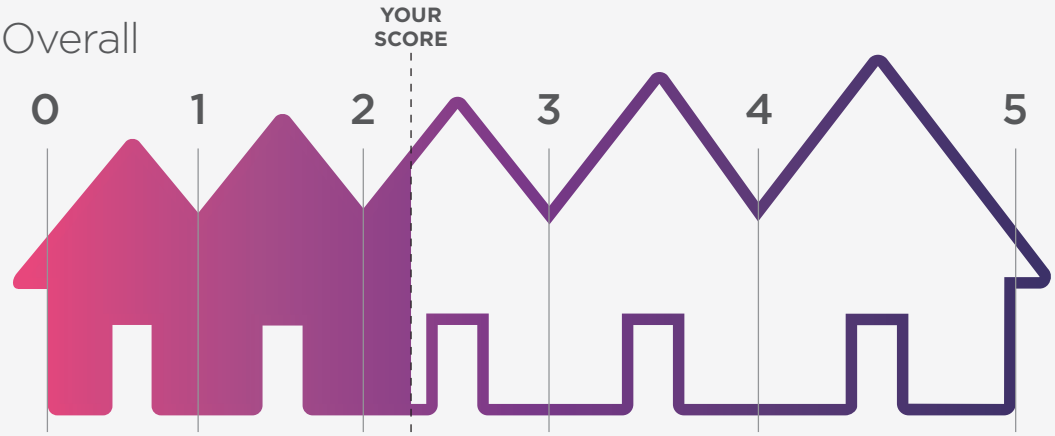
Distribution of Traffic Across an Average Weekday, Saturday & Sunday Compared to the DfT Expected

Sole Street (Maximum Radar Data) - Cobham

RATE MY ROAD

SITE ADDRESS
The Street, Cobham

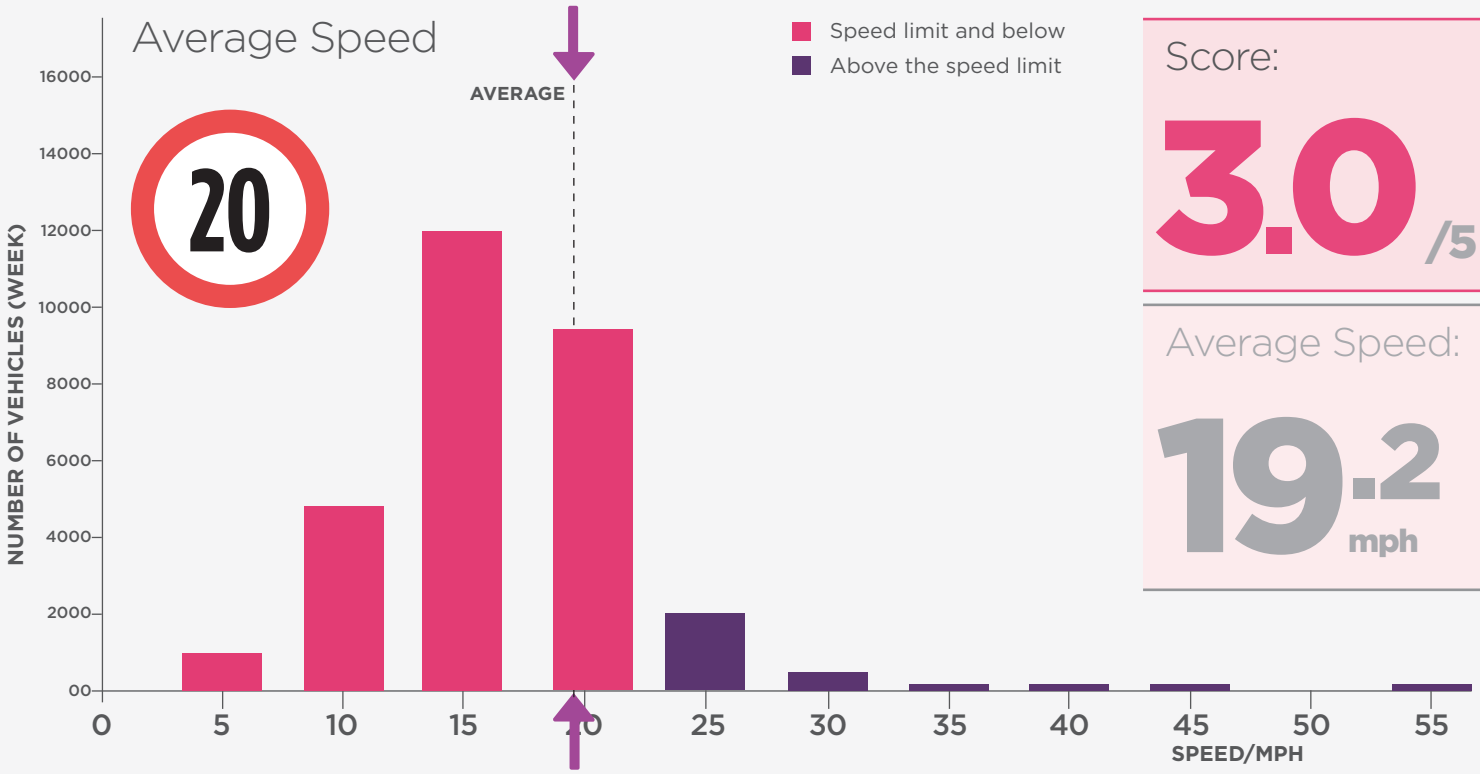
Overall



Overall Score:
2.2/5

This shows the overall score for your surveyed road. This takes into account all the surveyed characteristics. All scores are out of 5, where **0 = poor** & **5 = good**. If the overall score is poor then you should review in detail the following scores to establish the main reason(s) for the low score and whether these reasons are important to you individually.

Average Speed

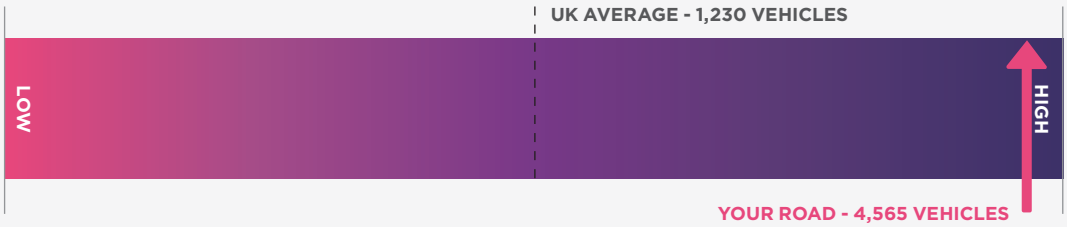


Score:
3.0/5

Average Speed:
19.2 mph

This graph shows the number of vehicles travelling at ranges of speeds. The score is based on the average speed recorded compared to your road's speed limit.

Weekday Traffic Flow



Score:
0.0/5

This chart shows how your road's average weekday total traffic flow (24h) compares with the UK average for that road type. A score of 2.5 means that your road is average for the road's classification.

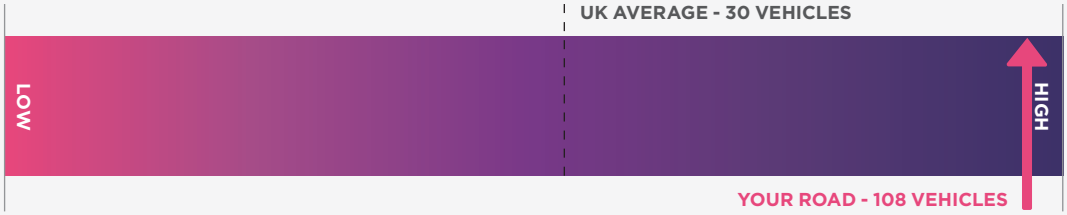
Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**
Date of survey booking: **08/09/19**
Dates of survey: **10/09/19 - 17/09/19**

RATE MY ROAD

SITE ADDRESS
The Street, Cobham

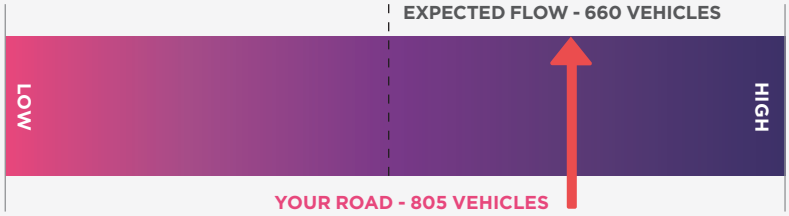
HGV Weekday Traffic Flow



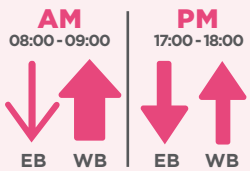
Score: **0.0** /5

This chart shows how your road's average weekday total HGV traffic flow (24h) compares with the UK average for that road type. A score of 2.5 means that your road is average for the road's classification.

