



Swanmore Parish Council

Key Routes Traffic Survey Analysis

July 2019
Version 3.0

Prepared by Councillor Pete Ansty

Document Control

Version 1.0	29/01/2019	First Version
Version 2.0	15/03/2019	Updated version following review from Hampshire Highways
Version 3.0	10/07/2019	Updated version following review from Hampshire Police

Introduction

There have been a number of enquiries and some complaints to the council with regards to issues concerning speeding in the village. This was further confirmed in a recent village survey (November 2018) where residents saw excessive speed as a key concern.

In the light of this feedback, the council commissioned Ampfield Traffic Ltd to perform a survey of vehicle movements at specific points around the village so there was a better understanding of the current situation to inform the council and residents where potential issues existed and help formulate next actions where necessary.

The data provided by Ampfield was in spreadsheet format, this was taken and used to provide the following consolidated results. Day / hour breakdowns of the individual sites are provided as a set of graphs in the appendix to this document for reference.

The initial draft of this document was distributed to both Hampshire Highways and Hampshire Police for comment. Those comments have been incorporated where possible within the revised document below.

It should also be noted that in terms of overall data Hampshire County Council (HCC) have access to the police injury accident database, which includes casualties in three categories of slight, serious and fatal, and they consider patterns and clusters of accidents including all three injury categories in addition to analysis of outright speed data when considering changes to speed limits / junction improvements etc.

In addition, with regards to speeding it is important to recognise that the Police Service operate within a nationally agreed guidance framework when it comes to enforcement. This is normally exceeding the speed limit by 10 per cent plus 2 MPH. so for a 30 MPH road this results in enforcement over 35 MPH and for 40 MPH road this is 46 MPH. These boundaries are shown in the following analysis in addition to the actual speed limit for reference.

Please Note: This document does not attempt to suggest any actions or activities which should be proposed as a result of the findings but simply presents the information for further consideration and interpretation as appropriate.

Reporting Rational

Two measures on reporting speed are used by the authorities. The Department of Transport guidance on assessing speed limits utilises mean (Average) speeds plus looking at the safety history of the location (as mentioned above) when considering changes to the speed limit, this is what HCC use. Another measure which the police use more and we have used in the data analysis is the 85-percentile measure when assessing traffic flows and speeds, the following definition is from the Department of Transport documentation.

What is the 85th Percentile Speed?

The 85th percentile speed is the speed at or below which 85 percent of the motorists drive on a given road unaffected by slower traffic or poor weather. This speed indicates the speed that most motorists on the road consider safe and reasonable under ideal conditions. It is a good guideline for the speed the majority of vehicles are travelling on that road.

Locations

The following map shows the locations where traffic was measured for this study

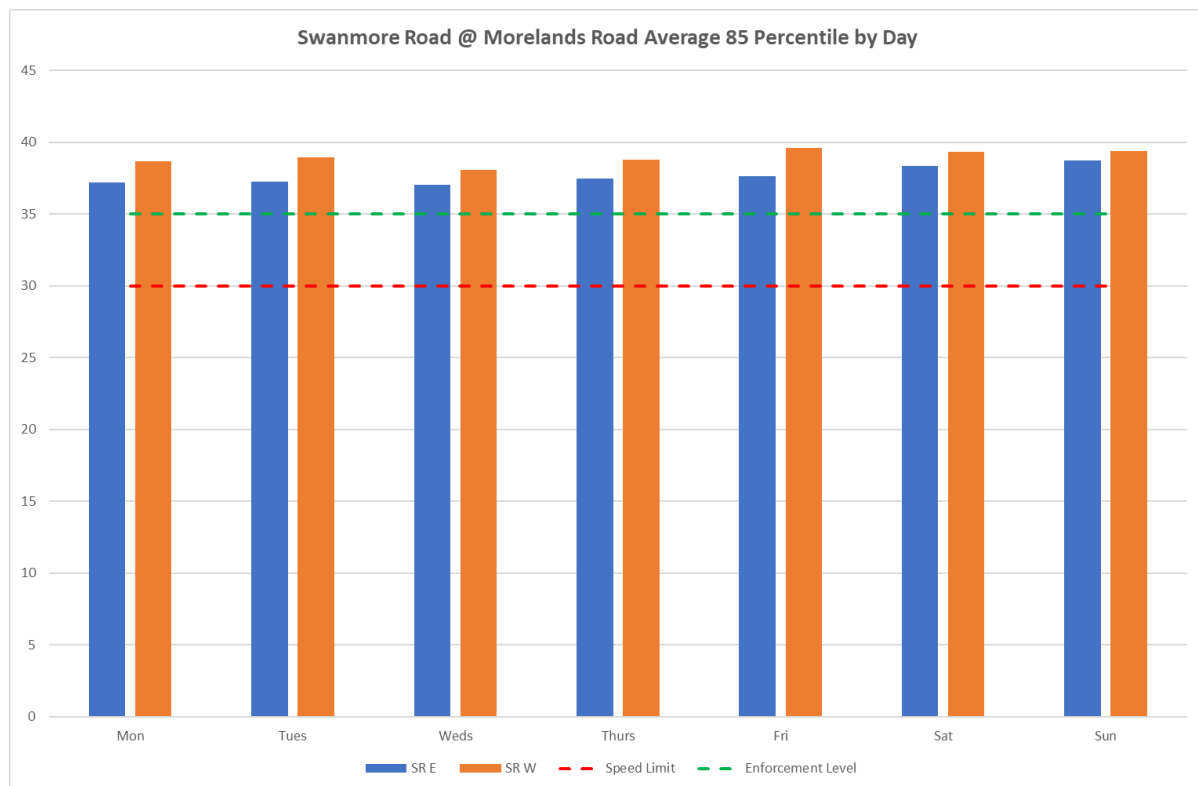


Analysis Approach

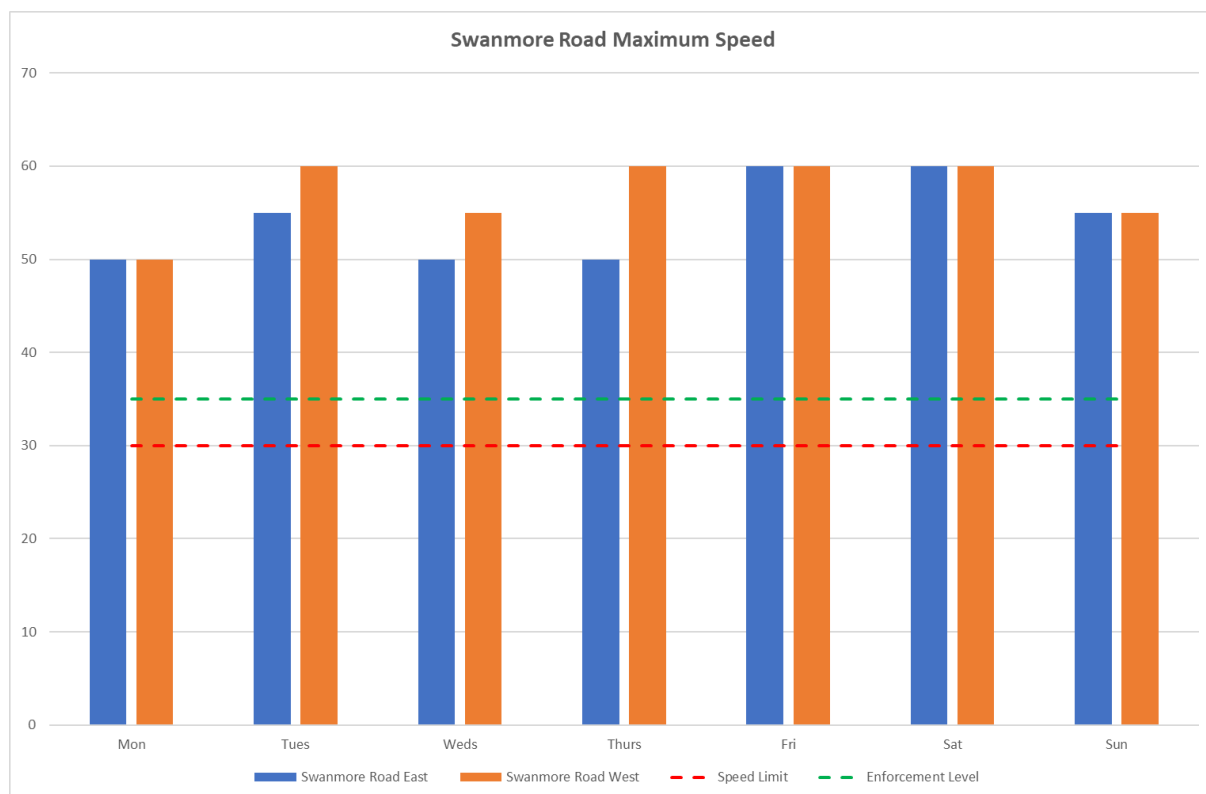
Where there is a single recording point for both directions for example Swanmore Road, traffic flows in each direction together with maximum speeds recorded during the period are shown with associated commentary. Where there are multiple recording points on a particular road such as New Road the data is summarised by direction to give an indication of differences at each recording point. Maximum speeds are also shown together with associated commentary.

