TECHNICAL NOTE

Job Name: Chichester Local Plan

Job No: 47085/5502

Note No:01(v1 0)

Date: 29/04/2022

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Subject: Neutral Month and Summer Month Flow Comparison

1.1 Introduction

1.1.1 Across the UK, the local planning authorities are required to prepare a local plan document setting out their growth thresholds for residential and employment based in part of central government guidance and local demand. To support this process the authorities are required to define the transport impact of the development and if required the mitigation works which are required to accommodate the growth.

1.1.2 To assess the transport impact of the future development the authorities would follow the industry standard and utilise a weekday peak and inter peak transport model. The model will be regional based so that it can incorporate the local plans of the neighbouring authorities.

1.1.3 The industry methodology for use of a weekday model is universal across the country and seeks to assess the peak demand on the road system outside of school holidays when traffic flows are the highest. The use of a weekday model also accounts for the fact that around 255 days are “working days”, whereas only around 104 are weekends, school holidays and bank holidays.

1.1.4 The use of the weekday model is considered to be optimum option, as it will consider the majority of the high peak demands and offers a consistent approach for preparing the likely mitigation works set out in the councils Infrastructure Delivery Plan which will support the Local Plan process.

1.1.5 However, some authorities may witness infrequent higher peak demands due to other factors such as Tourism. The current weekday models are based on an “average day” and as such these peaks are not considered statistically valid and are likely to result in an over provision of infrastructure in favour of the car and not Sustainable Transport, therefore not only not offer a realistic of traffic patterns across the majority of the year, but will also prevent the council meeting their AQ, Noise, Climate and Carbon Neutral objectives.

1.1.6 In support of the current local plan review for Chichester, the following note has been prepared to demonstrate that the methodology used is both the industry standard and that using any other method is not appropriate.

1.2 National Guidance

1.2.1 Although the CATM includes an average hour Inter Peak (IP) model, the Local Plan modelling has followed best practice and focussed on the AM and PM peak hours as these are the most congested hours, hence where the impacts of the Local Plan are most likely to be significant. The IP model has been used with the AM and PM peak hour models to inform the Air Quality and Noise Assessments.

1.2.2 The model, as per national guidance, is for an “average day” which in summary assumes a weekday, with all schools open. The modelling for the local plan process focuses on new residential and employment development. As such the times of day that these land uses will influence are the AM and PM commuter peaks during term time, when the background traffic is deemed to be at its highest.

1.2.3 The modelling for the Local Plan is not required to assess weekends, bank holidays or seasonal changes that may alter traffic flows in the area. In Chichester's case this could arise in the summer tourist season or when major events are held at Goodwood. For these types of assessment, which are regarded as infrequent occurrences for the purposes of this study, the Council would be required to carry out more localised studies and implement specific traffic management to support the scale and nature of the event This approach reflects policy and recognised best practice in transport studies across the country.

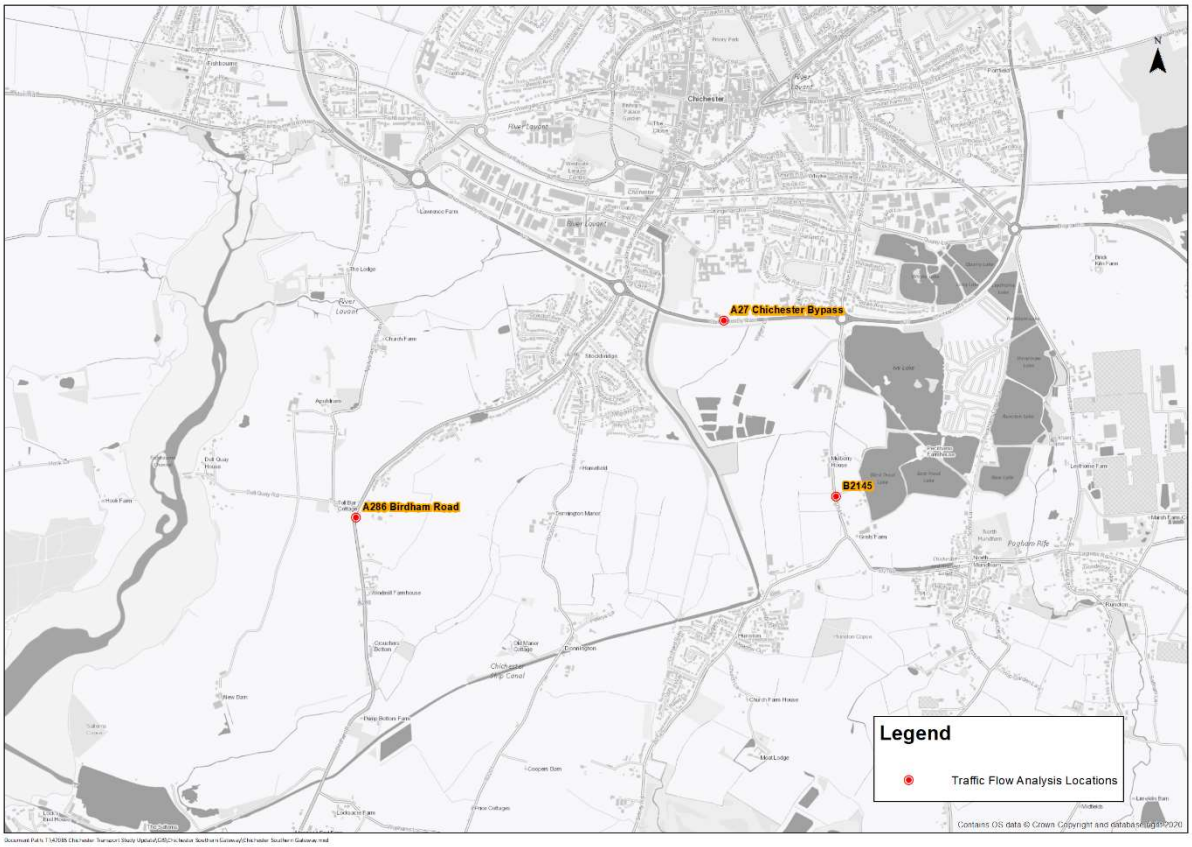
1.2.4 Nevertheless, this study has undertaken some traffic flow analysis to compare how summer traffic flows differ from neutral months. Flow comparisons have been undertaken on the A27 representing the SRN, on the A286 Birdham Road and on the B2145, the latter two sites representing flows on the local network associated with the Manhood Peninsula. The location of the sites is shown in Figure 8.1.