Peak Hour Weekday Traffic Flow



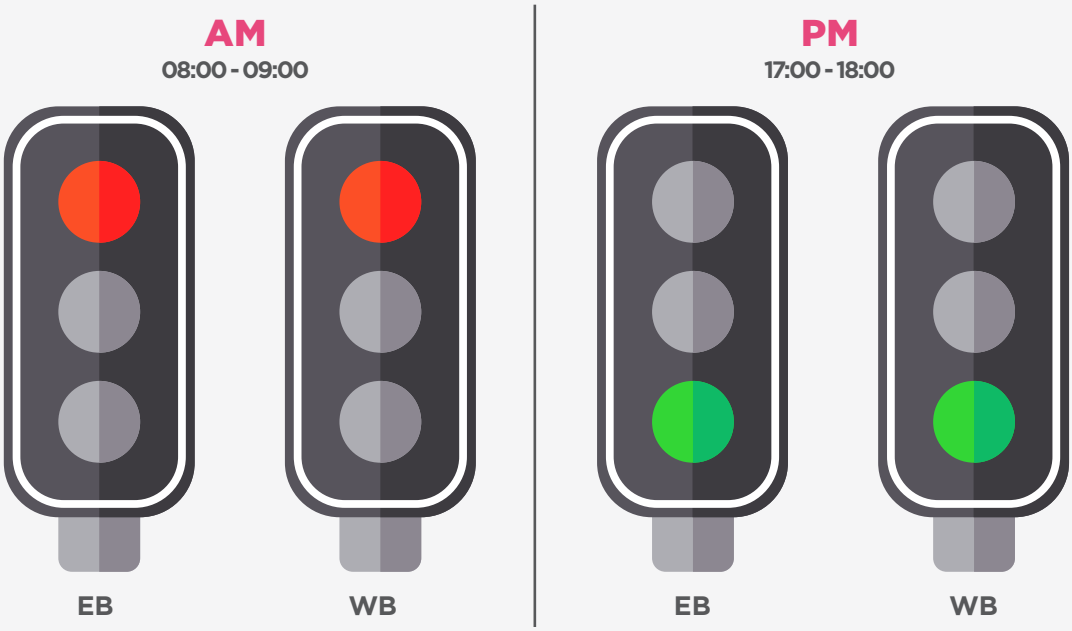
Direction of Traffic Flow



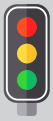
Score: **2.7** /5

This chart shows how your road's average weekday peak hour traffic (AM & PM) compares to what is expected according to the Department for Transport for a road with the level of traffic recorded. This identifies whether peak traffic is greater or less than expected peak hour conditions. The peak hours surveyed are **08:00-09:00** & **17:00-18:00**. The second chart shows whether or not the direction of traffic flow is tidal (i.e. traffic flow is greater in one direction) and in which direction. **EB = Eastbound** (towards Halfpence Lane) & **WB = Westbound** (towards Jeskyns Road).

Peak Hour Congestion



Score: **3.6** /5



Red = Heavy congestion in direction
Amber = Some congestion in direction
Green = Free flowing traffic in direction

EB = Eastbound (towards Halfpence Lane) &
WB = Westbound (towards Jeskyns Road).

Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number:	5197
Date of survey booking:	08/09/19
Dates of survey:	10/09/19 - 17/09/19

RATE MY ROAD

SITE ADDRESS
The Street, Cobham

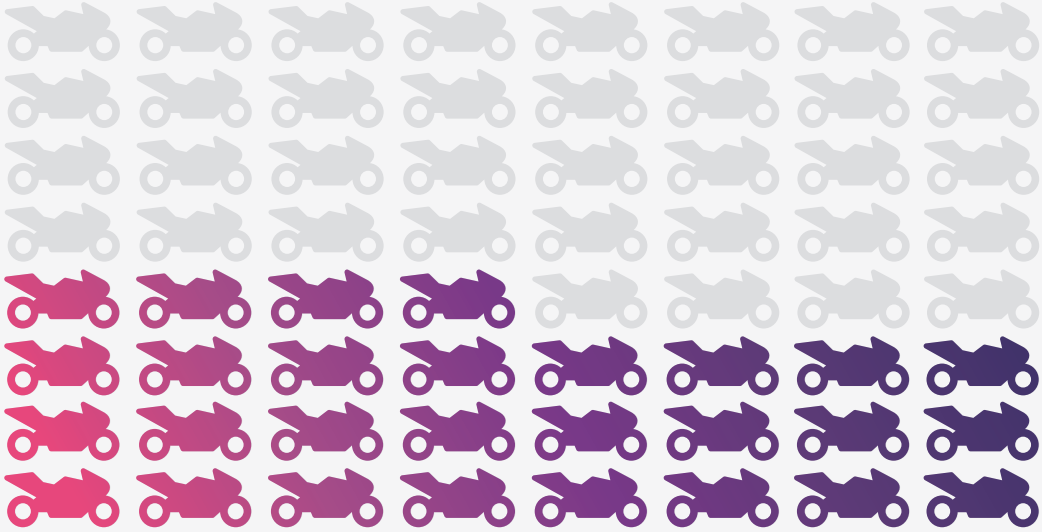
HGV Composition During Sensitive Hours
(00:00 - 05:00)

Score:
3.5/5

Average HGVs During Weekday Nights:
2.0

This graphic shows the average number of HGVs travelling on your road during the hours of **00:00-05:00** on weekday nights.

Motorbike Composition During Weekends



Score:
2.8/5

Maximum No. of Motorbikes in 1 hour During the Weekend
28

This graphic shows the maximum number of motorbikes travelling on your road within the same hour during the weekend.

Speed Limit

General Road Condition

Road Classification

U

4.2 metres
Is the measured width of the road

Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**
Date of survey booking: **08/09/19**
Dates of survey: **10/09/19 - 17/09/19**

RATE MY ROAD

SITE ADDRESS
The Street, Cobham

No roadworks were present during the time of survey

1 **footway** at **1.1m** in width

0 Visible Cycle Routes

BUS

2 Visible Bus Stops

Visible Facilities

post boxes	petrol station	local shops	schools
0	0	1	1

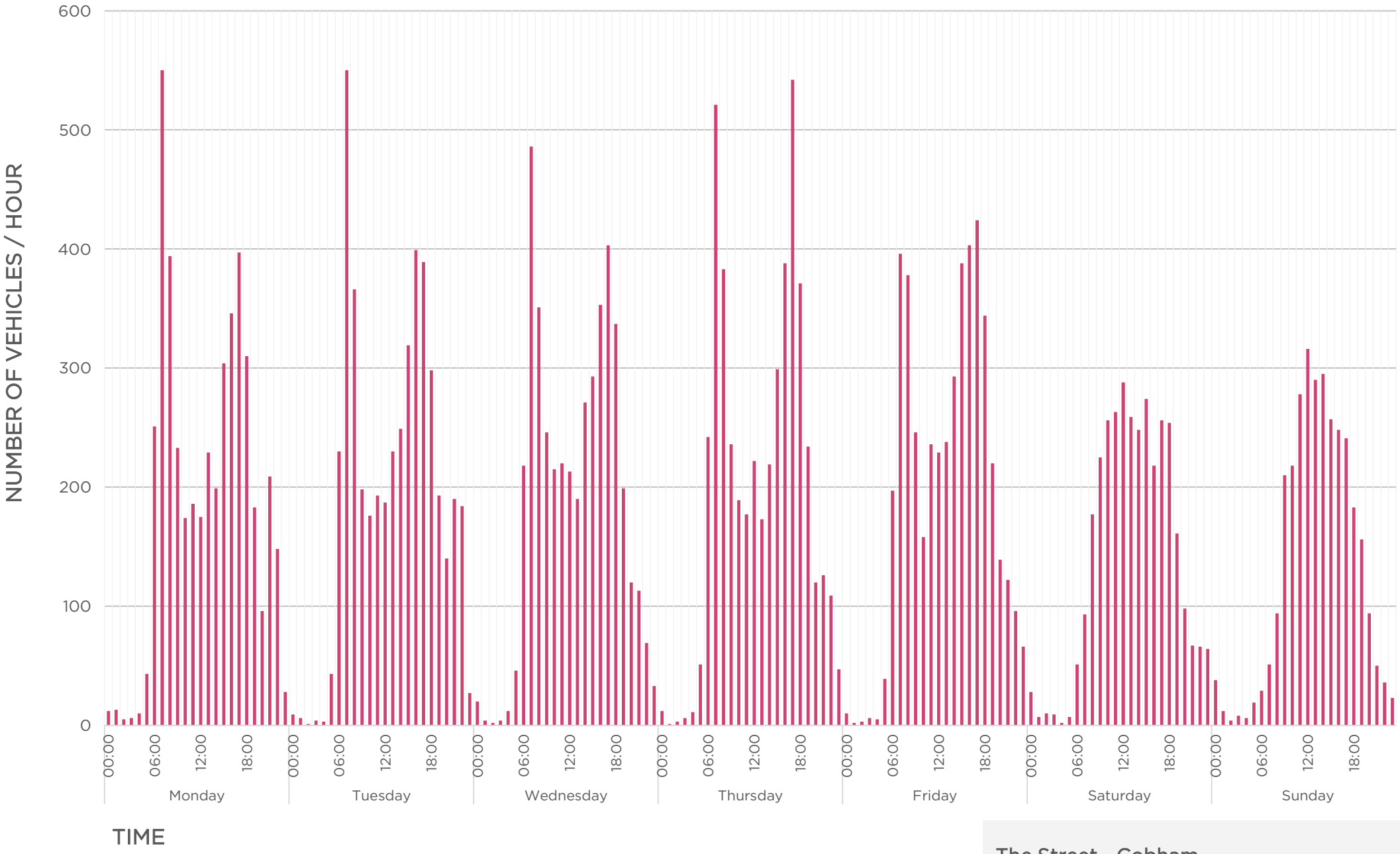
Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number:	**5197**
Date of survey booking:	**08/09/19**
Dates of survey:	**10/09/19 - 17/09/19**