Swanmore Road

This was a single recording point opposite Morelands Road giving an indicative result for both vehicles travelling west towards Bishops Waltham and East towards the Village.



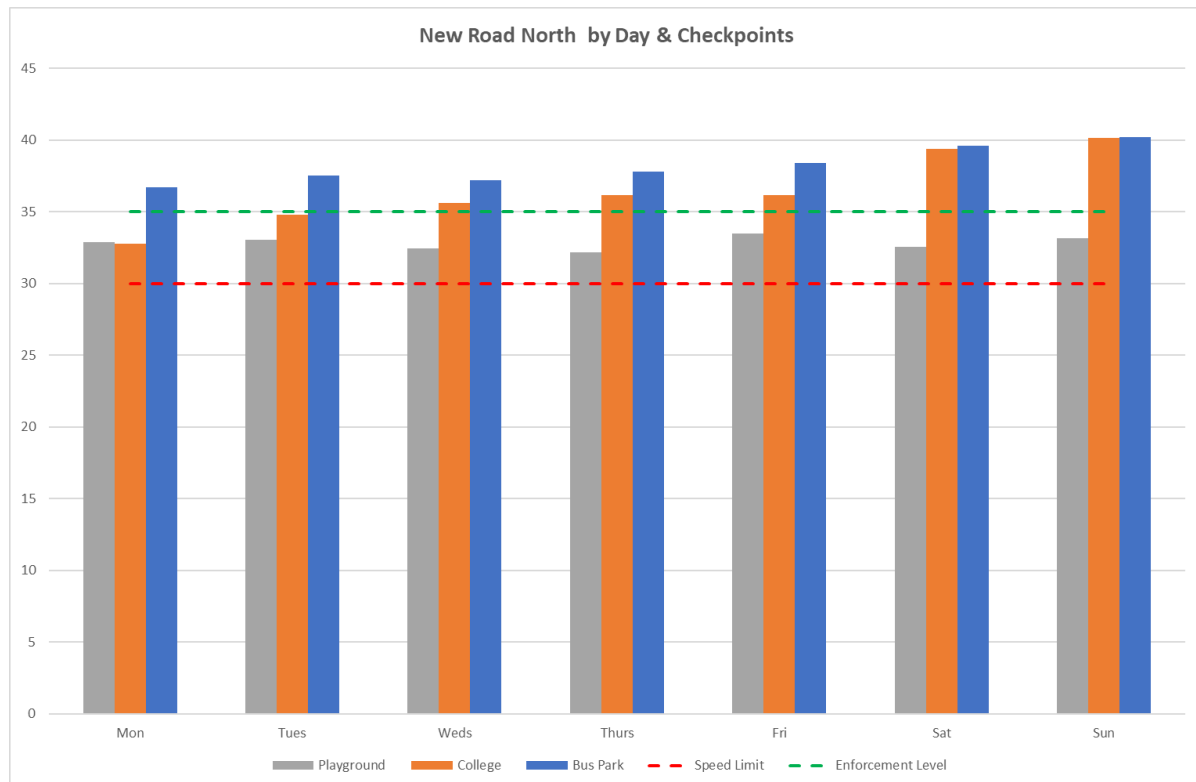
During the recording period traffic flows are quite consistent with traffic exiting the village slightly faster than entering suggesting that the 30 MPH signage together with the bend in the road is keeping speed down. Vehicles exiting the village are consistently faster by a few miles per hour but even at the weekend below 40MPH.



However, a different view is shown where maximum speed recorded over the week. Speeds up to 60MPH are shown going out towards Bishops Waltham on many days and Friday to Sunday shows similar speeds inbound to the village.

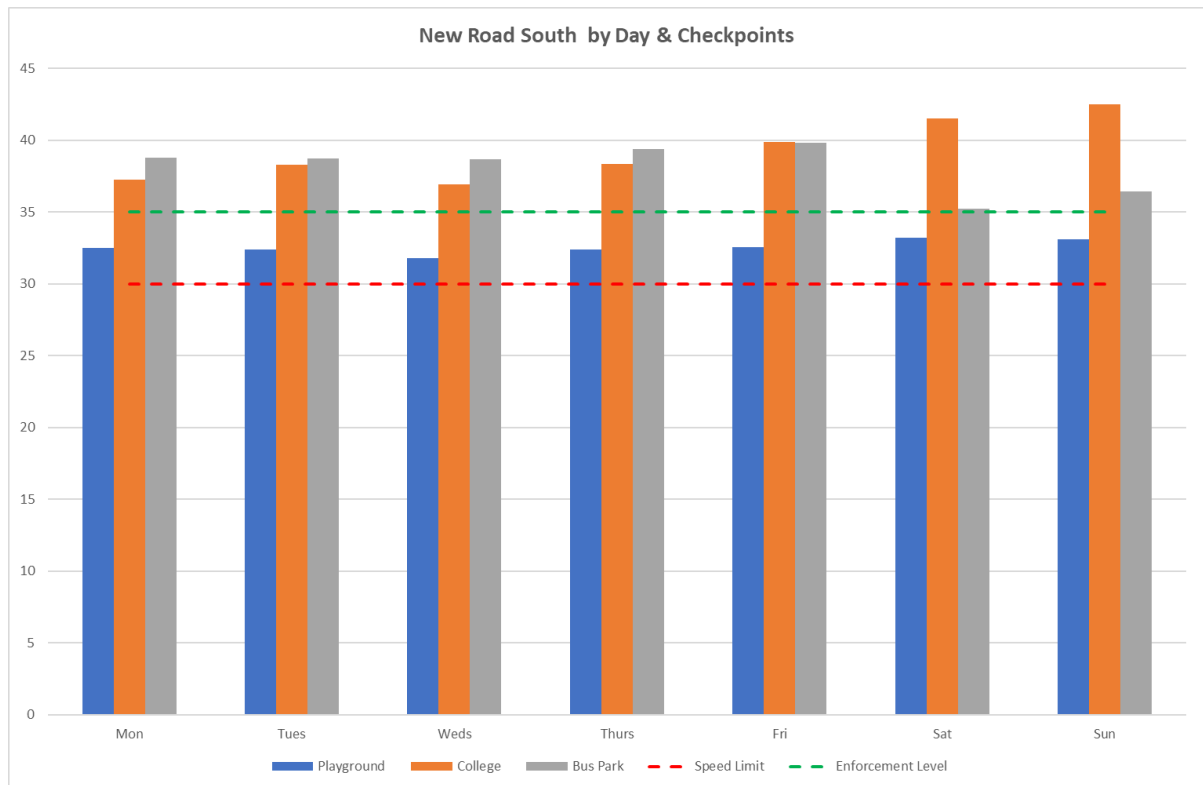
New Road

Due to feedback concerning this road, three locations were recorded. New Road Top was by the recreation ground where the playground sign is located. New Road College is as it suggests outside the college and New Road Business Park adjacent to Brickyard Road. Individual recordings were consolidated to provide a homologated view north towards the village and south away from the village.