1.3 Analysis Approach

1.3.1 Flows on the A27 Chichester Bypass were obtained from National Highways' WebTRIS database. The flows were analysed by looking at traffic data for August 2019 this being considered to represent summer traffic. This was compared against traffic data from the neutral months of June, July, September and October also from 2019. Data from 2019 was considered to be representative of pre-Covid 19 pandemic times and hence to be robust. The analysis was undertaken by direction comparing eastbound and westbound flows separately.

1.3.2 Comparisons were made based on weekday flows and on weekends. Consideration was also undertaken to consider traffic flows for the August Bank Holiday including the weekend flows leading up to the Bank Holiday Monday 26th August 2019. Flows analysis there looked at traffic from Friday 23rd, Saturday 24th, Sunday 25th and Bank Holiday Monday 26th August.

Figure 8.1: Traffic Count Locations



1.4 A27 SRN Flow Analysis

1.4.1 The results of the flow analysis for the A27 are shown graphically in Figures 8.1 to 8.8

Figure 8.1: A27 Eastbound Comparison of Average Weekday Flows in Vehicles/hour for Neutral Months v August Summer month 2019

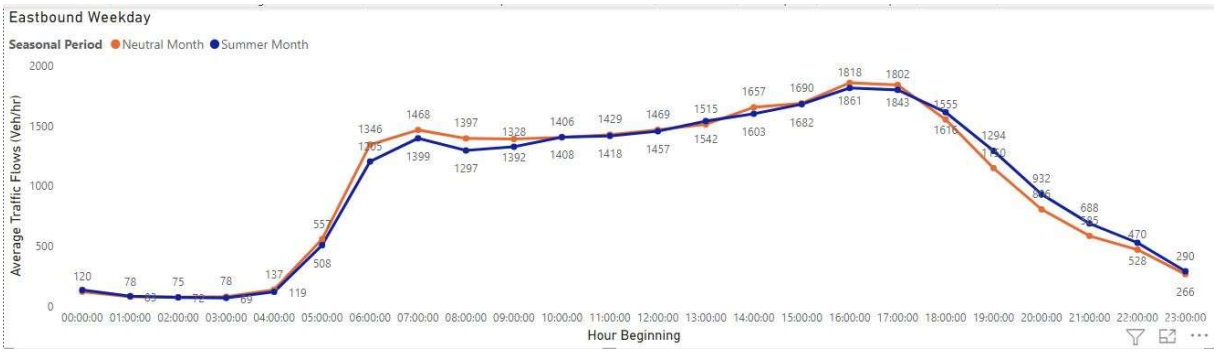


Figure 8.2: A27 Westbound Comparison of Average Weekday Flows in Vehicles/hour for Neutral Months v August Summer month 2019

Figure 8.3: A27 Eastbound Comparison of Average Weekend Flows in Vehicles/hour for Neutral Months v August Summer month 2019

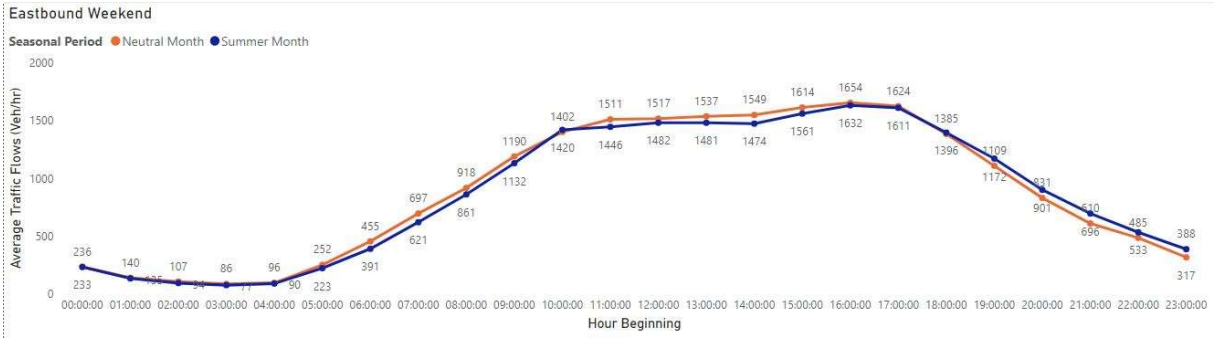


Figure 8.4: A27 Westbound Comparison of Average Weekend Flows in Vehicles/hour for Neutral Months v August Summer month 2019