RATE MY ROAD

A1

Number of Vehicles, Both Directions

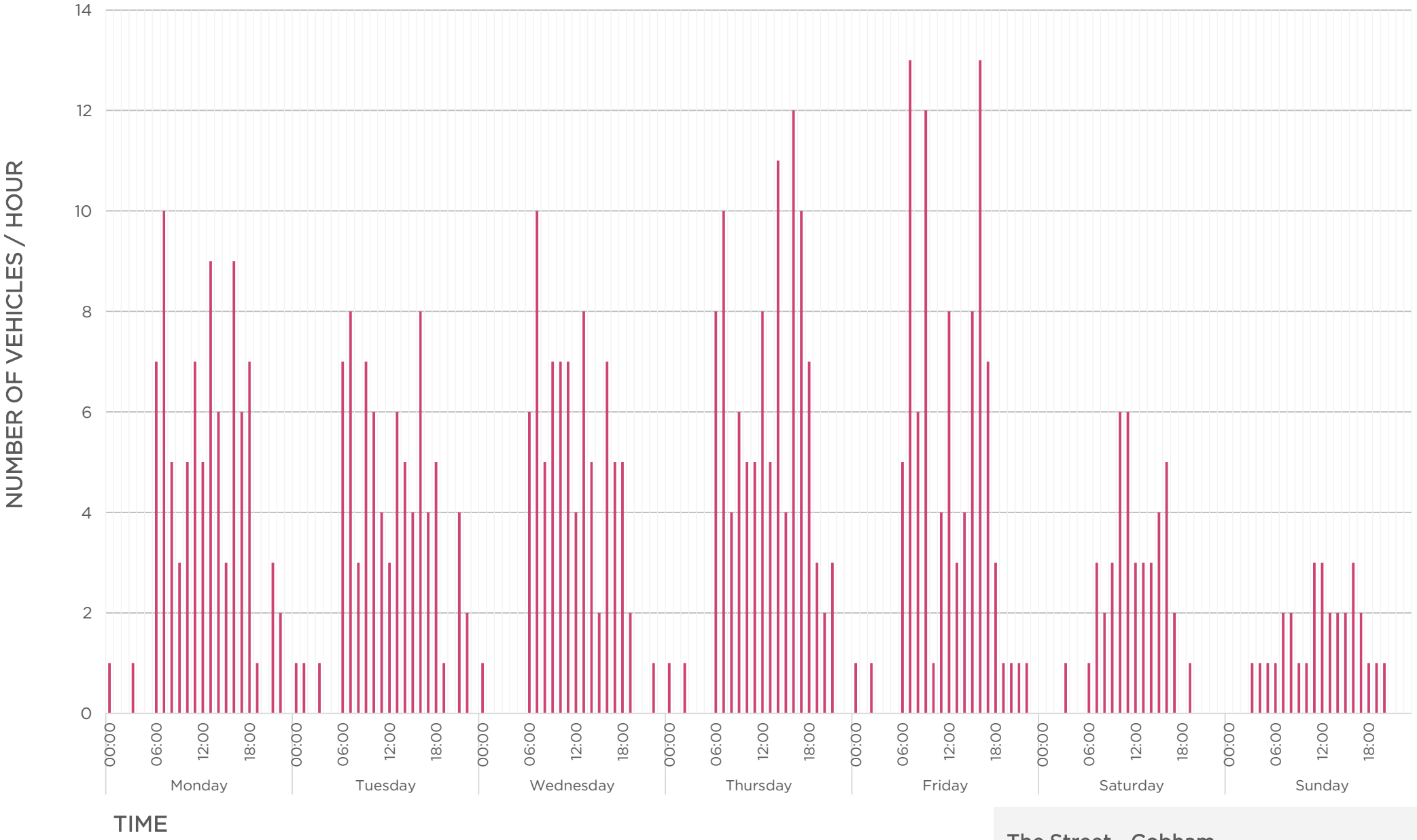


The Street - Cobham

RATE MY ROAD

A2

HGVs (3+ Axles), Both Directions

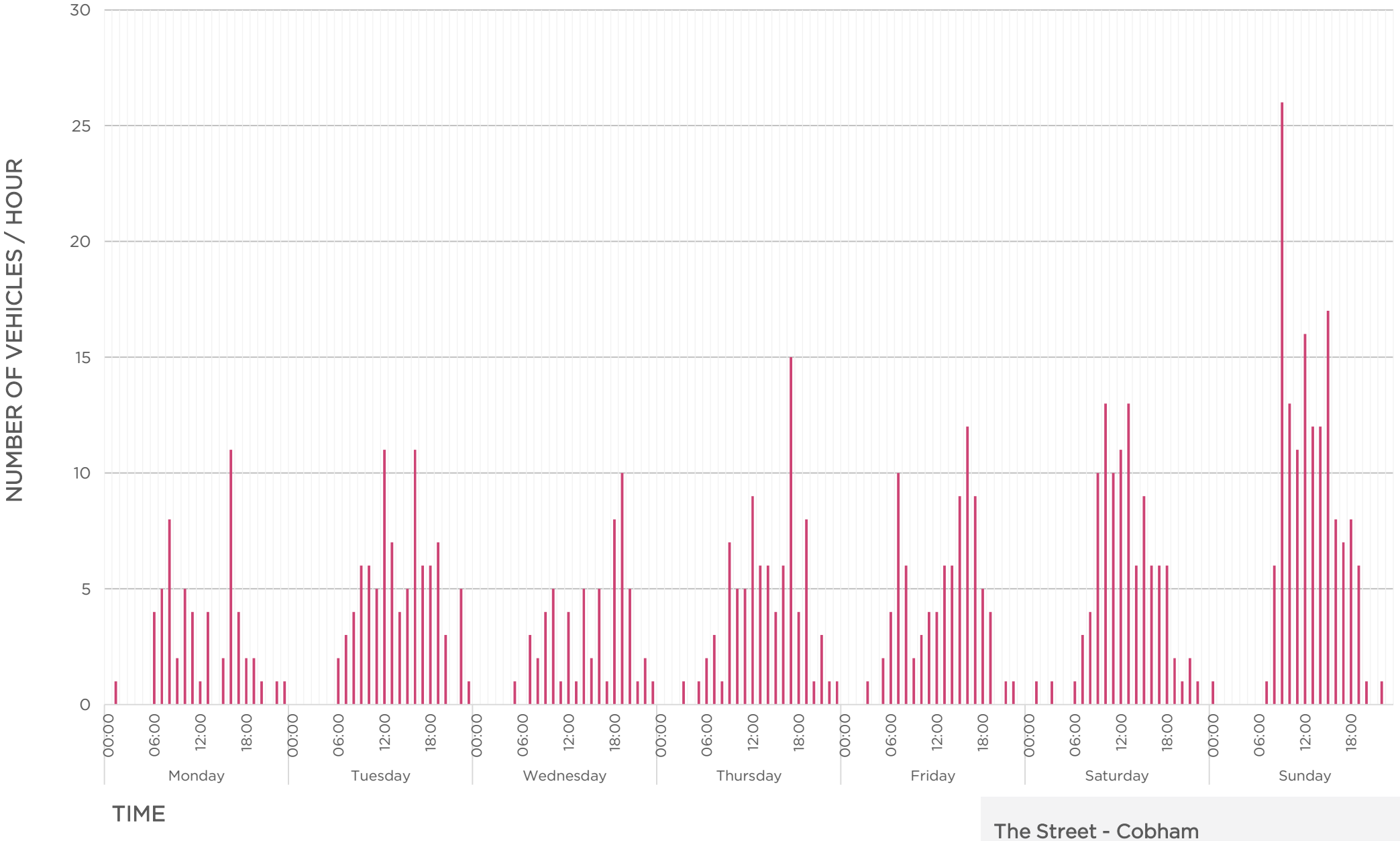


The Street - Cobham

RATE MY ROAD

A3

Bicycles / Motorbikes, Both Directions



The Street - Cobham

RATE MY ROAD

B1

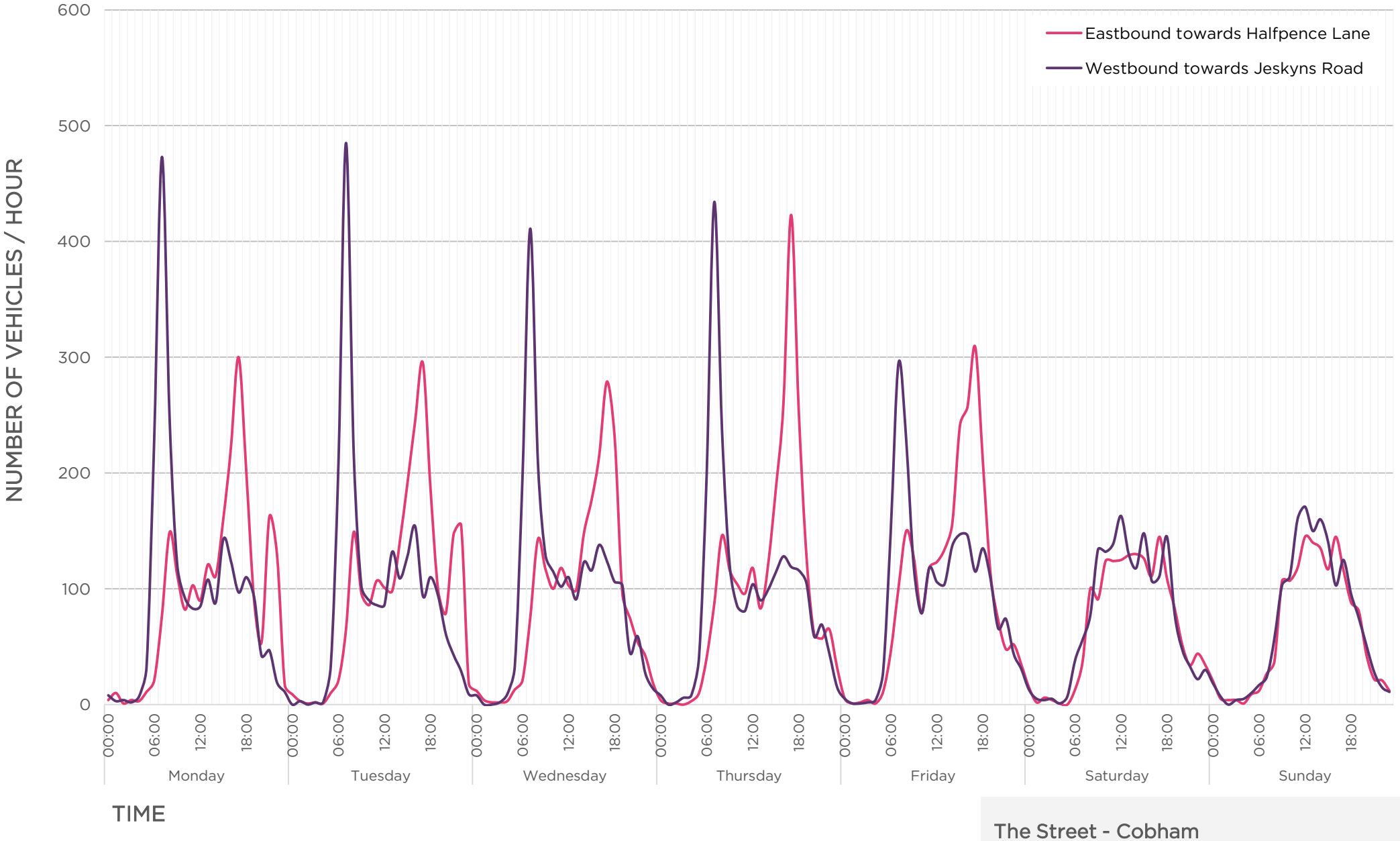
Number of Vehicles and Average Speed on a Typical Weekday by Direction