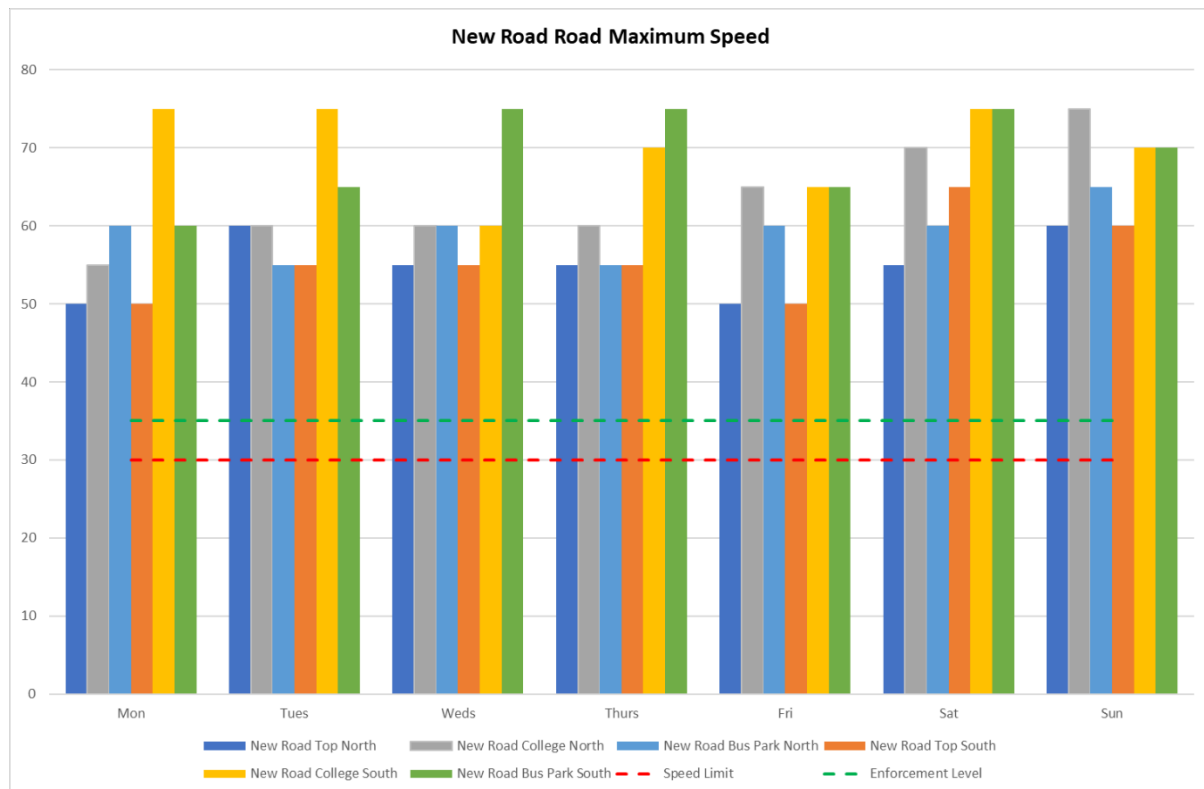


Looking at the Northbound traffic flows, it can be seen the trend is as vehicles come into the village there is a reduction in speed however in all cases 85 percentile speed is recorded above the existing 30MPH level. This is further exacerbated at the weekends where average speeds at the bottom of New Road and past the college are an average of around 40MPH.

This may be due to a number of factors include that the college is closed at the weekend so there are less parked cars to slow the flow.



Going south away from the village we have a different picture. Speed at the top of New Road is relatively constant throughout the week, probably due to the parking at the top of the road restricting flow. However, the analysis shows the increase in speed passing the college and again at weekends we see a significant increase in speed which recorded an 85 percentile of over 40MPH.



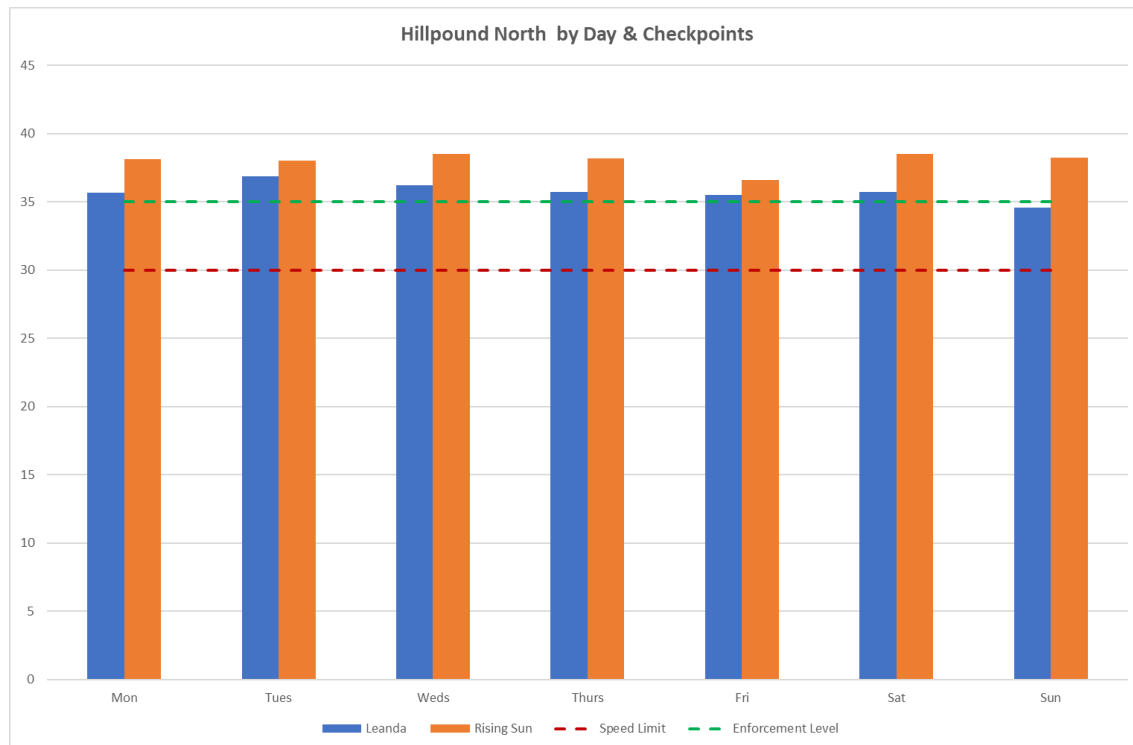
This chart showing maximum speed is one which is very concerning. There are instances where vehicles have been traveling at over 50 MPH on all stretches of New Road during the week. In addition, it can be seen that in a number of cases, south past the college and the business park have recorded speeds of 75MPH. There is also high speed past the college at the weekend in a northerly direction towards the village.

Note: This high speed could have been higher than 75 MPH as the recording equipment only measures up to 75MPH.