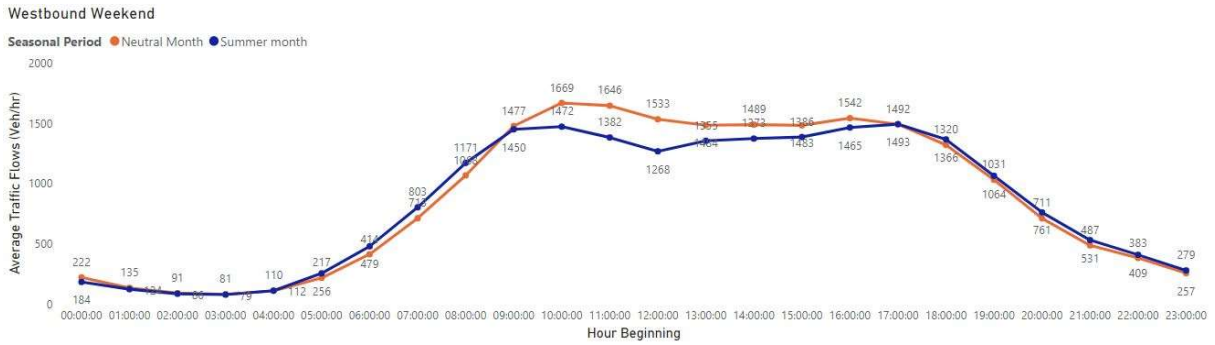


Figure 8.5: A27 Eastbound Comparison of Bank Holiday days associated flows v Weekday flows

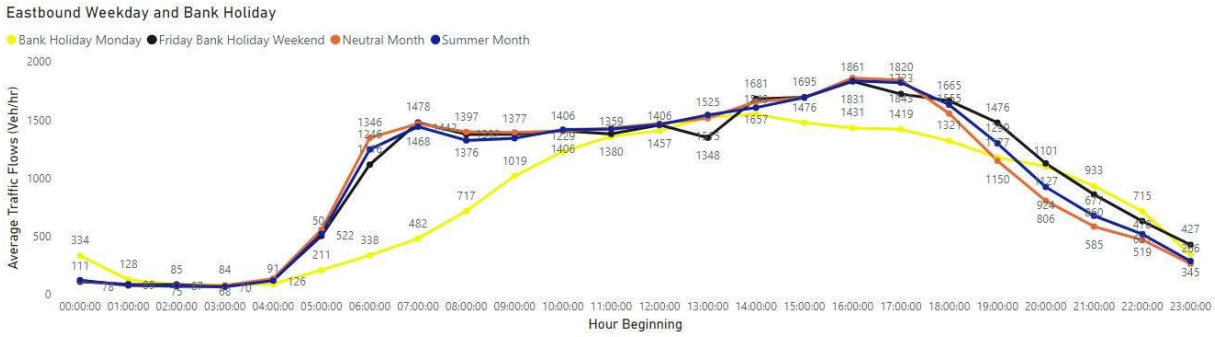


Figure 8.6: A27 Westbound Comparison of Bank Holiday days associated flows v Weekday flows

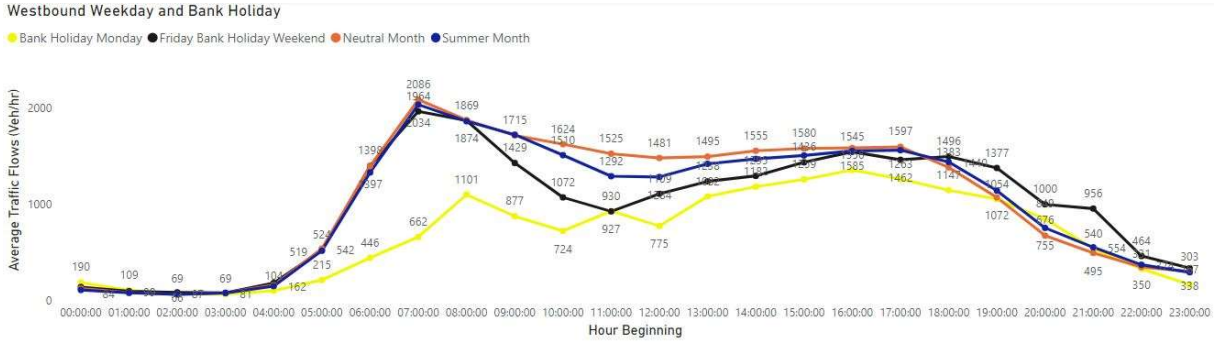


Figure 8.7: A27 Eastbound Comparison of Bank Holiday (Weekend days) flows v Weekend flows

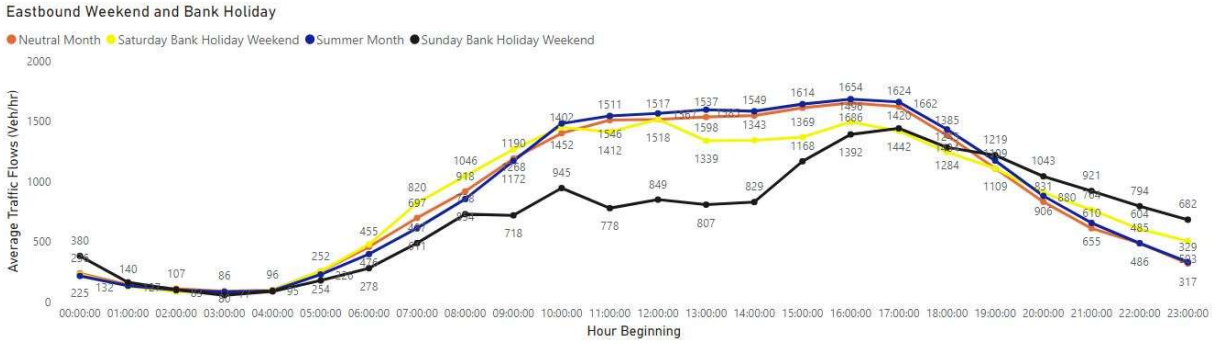
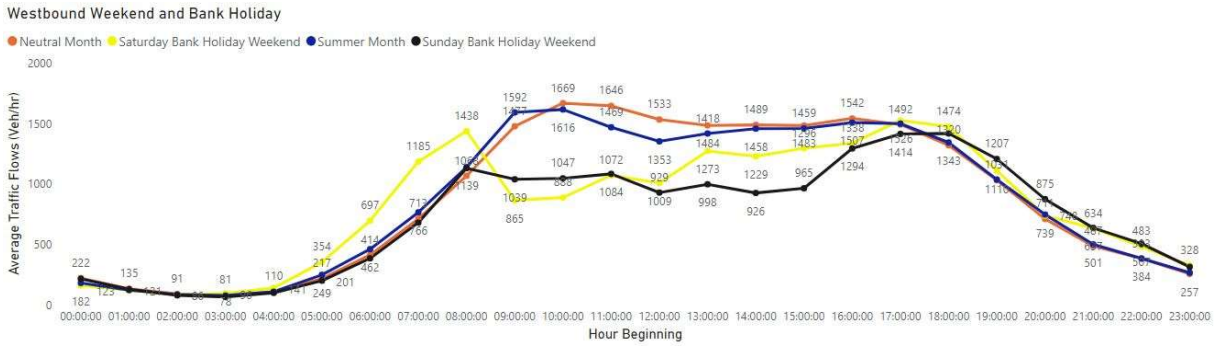