The Street - Cobham

RATE MY ROAD

B2

Total Number of Vehicles by Direction



The Street - Cobham

RATE MY ROAD

B3

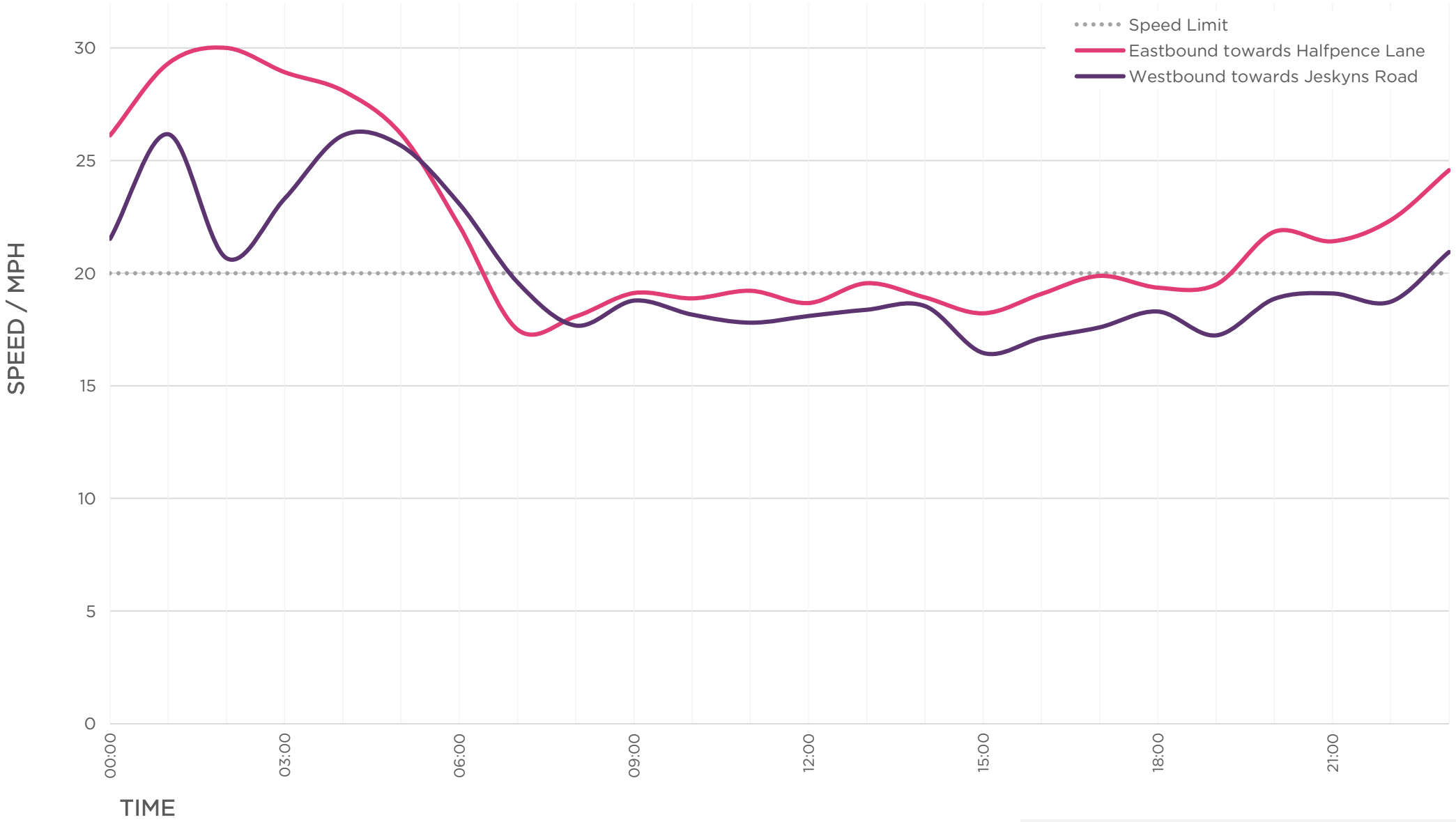
Distribution of Traffic Across an Average Weekday, Saturday & Sunday Compared to the DfT Expected