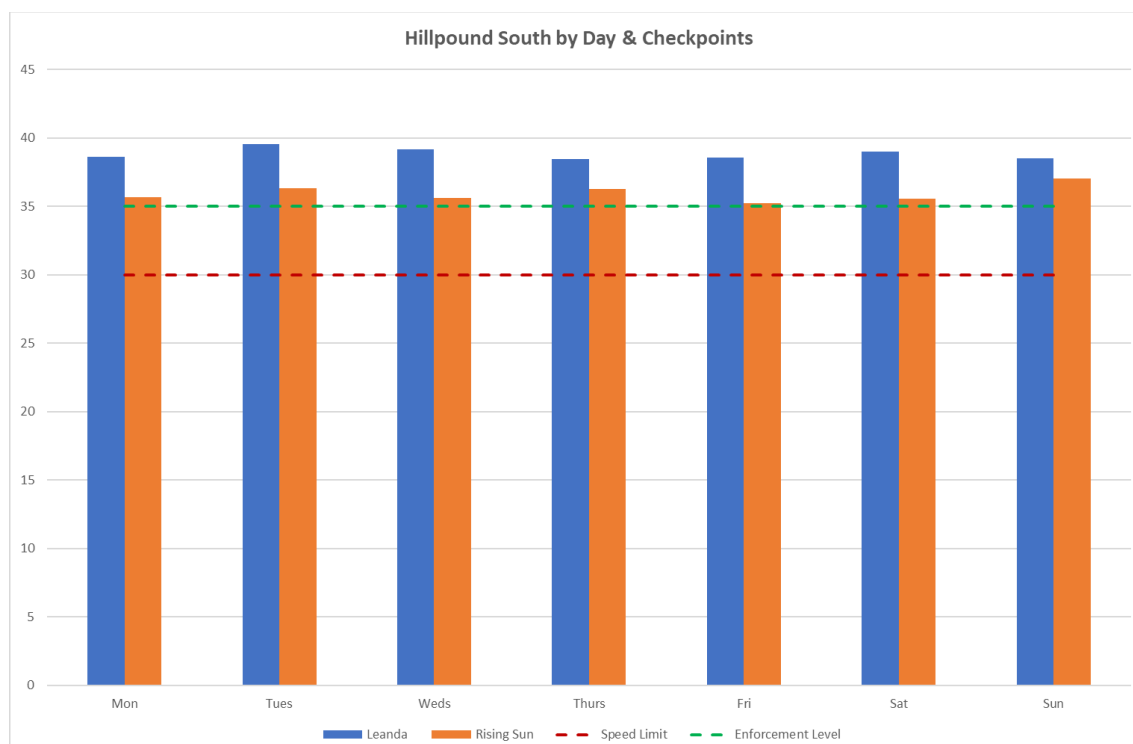
It is appreciated that the incidence of these speeds is low compared with the general flow of traffic and also outside peak traffic times but is still a concern.

Hill Pound

Two recording points were utilised in this area, one by Leanda House just at the point of build-up of properties on Hill Pound and also opposite the Rising Sun Pub just past the Mislingford Road / Chapel Road Crossroads.

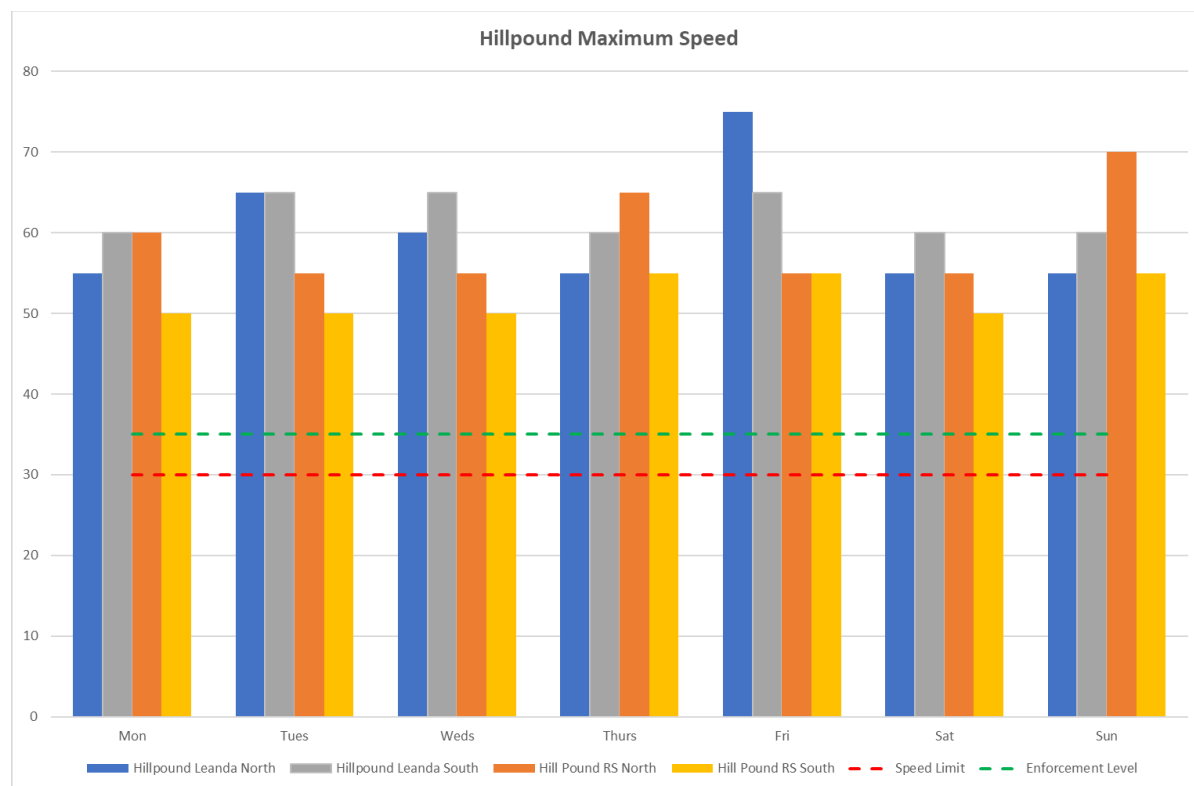


Traffic flows through this road from the Shirrel Heath direction towards the Hunters Inn are very similar for each day. They show a small increase when passing the Rising Sun but not significant.



The opposite direction shown on the previous page is very similar in profile with vehicles accelerating slightly as they leave the village.

It should be noted however in both cases speeds are above the enforcement level.



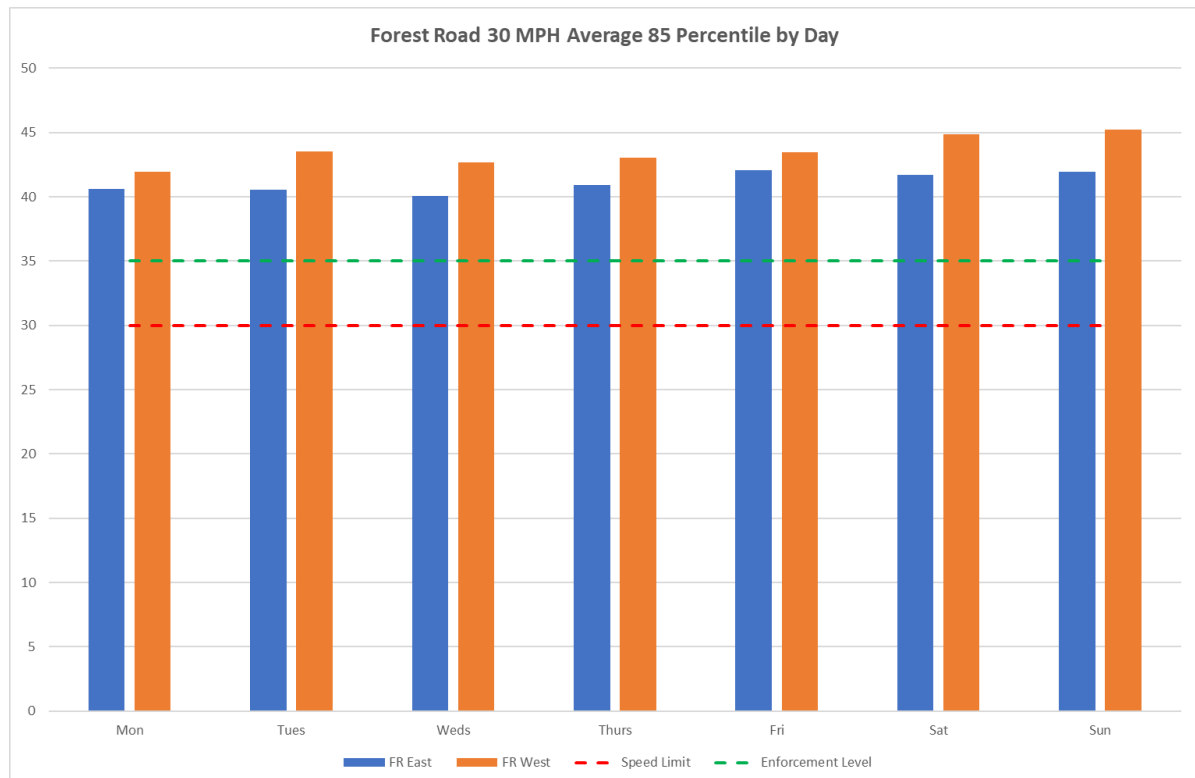
However, where we see some worrying behaviour is in the maximum speeds recorded over this stretch of road, the worst is a vehicle coming onto Swanmore at over 75 MPH but more concerning is the general level of vehicles identified at over 50 MPH in all situations.