Figure 8.8: A27 Westbound Comparison of Bank Holiday (Weekend days) flows v Weekend flows



1.4.2 In respect of the A27, the graphical outputs generally indicate that the summer holiday flows be they weekday, weekend and specific to Bank Holiday days, are within the range of flows observed for a neutral month. The CATM model represents an average weekday in a neutral month. The analysis indicates that the summer month flows are comparable to those in a neutral month. It is considered that the CATM model is a sufficient enough tool to indicate the impacts of the LP in general. For specific atypical high flow days such as on festival days, it would be expected that bespoke dedicated traffic management place would be put in place to manage the unique traffic conditions.

1.5 A286 Local Network Flow Analysis

1.5.1 The results of the flow analysis for the A286 Birdham Road are shown graphically in Figures 8.9 to 8.16.

Figure 8.9: A286 Eastbound Comparison of Average Weekday Flows in Vehicles/hour for Neutral Months v August Summer month 2019

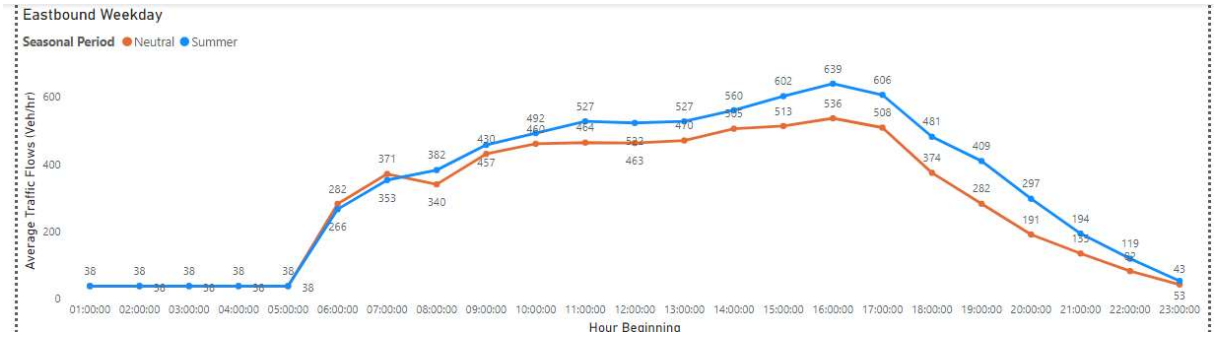


Figure 8.10: A286 Westbound Comparison of Average Weekday Flows in Vehicles/hour for Neutral Months v August Summer month 2019

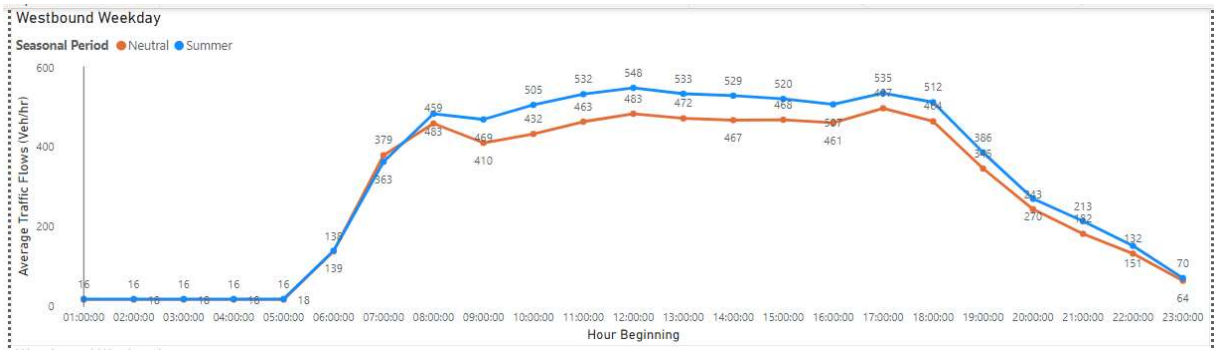


Figure 8.11: A286 Eastbound Comparison of Average Weekend Flows in Vehicles/hour for Neutral Months v August Summer month 2019