The Street - Cobham

RATE MY ROAD

C1

Average Speed by Time of Day Across a Typical Weekday

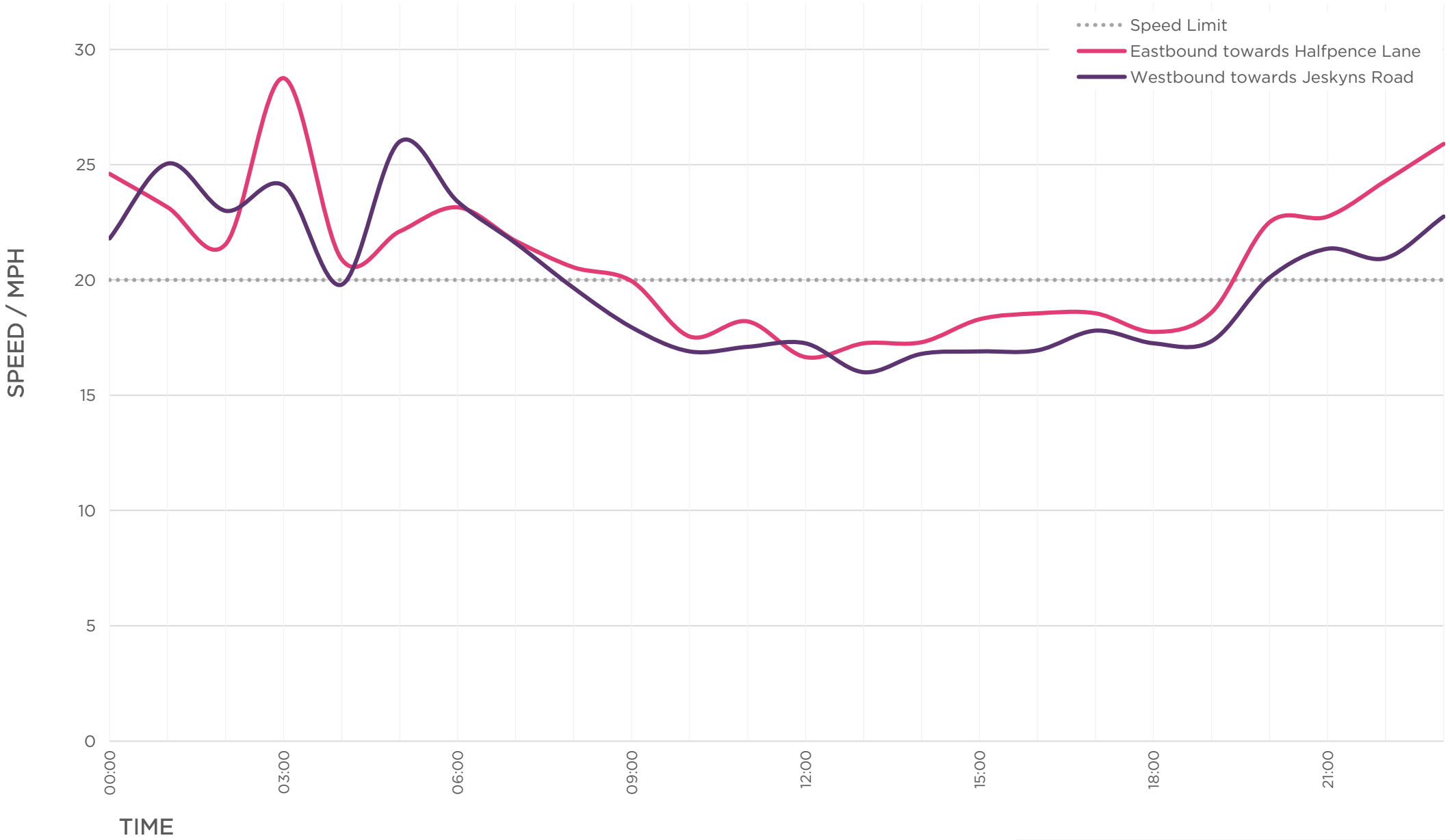


The Street - Cobham

RATE MY ROAD

C2

Average Speed by Time of Day Across a Typical Weekend Day

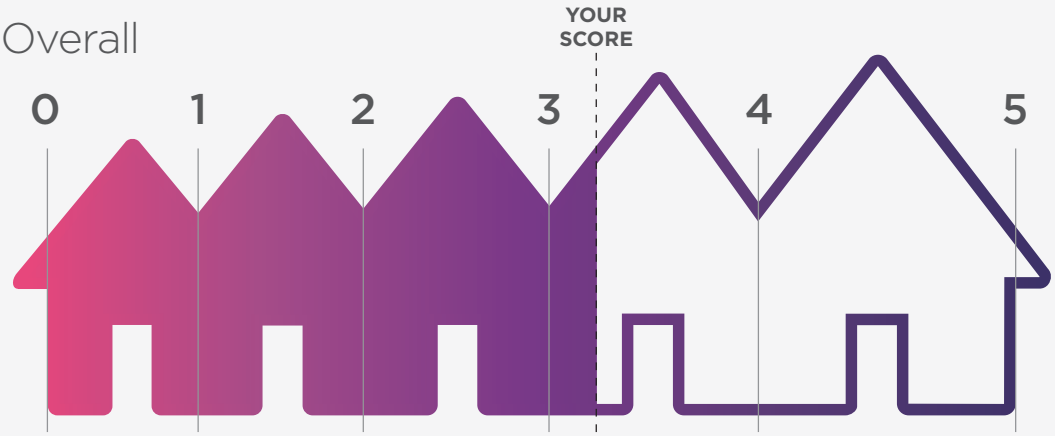


The Street - Cobham

RATE MY ROAD

SITE ADDRESS
Sole Street, Cobham

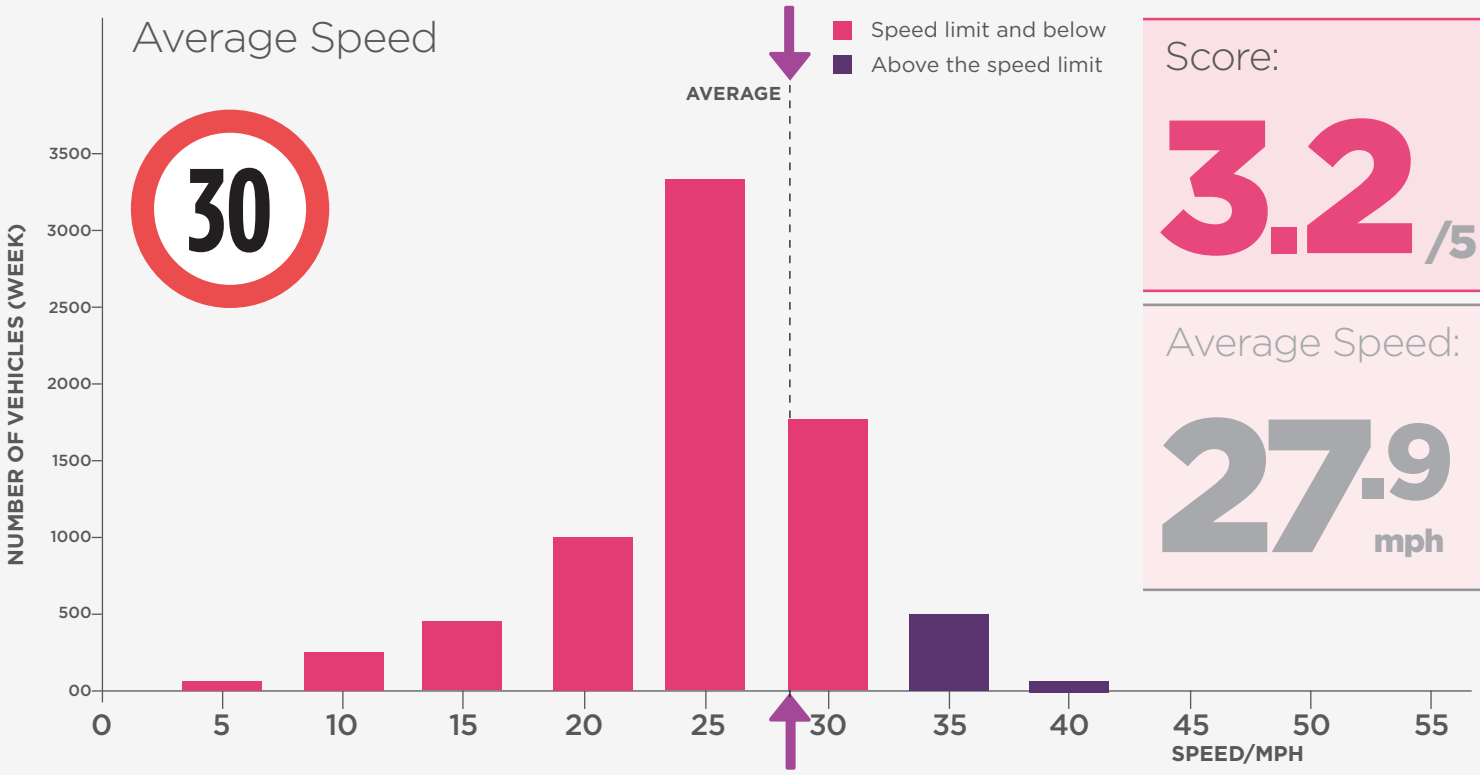
Overall



Overall Score: **3.2/5**

This shows the overall score for your surveyed road. This takes into account all the surveyed characteristics. All scores are out of 5, where **0 = poor** & **5 = good**. If the overall score is poor then you should review in detail the following scores to establish the main reason(s) for the low score and whether these reasons are important to you individually.

Average Speed

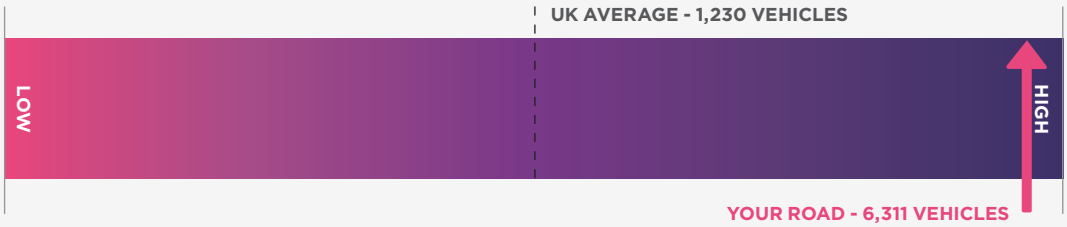


Score: **3.2/5**

Average Speed: **27.9 mph**

This graph shows the number of vehicles travelling at ranges of speeds. The score is based on the average speed recorded compared to your road's speed limit.

Weekday Traffic Flow



Score: **0.0/5**

This chart shows how your road's average weekday total traffic flow (24h) compares with the UK average for that road type. A score of 2.5 means that your road is average for the road's classification.

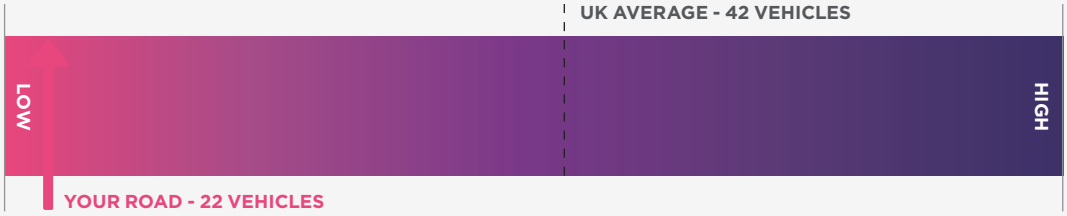
Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**
Date of survey booking: **NA**
Dates of survey: **12/07/19 - 19/07/19**

RATE MY ROAD

SITE ADDRESS
Sole Street, Cobham

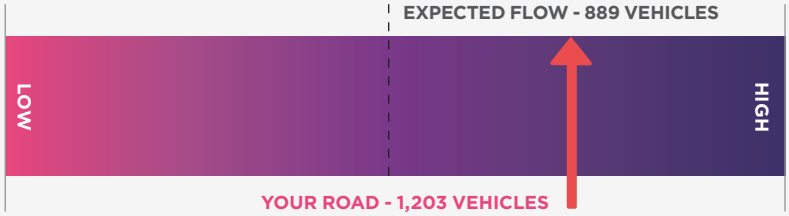
HGV Weekday Traffic Flow



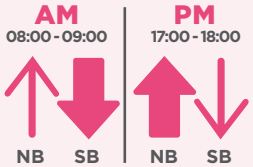
Score: **5.0** /5

This chart shows how your road's average weekday total HGV traffic flow (24h) compares with the UK average for that road type. A score of 2.5 means that your road is average for the road's classification.

Peak Hour Weekday Traffic Flow



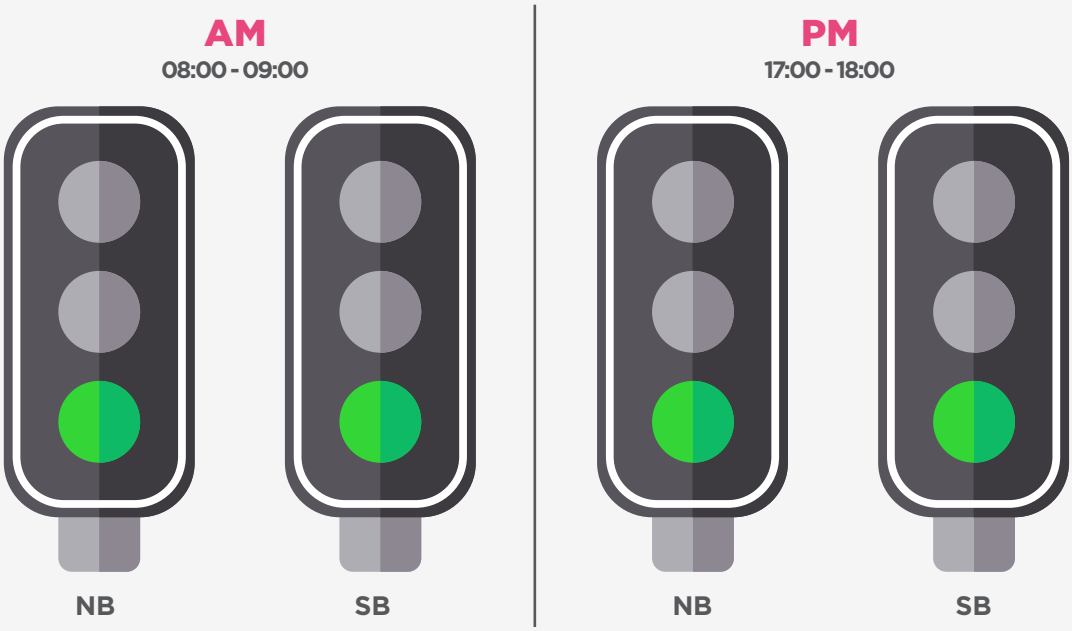
Direction of Traffic Flow



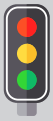
Score: **1.4** /5

This chart shows how your road's average weekday peak hour traffic (AM & PM) compares to what is expected according to the Department for Transport for a road with the level of traffic recorded. This identifies whether peak traffic is greater or less than expected peak hour conditions. The peak hours surveyed are **08:00-09:00** & **17:00-18:00**. The second chart shows whether or not the direction of traffic flow is tidal (i.e. traffic flow is greater in one direction) and in which direction. **NB = Northbound** (towards The Street) & **SB = Southbound** (towards Camer Road).

Peak Hour Congestion



Score: **3.6** /5



Red = Heavy congestion in direction
Amber = Some congestion in direction
Green = Free flowing traffic in direction

NB = Northbound (towards The Street &
SB = Southbound (towards Camer Road).

Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**
Date of survey booking: **NA**
Dates of survey: **12/07/19 - 19/07/19**

RATE MY ROAD

SITE ADDRESS
Sole Street, Cobham

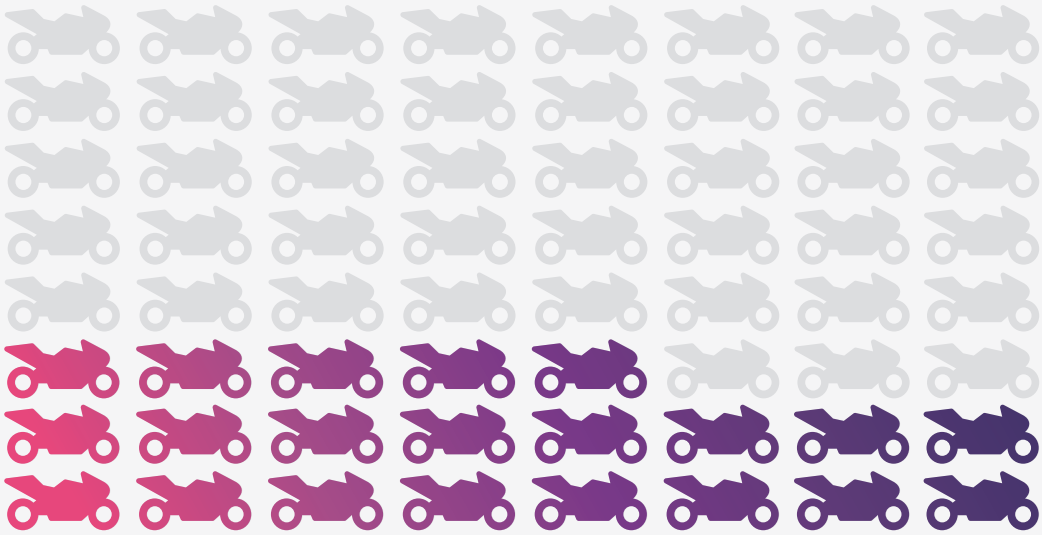
HGV Composition During Sensitive Hours
(00:00 - 05:00)

Score:
4.2/5

Average HGVs During Weekday Nights:
1.4

This graphic shows the average number of HGVs travelling on your road during the hours of **00:00-05:00** on weekday nights.

Motorbike Composition During Weekends



Score:
3.3/5

Maximum No. of Motorbikes in 1 hour During the Weekend
21

This graphic shows the maximum number of motorbikes travelling on your road within the same hour during the weekend.

Speed Limit

General Road Condition

Road Classification

U

5.4 metres
Is the measured width of the road

Customer name & address:
Cobham Parish Council,
The Street, Cobham

Project reference number: **5197**
Date of survey booking: **NA**
Dates of survey: **12/07/19 - 19/07/19**

RATE MY ROAD

SITE ADDRESS
Sole Street, Cobham

No roadworks were present during the time of survey

1

footway at **1.8m** in width

0

Visible Cycle Routes

Visible Bus Stops

1

Visible Facilities

0 post boxes

0 petrol station

1 local shops

0 schools

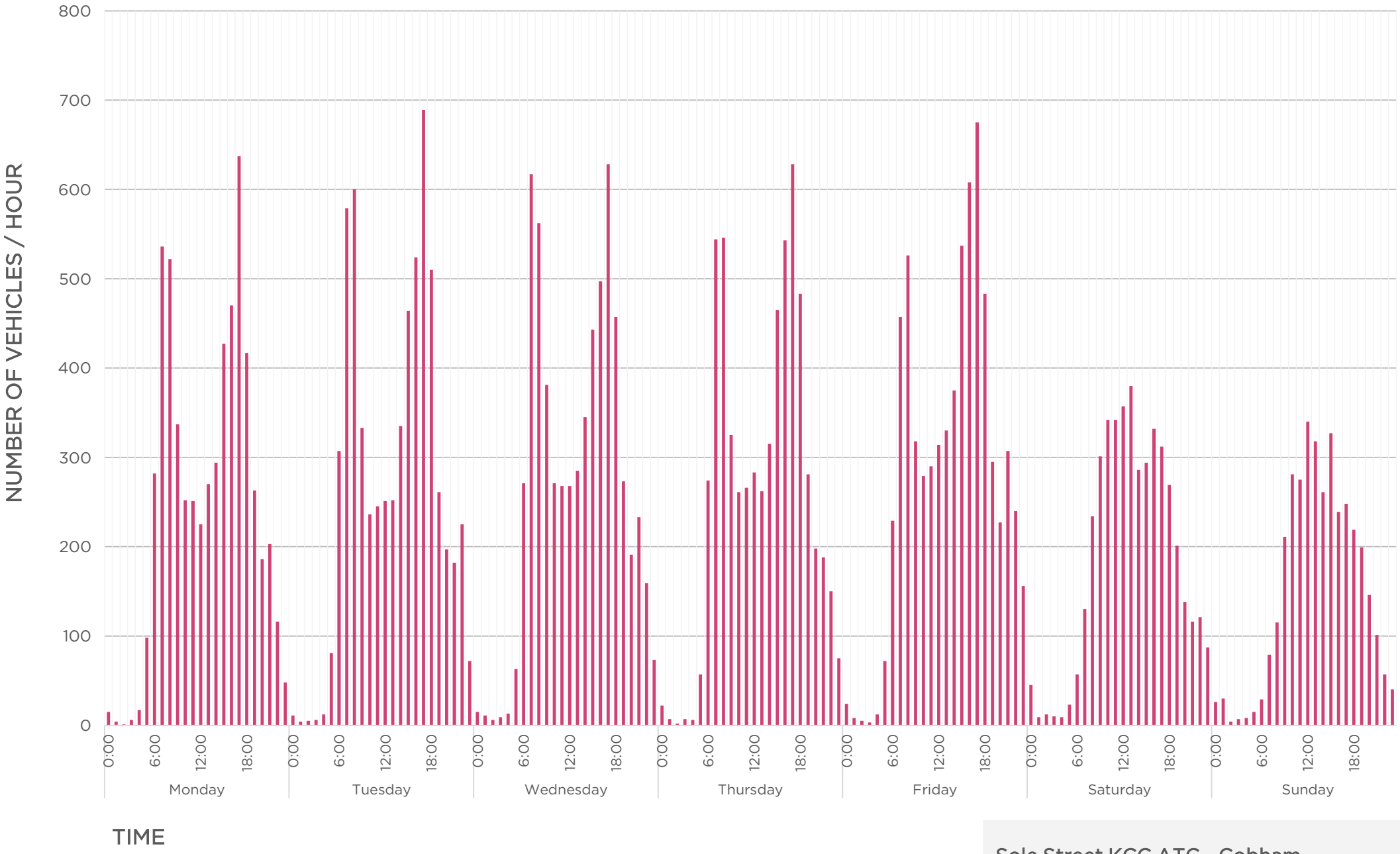
Customer name & address:
Cobham Parish Council, The Street, Cobham

Project reference number: **5197**
Date of survey booking: **NA**
Dates of survey: **12/07/19 - 19/07/19**