As mentioned previously, it is appreciated that the incidence of these speeds is low compared with the general flow of traffic and also outside peak traffic times but is still a concern.

Forest Road

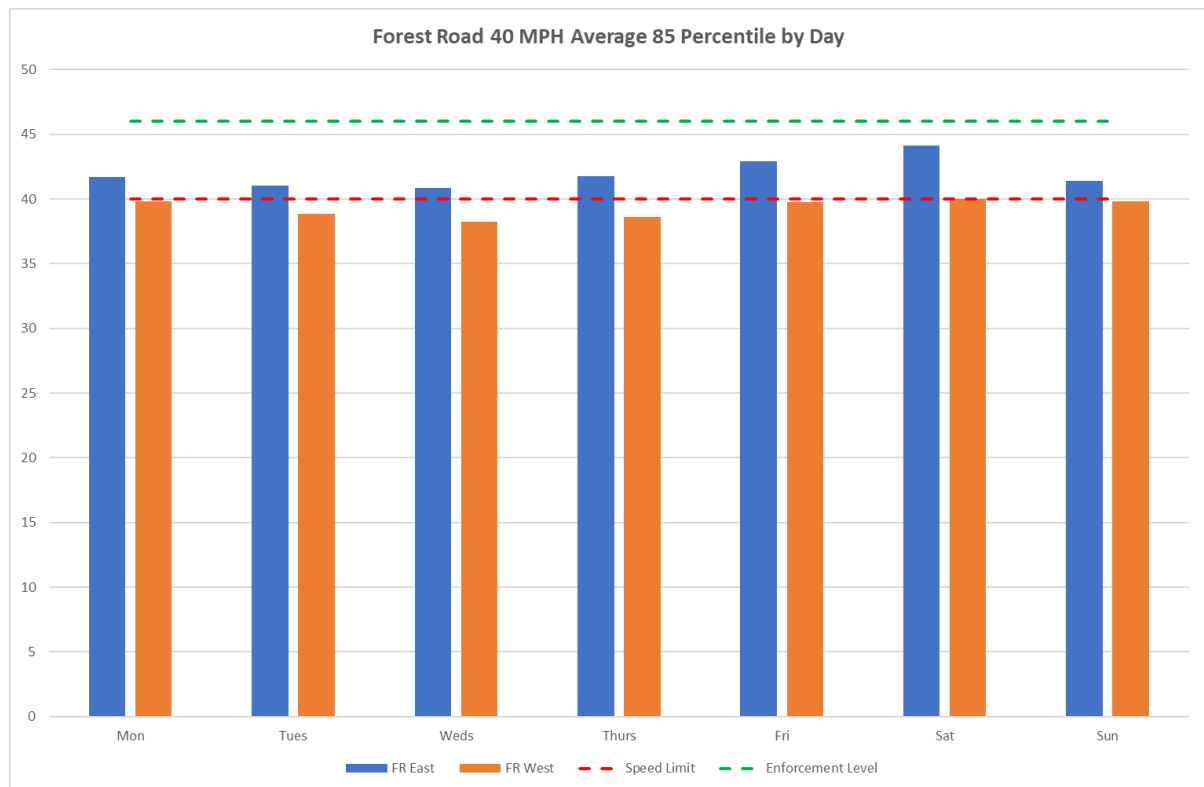
Some issues were raised by residents over the speed of traffic along this road which is split between a 30 MPH and a 40 MPH section. Therefore, to provide accurate analysis recordings were made in both sections and are shown below.

30 MPH Section Results

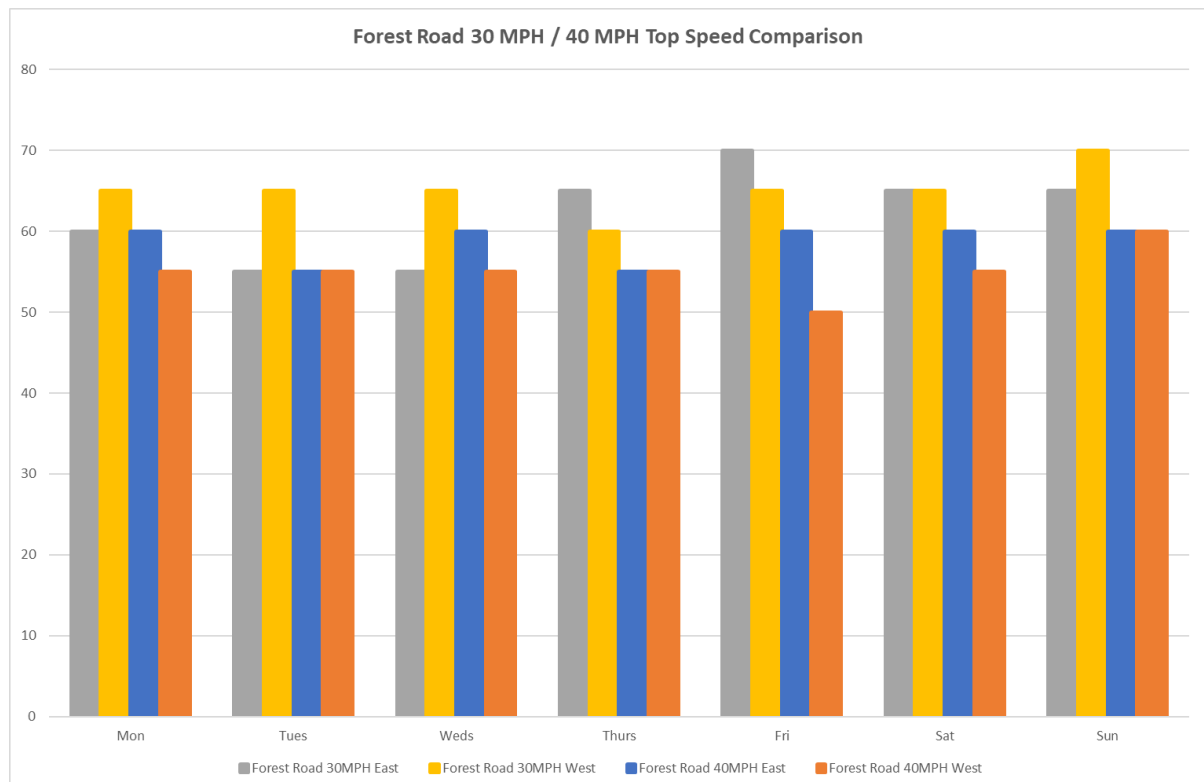


Of all the roads analysed this shows the largest deviation of the 85 percentile showing on average, vehicles are traveling at least 10 MPH over the speed limit towards the Gravel Hill Junction and between 12 and 15 MPH over the speed limit towards the Waltham Chase traffic lights. It is also in excess of the enforcement speed by some degree.