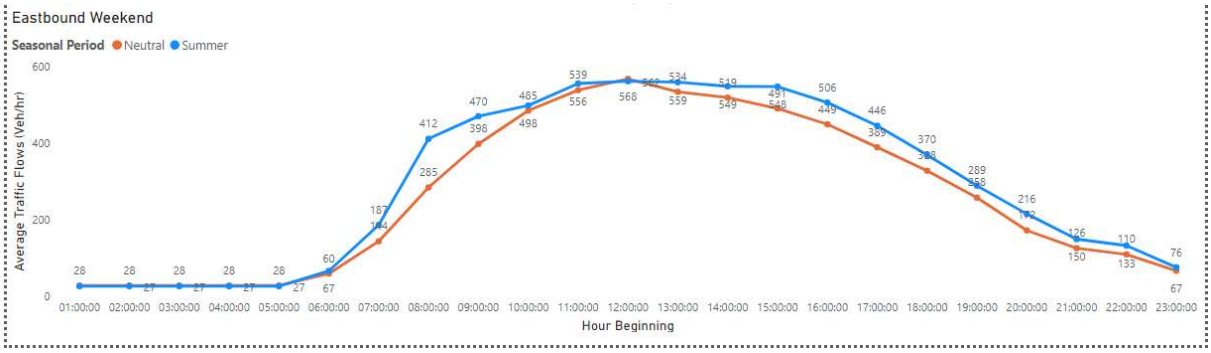


Figure 8.12: A286 Westbound Comparison of Average Weekend Flows in Vehicles/hour for Neutral Months v August Summer month 2019

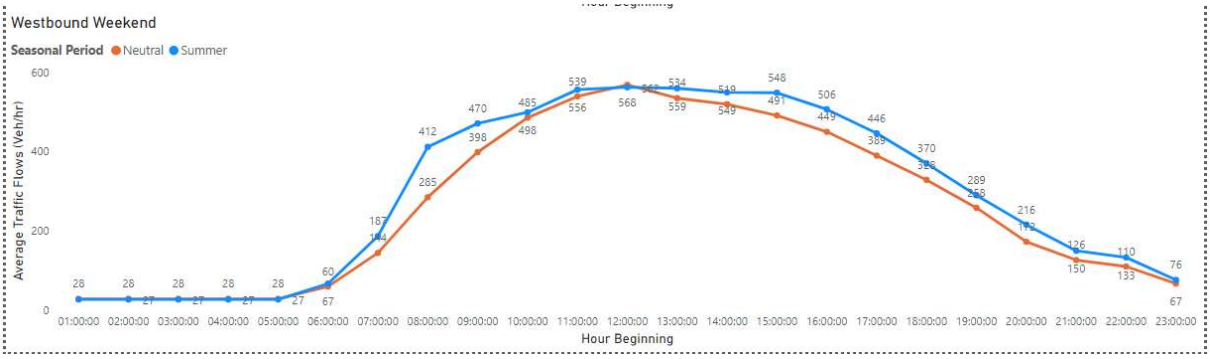


Figure 8.13: A286 Eastbound Comparison of Bank Holiday days associated flows v Weekday flows

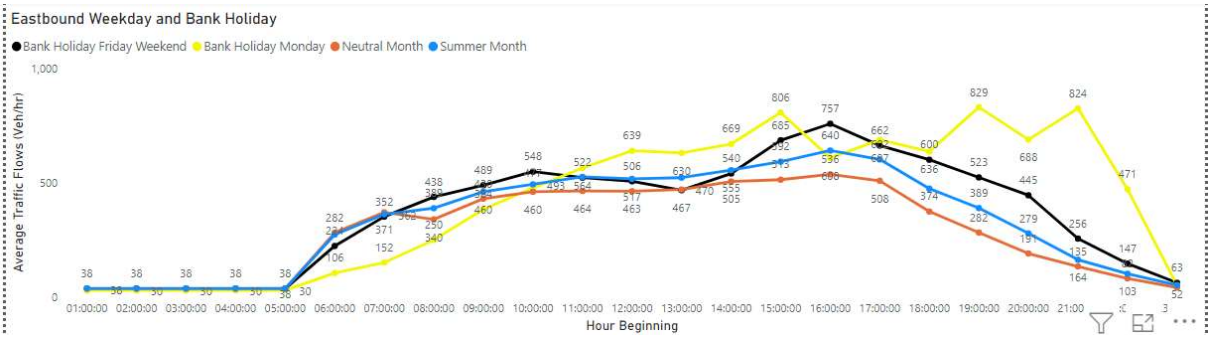


Figure 8.14: A286 Westbound Comparison of Bank Holiday days associated flows v Weekday flows

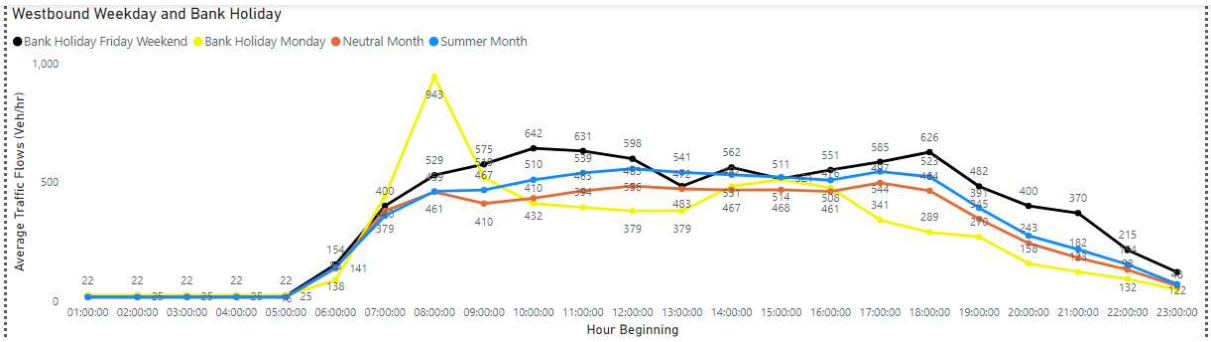


Figure 8.15: A286 Eastbound Comparison of Bank Holiday (Weekend days) flows v Weekend flows