RATE MY ROAD

A1

Number of Vehicles, Both Directions

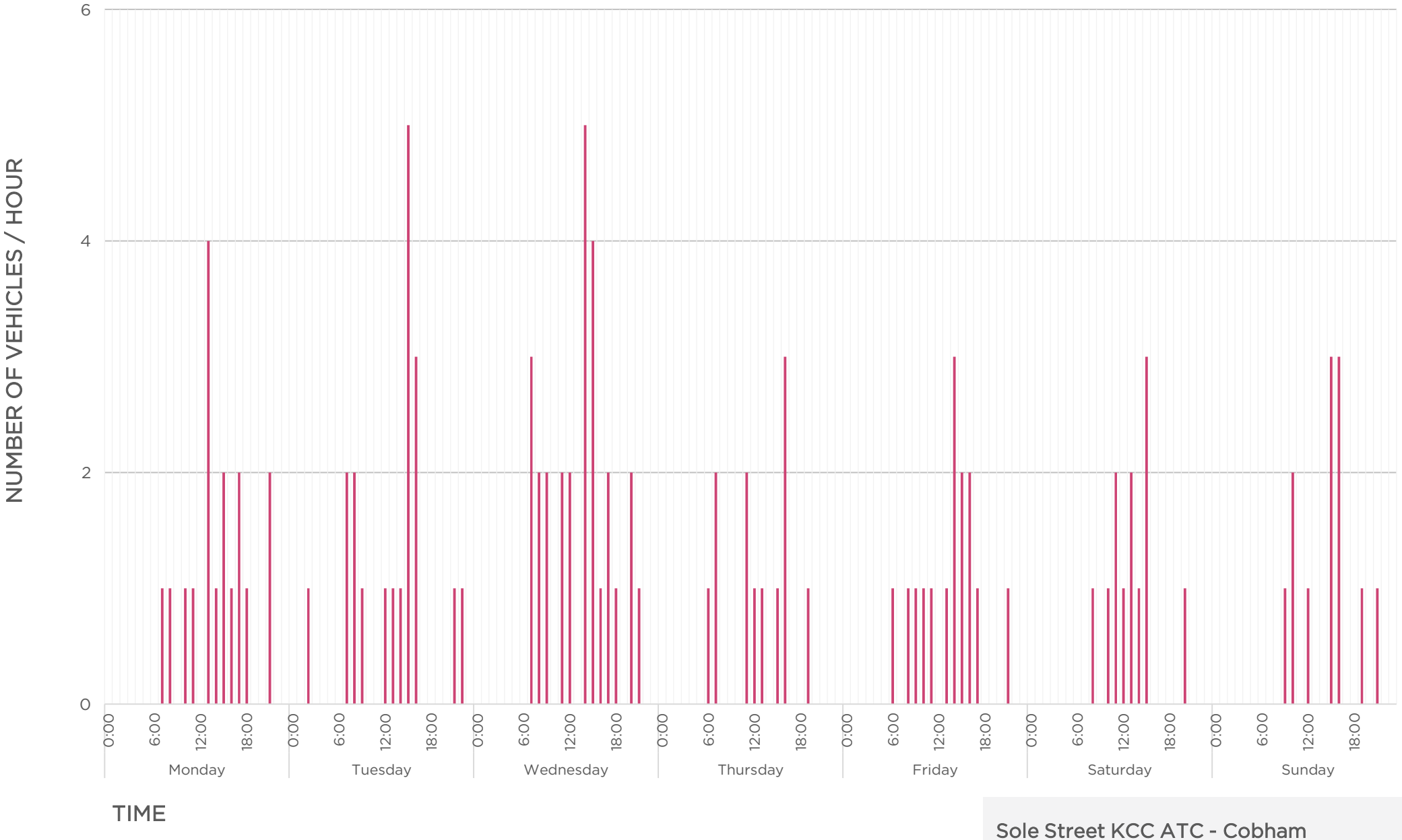


Sole Street KCC ATC - Cobham

RATE MY ROAD

A2

HGVs (3+ Axles), Both Directions

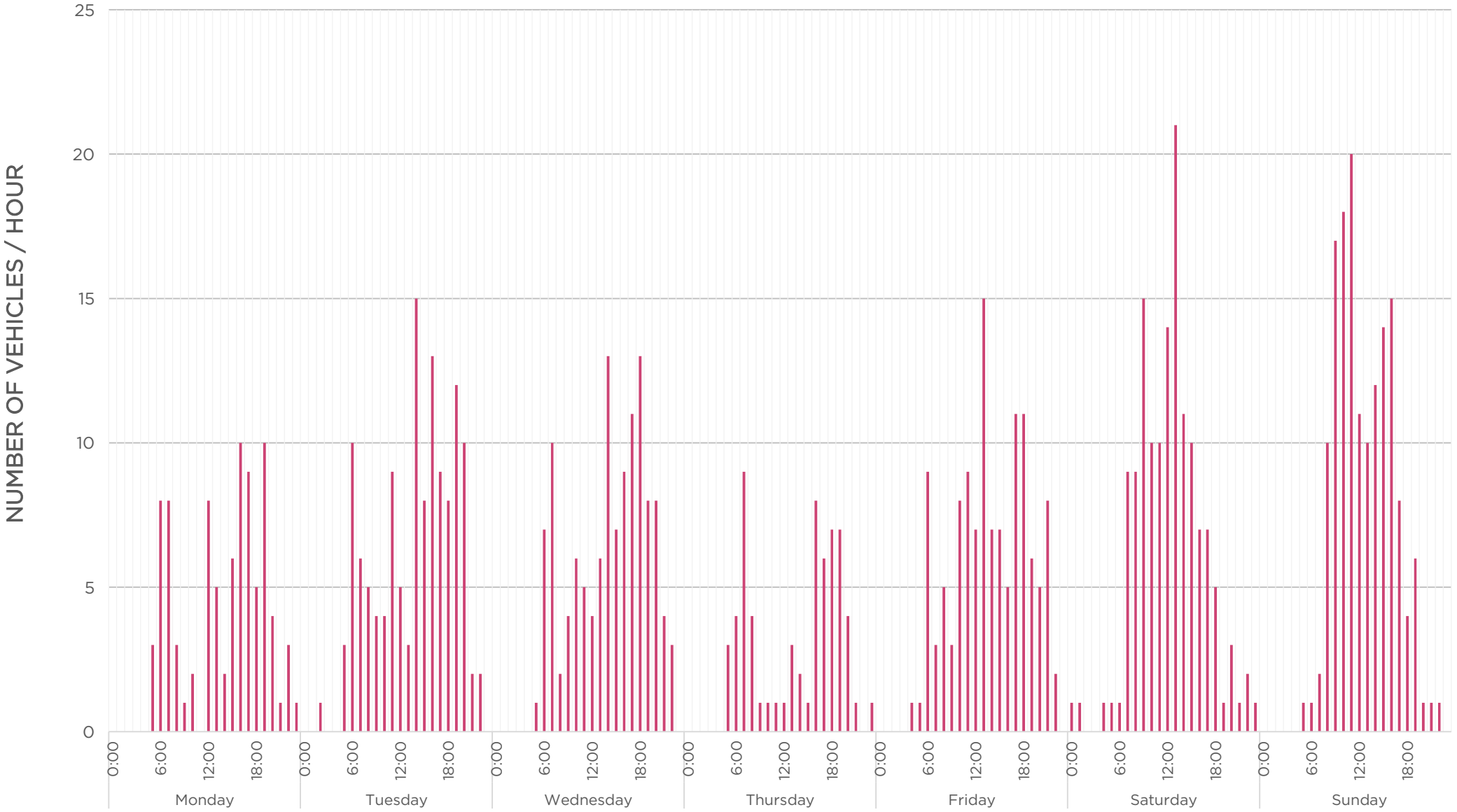


Sole Street KCC ATC - Cobham

RATE MY ROAD

A3

Motorbikes, Both Directions

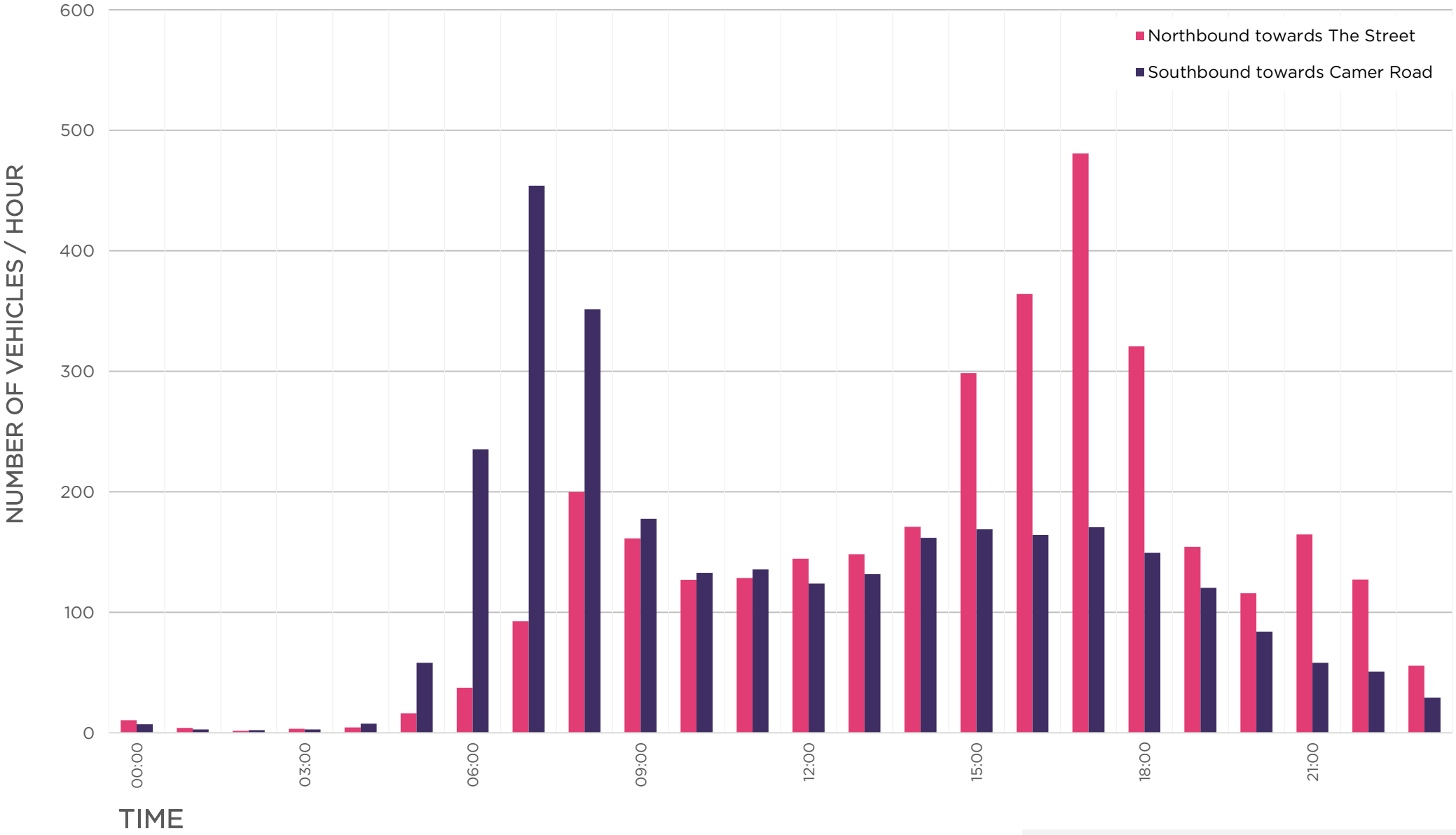


Sole Street KCC ATC - Cobham

RATE MY ROAD

B1

Number of Vehicles on a Typical Weekday by Direction

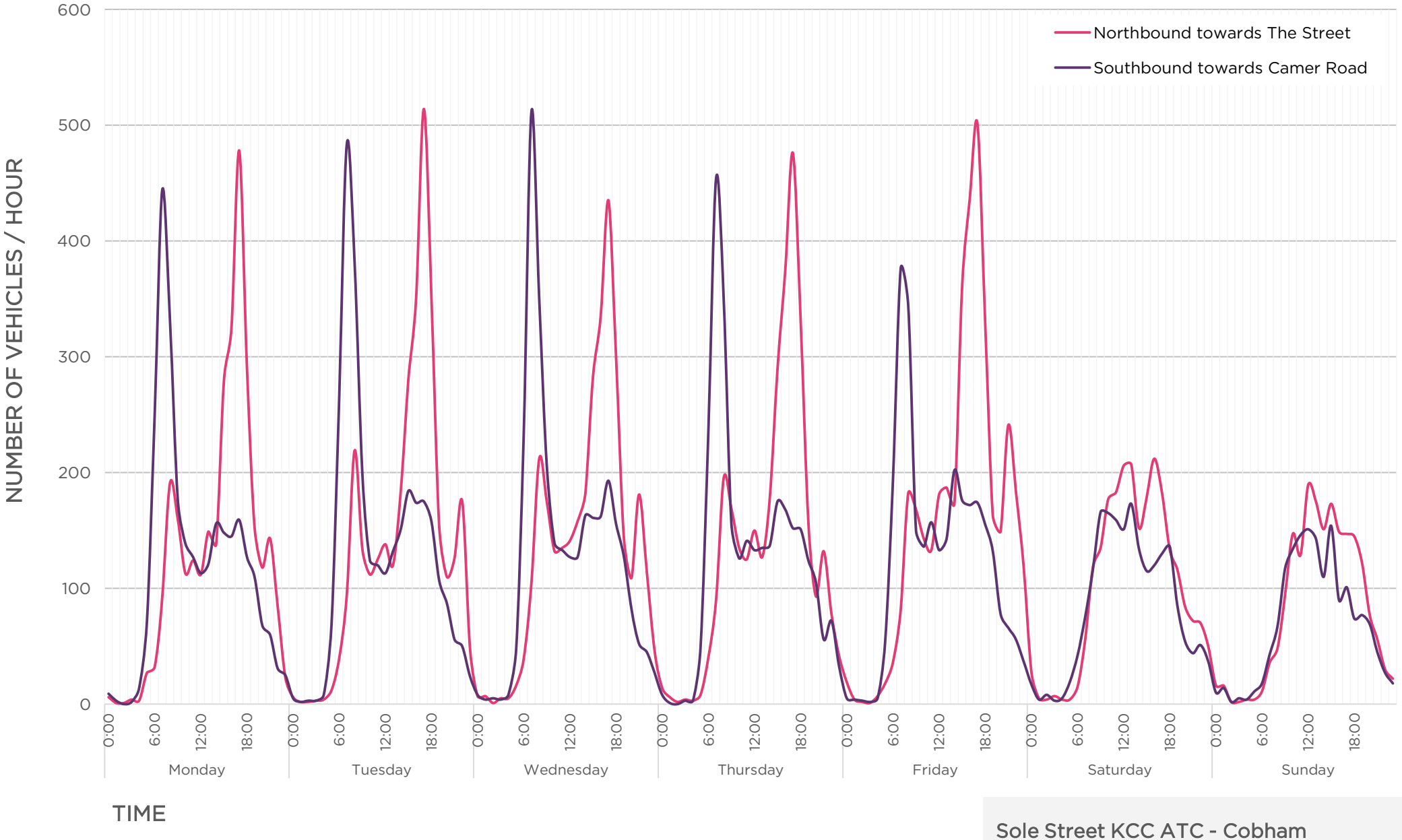


Sole Street KCC ATC - Cobham