40 MPH Section Results

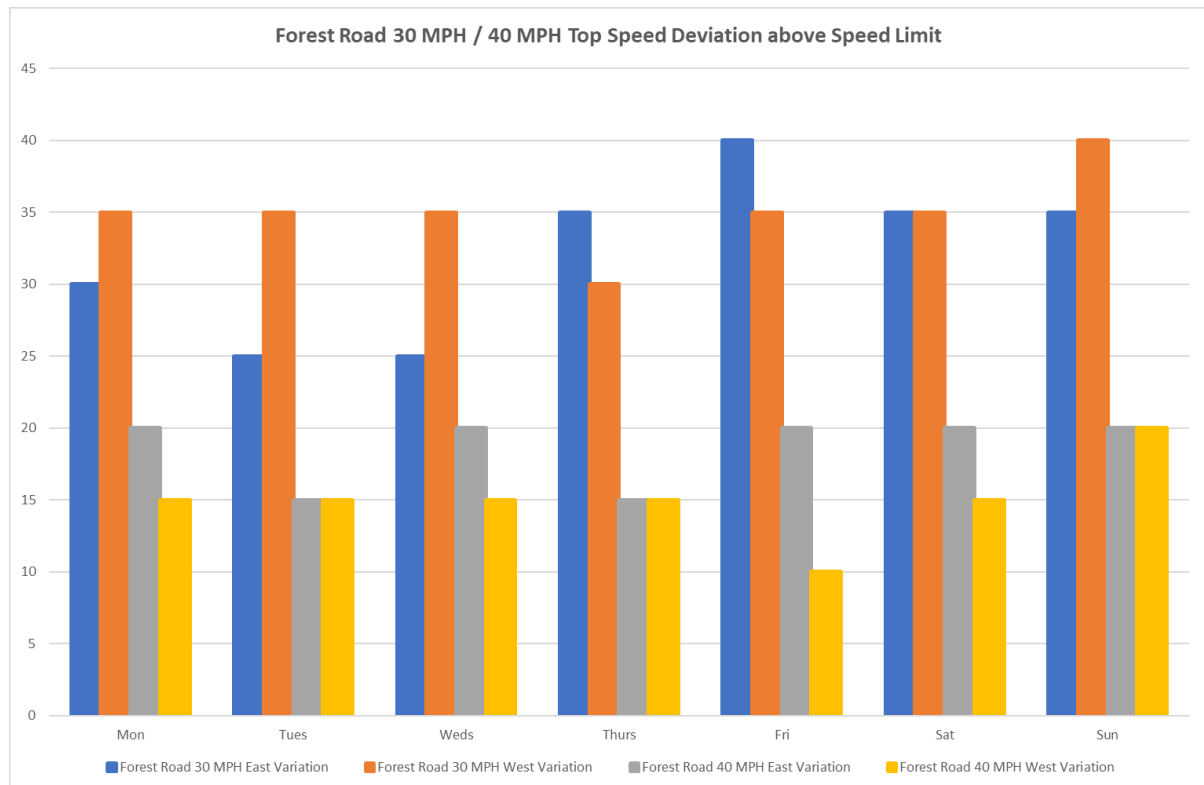


By contrast looking at the 40 MPH section vehicle speed is at or around the stated limit most of the time or within 4 MPH deviation.



When looking at the chart on the previous page however, we see some very disturbing data as although like elsewhere we have high speeds the higher ones are actually in the 30MPH area in all cases.

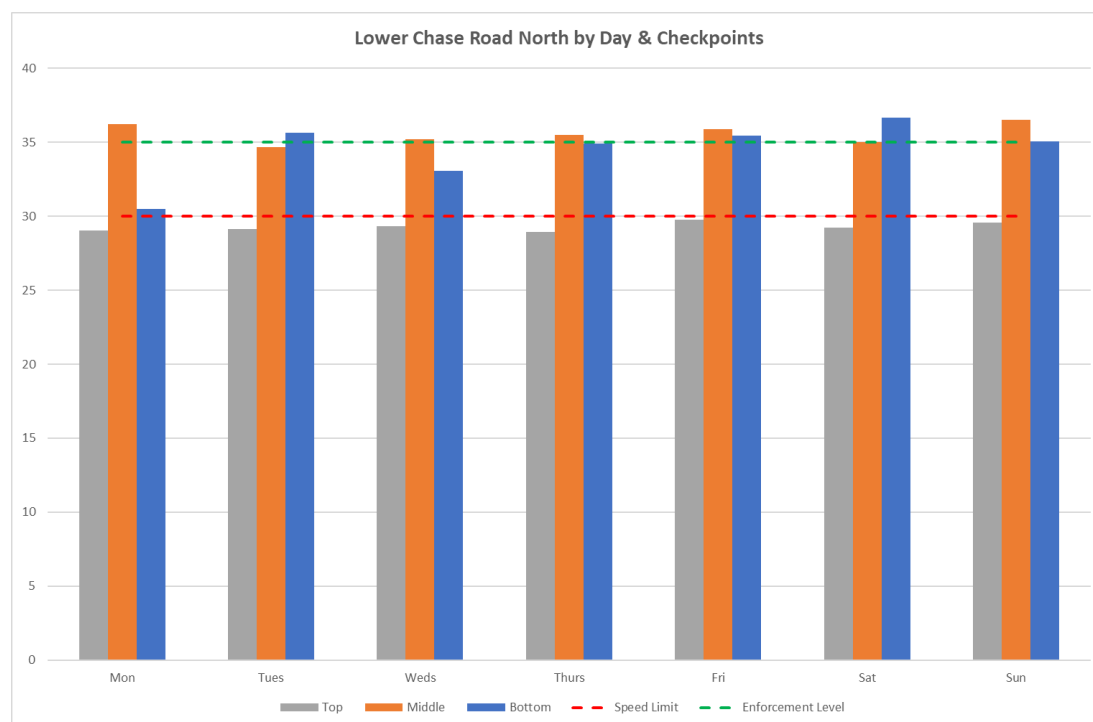
To look at this in more detail the following chart shows the deviation above the specified speed limit both for 30 MPH and 40MPH sections.



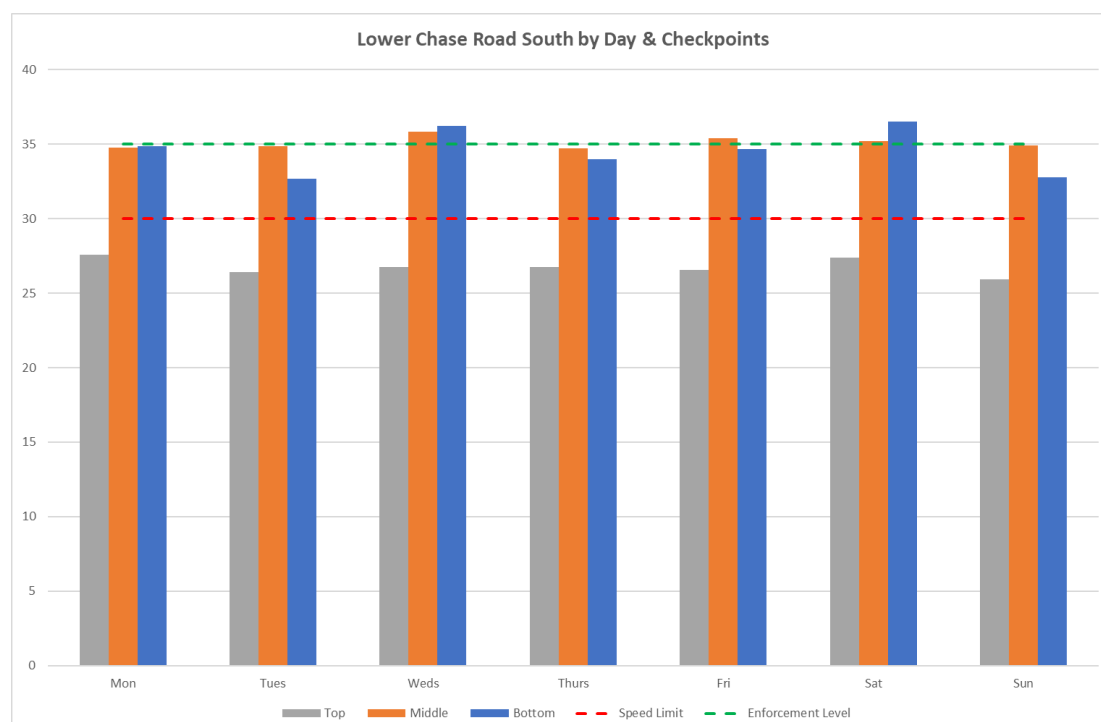
This chart shows more dramatically that maximum speed in the 30 MPH section is proportionally higher which suggest that these vehicles are transiting the complete length of Forest Road at these high speeds taking no reference to the change in speed limit. Also, in most cases the higher speed is from the westerly direction going from 40 MPH to the 30 MPH limit