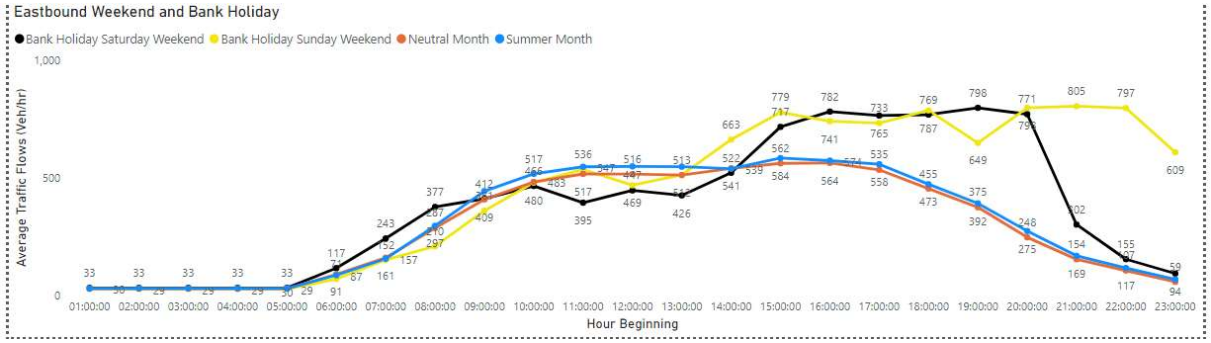
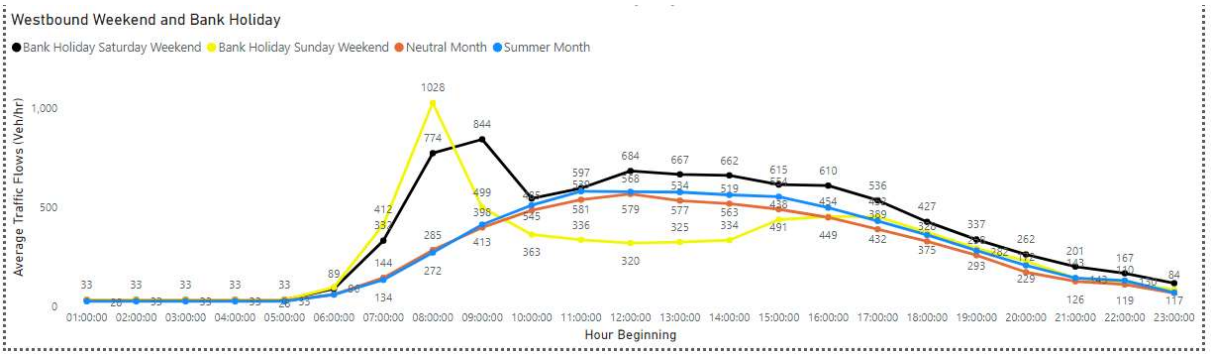


Figure 8.16: A286 Westbound Comparison of Bank Holiday (Weekend days) flows v Weekend flows



1.5.2 The count data flow analysis for the A286 Birdham Road indicates that generally the summer month flows are comparable to the neutral months flows although there are instances typically around the Bank Holiday weekend when the flows are significantly higher than those seen in a neutral month.

1.5.3 Out of the 8 Bank Holidays in the UK only 5 fall within the Easter and Summer months, therefore designing mitigation for such a low number of days is not industry practice.

1.6 B2145 Local Network Flow Analysis

The results of the flow analysis for the B2145 are shown graphically in Figures 8.17 to 8.24.

Figure 8.17: B2145 Northbound Comparison of Average Weekday Flows in Vehicles/hour for Neutral Months v August Summer month 2019

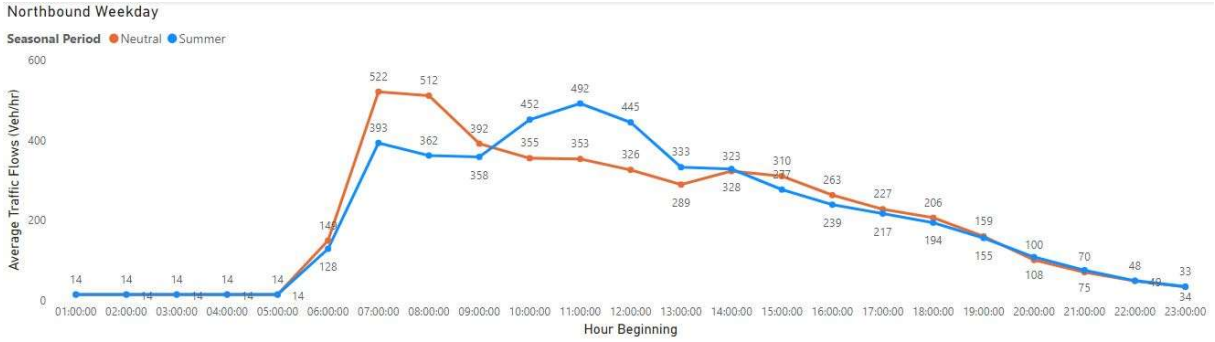


Figure 8.18: B2145 Southbound Comparison of Average Weekday Flows in Vehicles/hour for Neutral Months v August Summer month 2019