RATE MY ROAD

B2

Total Number of Vehicles by Direction



Sole Street KCC ATC - Cobham

RATE MY ROAD

B3

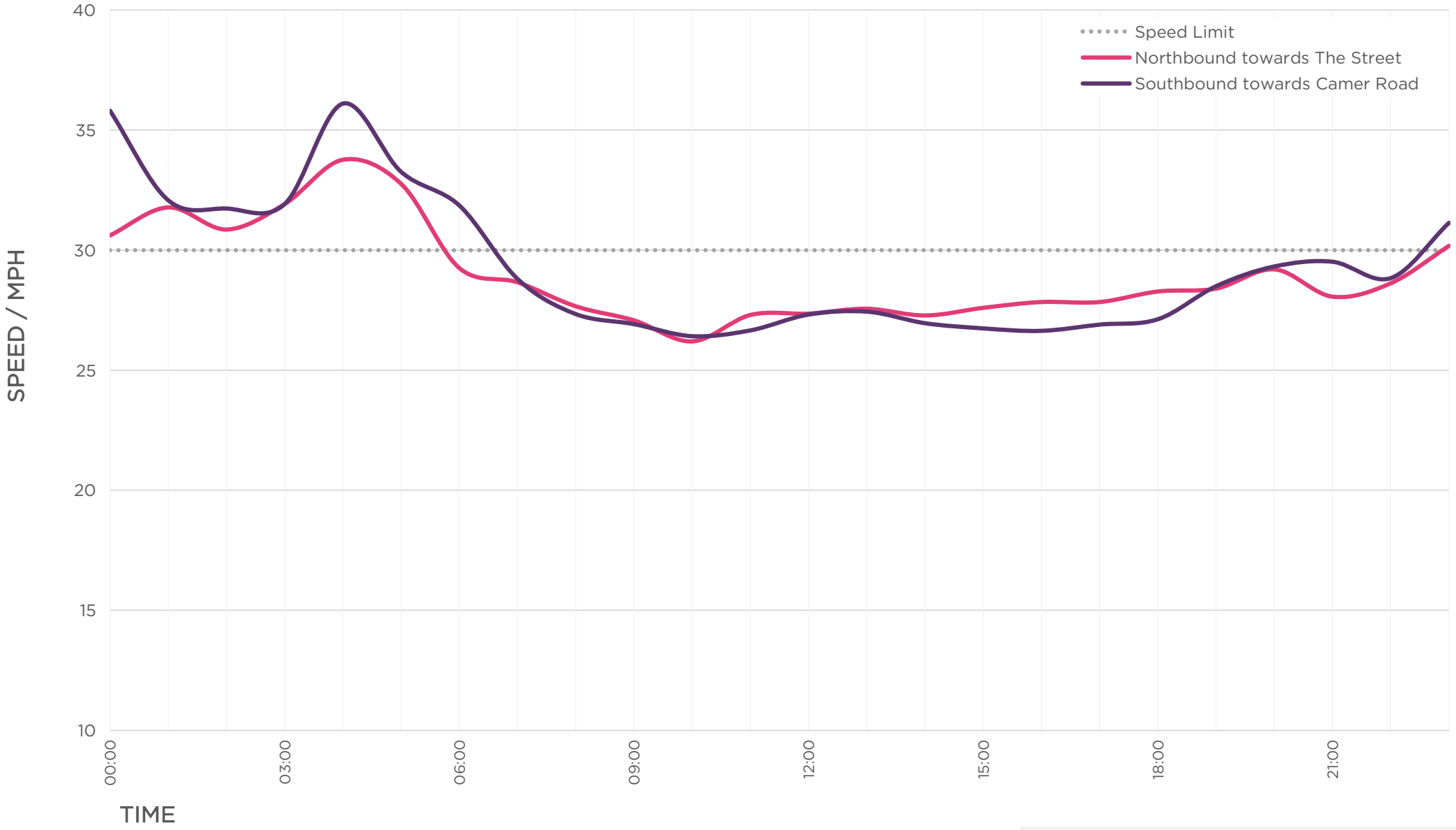
Distribution of Traffic Across an Average Weekday, Saturday & Sunday Compared to the DfT Expected

Sole Street KCC ATC - Cobham

RATE MY ROAD

C1

Average Speed by Time of Day Across a Typical Weekday

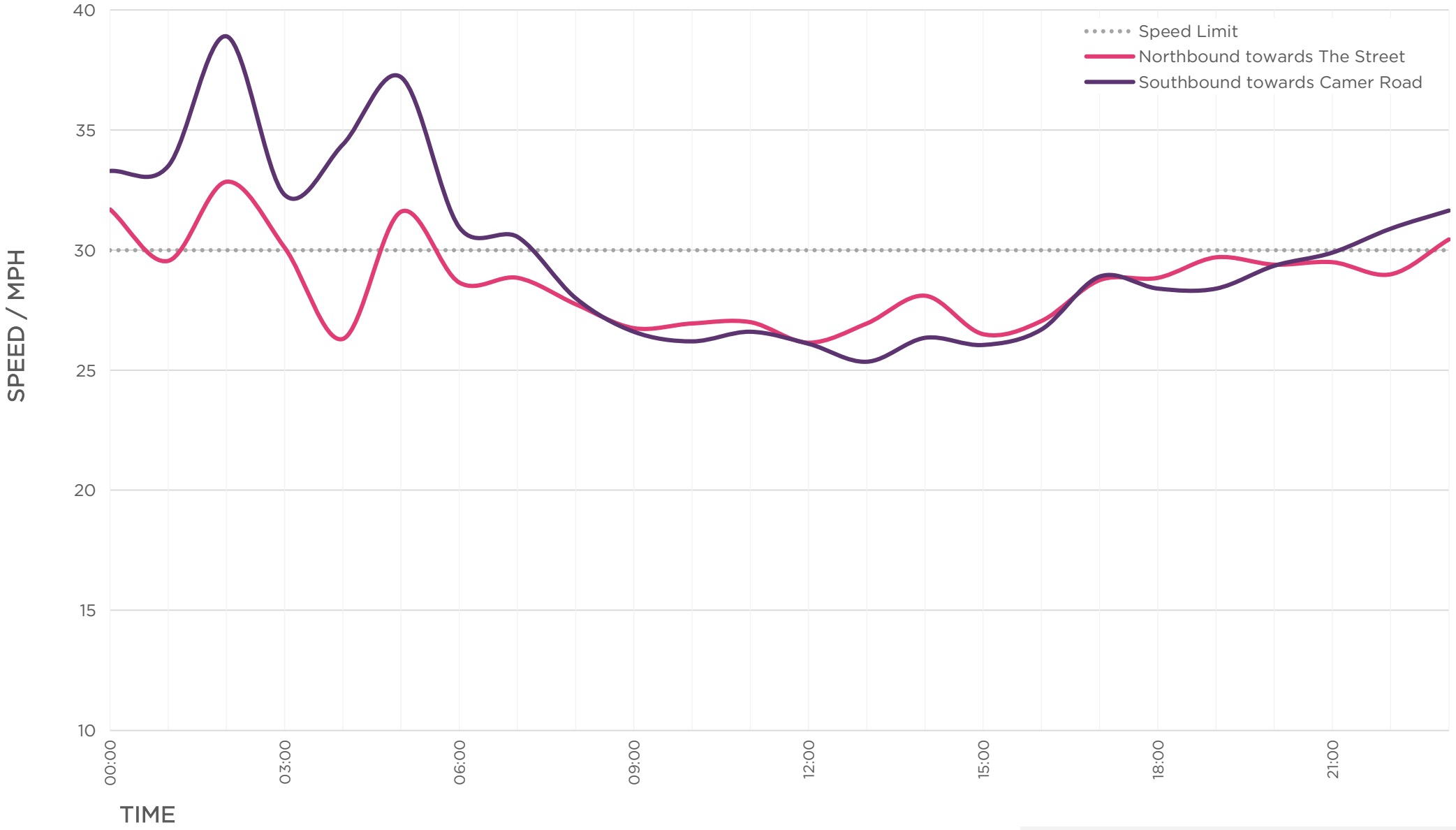


Sole Street KCC ATC - Cobham

RATE MY ROAD

C2

Average Speed by Time of Day Across a Typical Weekend Day



Sole Street KCC ATC - Cobham