Lower Chase Road

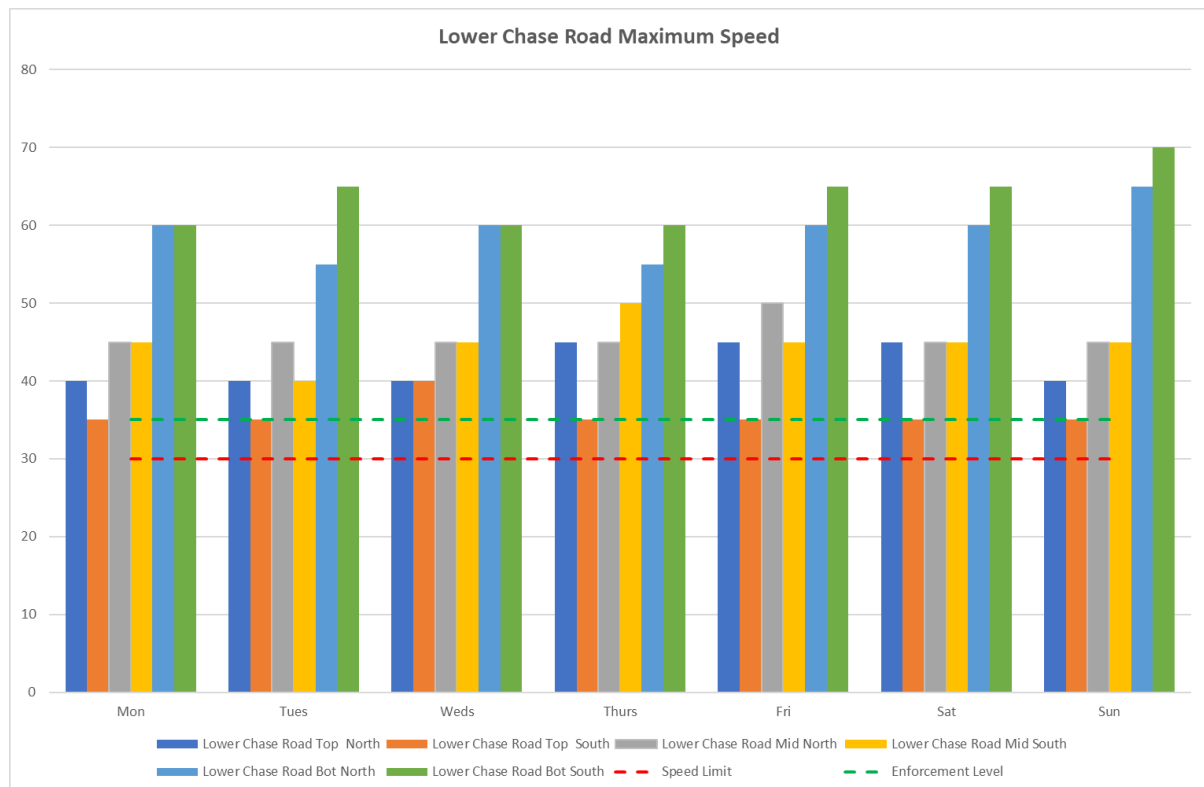
Again, three locations were recorded for this road. The top location within the built-up area at the northern end of the road, one location where the majority of building stops and one at the entrance to the business park. Again, individual recordings were consolidated to provide a homologated view north towards the village and south away from the village.



As to be expected once out of the 'congested' part of the road average speeds increased above the 85 percentile by around 5 MPH and maintained this on most days.



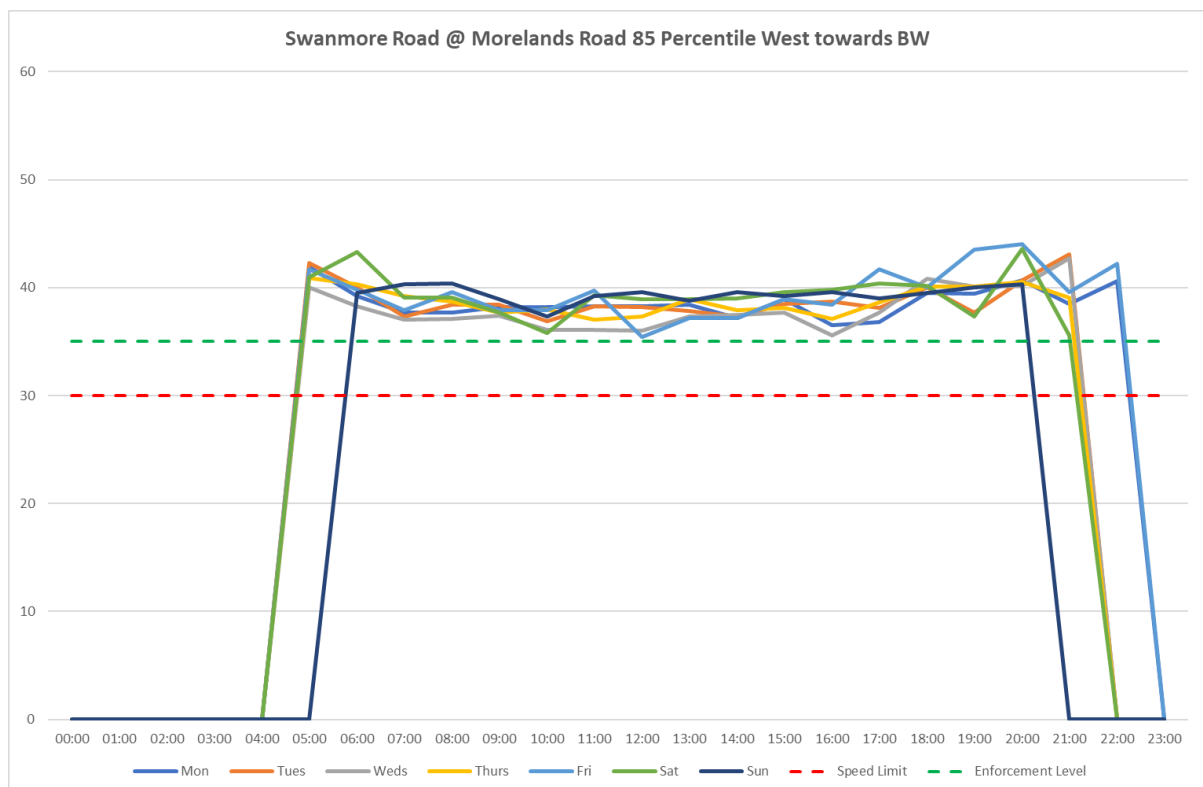
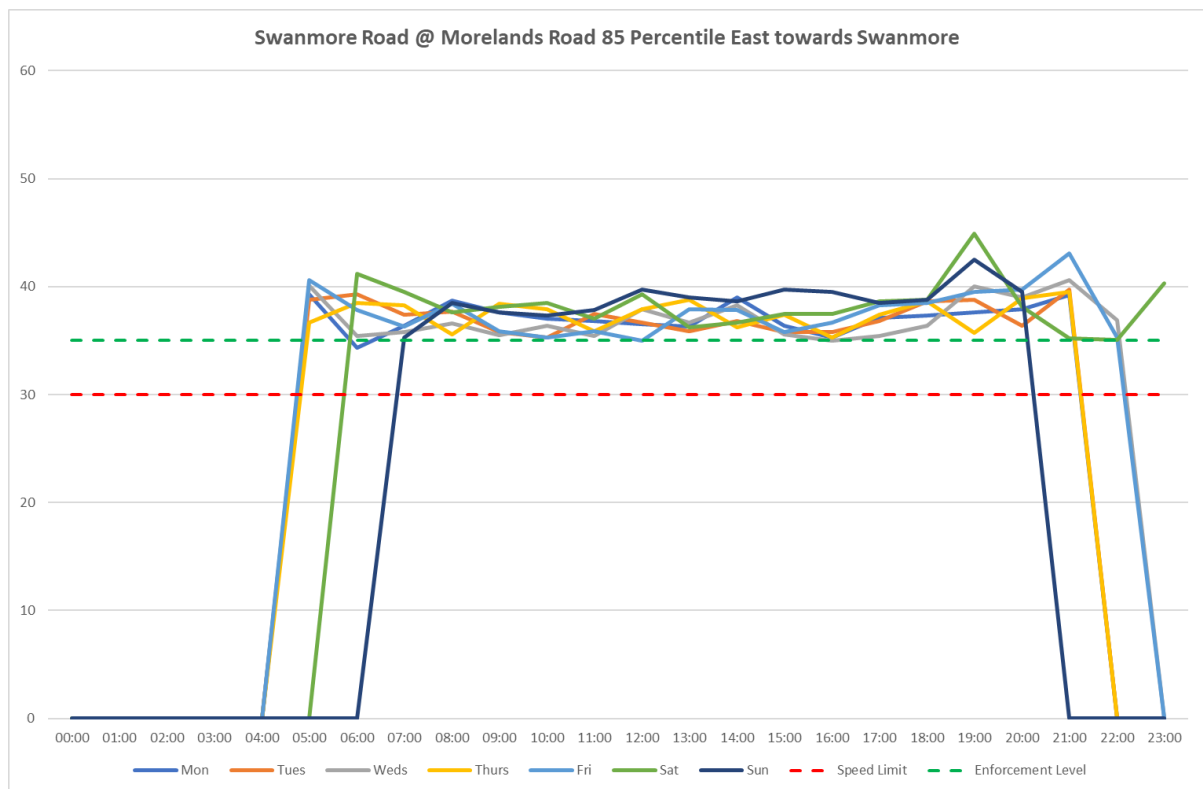
Similarly, in the alternate direct the results were virtually the same with low speeds at the top where there is more 'congestion' but similar speeds in the other two sections.