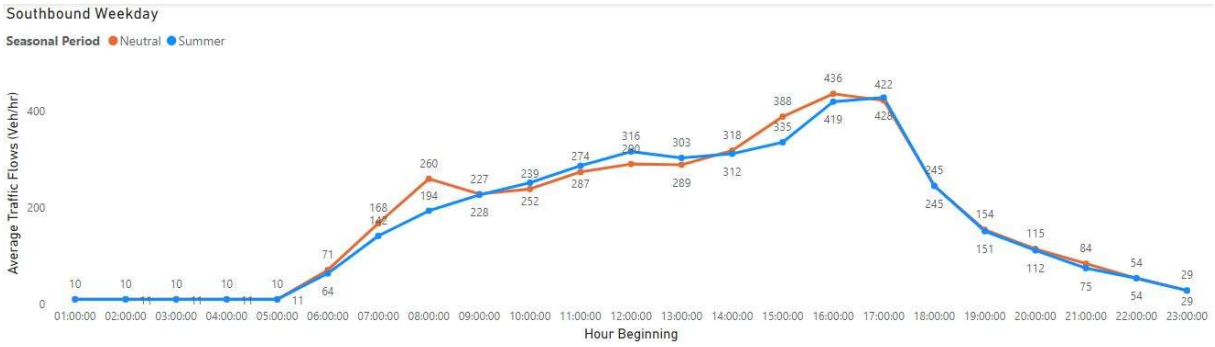


Figure 8.19: B2145 Northbound Comparison of Average Weekend Flows in Vehicles/hour for Neutral Months v August Summer month 2019

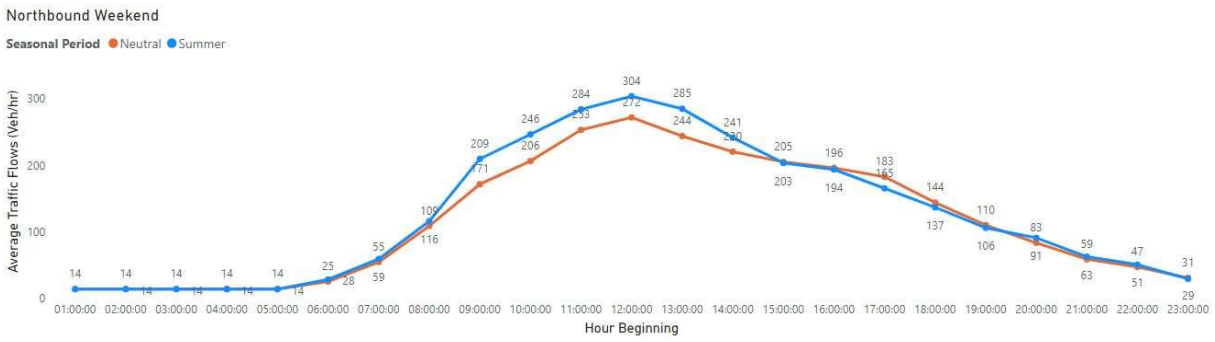


Figure 8.20: B2145 Southbound Comparison of Average Weekend Flows in Vehicles/hour for Neutral Months v August Summer month 2019

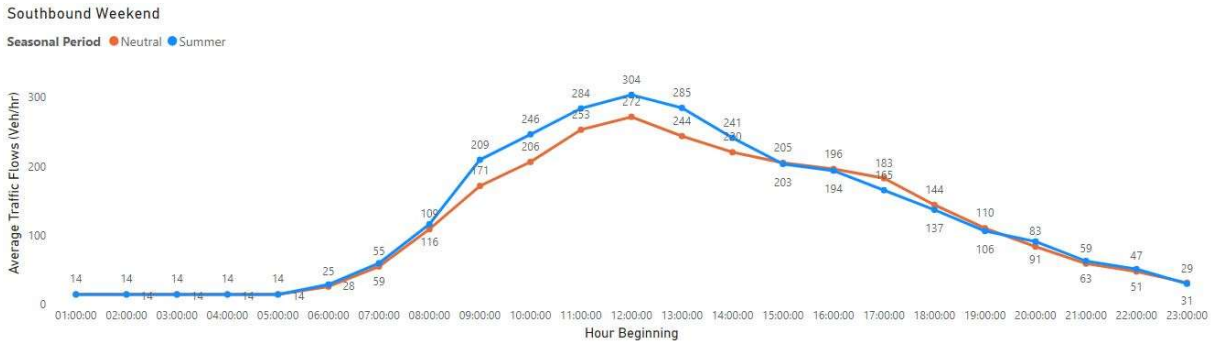


Figure 8.21: B2145 Northbound Comparison of Bank Holiday days associated flows v Weekday flows

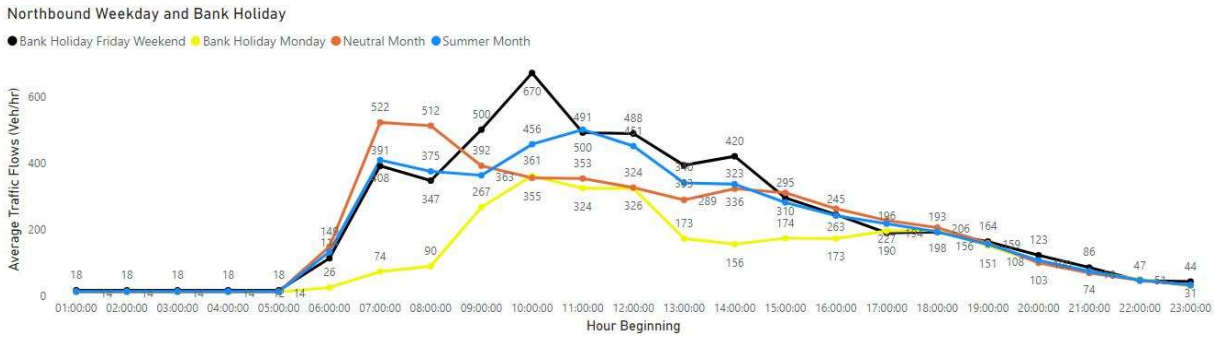


Figure 8.22: B2145 Southbound Comparison of Bank Holiday days associated flows v Weekday flows

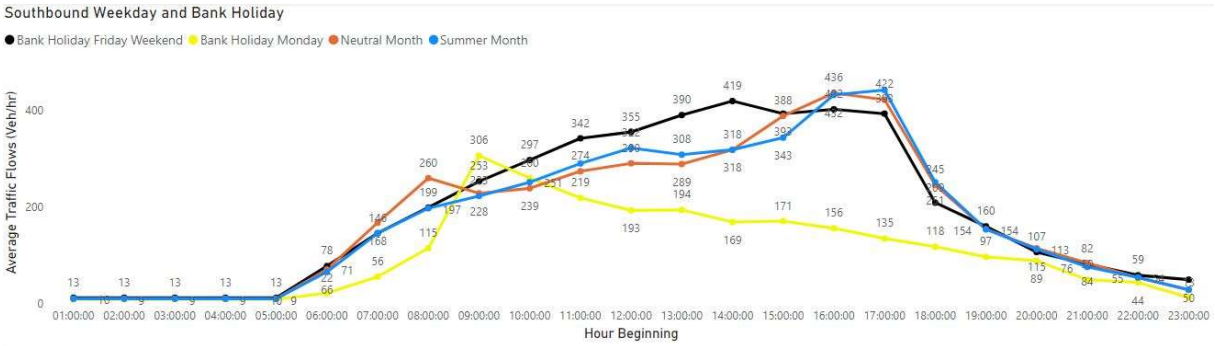


Figure 8.23: B2145 Northbound Comparison of Bank Holiday (Weekend days) flows v Weekend flows

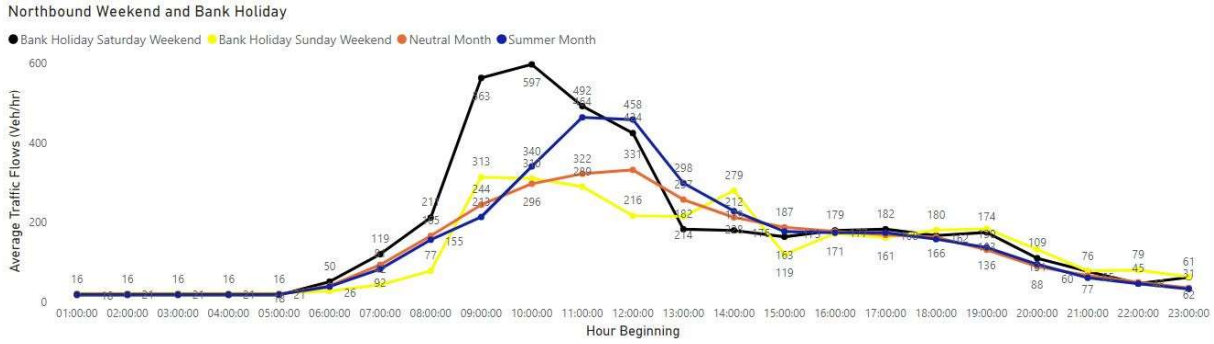
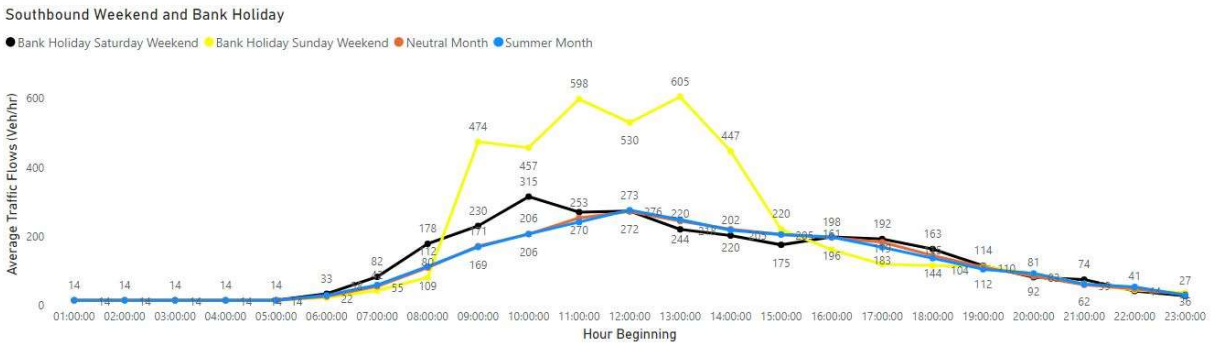


Figure 8.24: B2145 Southbound Comparison of Bank Holiday (Weekend days) flows v Weekend flows



1.6.1 The count data flow analysis for the B2145 indicates that generally the summer month flows are comparable to the neutral months flows although there are instances typically around the Bank Holiday weekend when the flows are significantly higher than those seen in a neutral month.

1.6.2 Out of the 8 Bank Holidays in the UK only 5 fall within the Easter and Summer months, therefore designing mitigation for such a low number of days is not industry practice.

1.7 Summary on Traffic Flow Analysis

1.7.1 The count data analysis undertaken for the A27, A286 and B2145 indicates that generally, the average summer month flows are comparable to neutral month flows in the peaks and across the day. There are, however, days or instances when the summer month flows exceed the average month flows generally represented by the traffic model.

1.7.2 This is shown on the local network as analysed on the A286 Birdham Road and B2145 around or leading to/from the Manhood Peninsula during the Bank Holiday weekend days. For these specific and other atypical high flow days including on festival days, it would be expected that bespoke dedicated traffic management would be put in place to manage the unique traffic conditions.

1.7.3 The local plan assessment methodology is sound, in line with Industry and Government guidance and seeks to predict and manage the mitigation works across the local plan area. Therefore, there is no requirement for any seasonal assessments to be completed for the local plan process.

TECHNICAL NOTE

DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
Job No/Brief/TN001	02	21.04.22	SA/NM	NM	PG	
Job No/Brief/TN001	03	29.04.22	SA/NM	NM	PG	PB
Job No/Brief/TN001	v1 0	29.04.22	SA/NM	NM	PG	PB

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