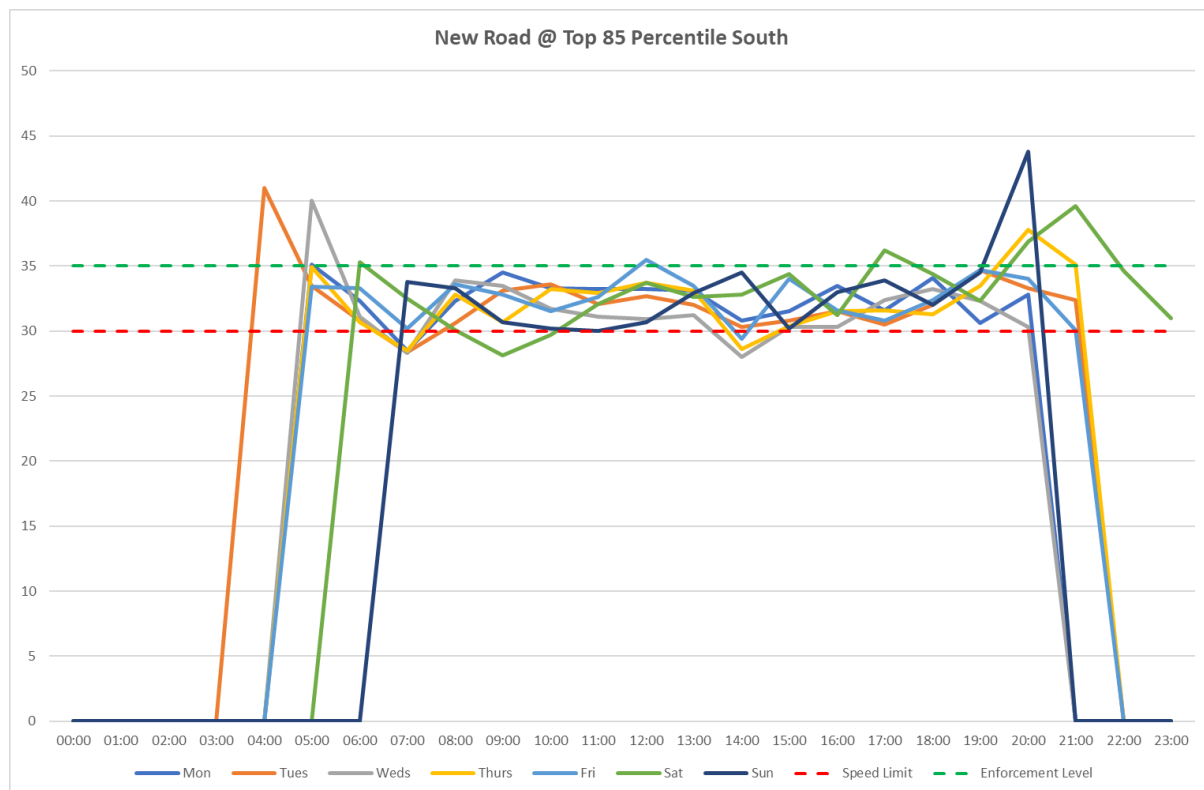
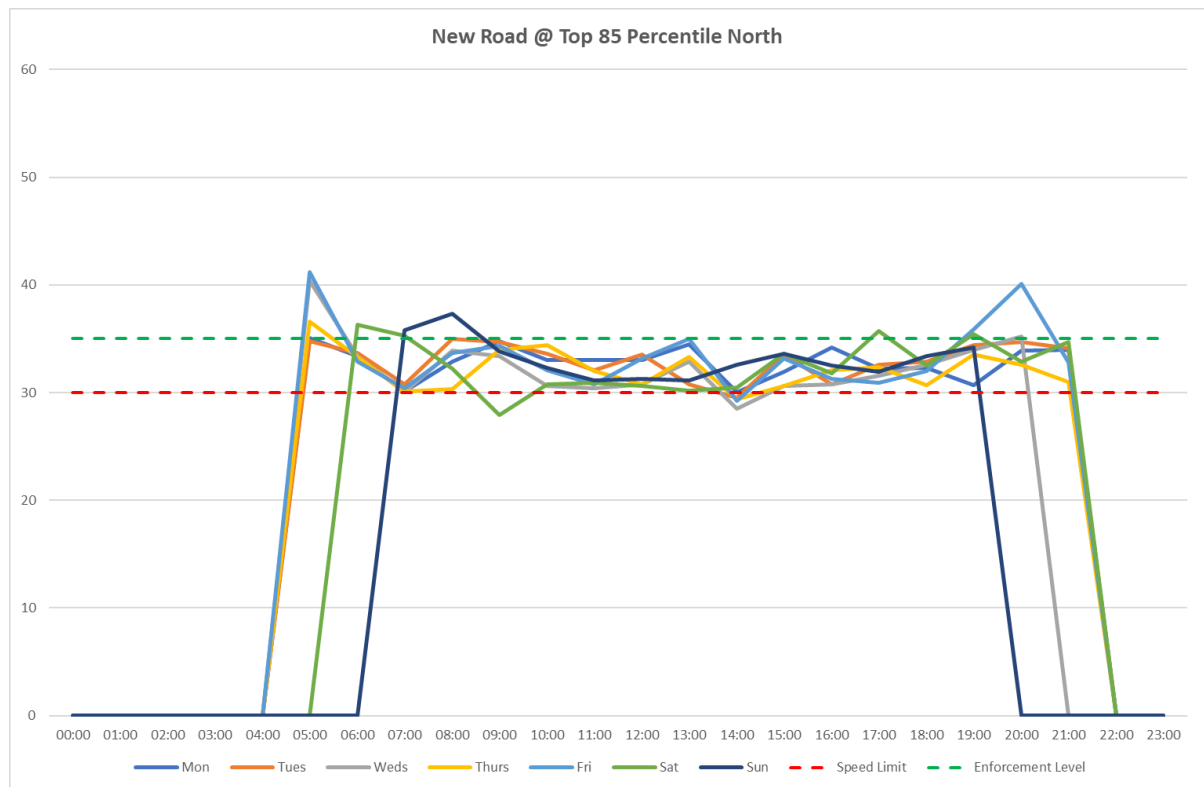
Looking at maximum recorded speeds we see a correlation between high speeds in the bottom section of the road whereas although speed is slightly increased in the other sections compared with the average not significantly so.

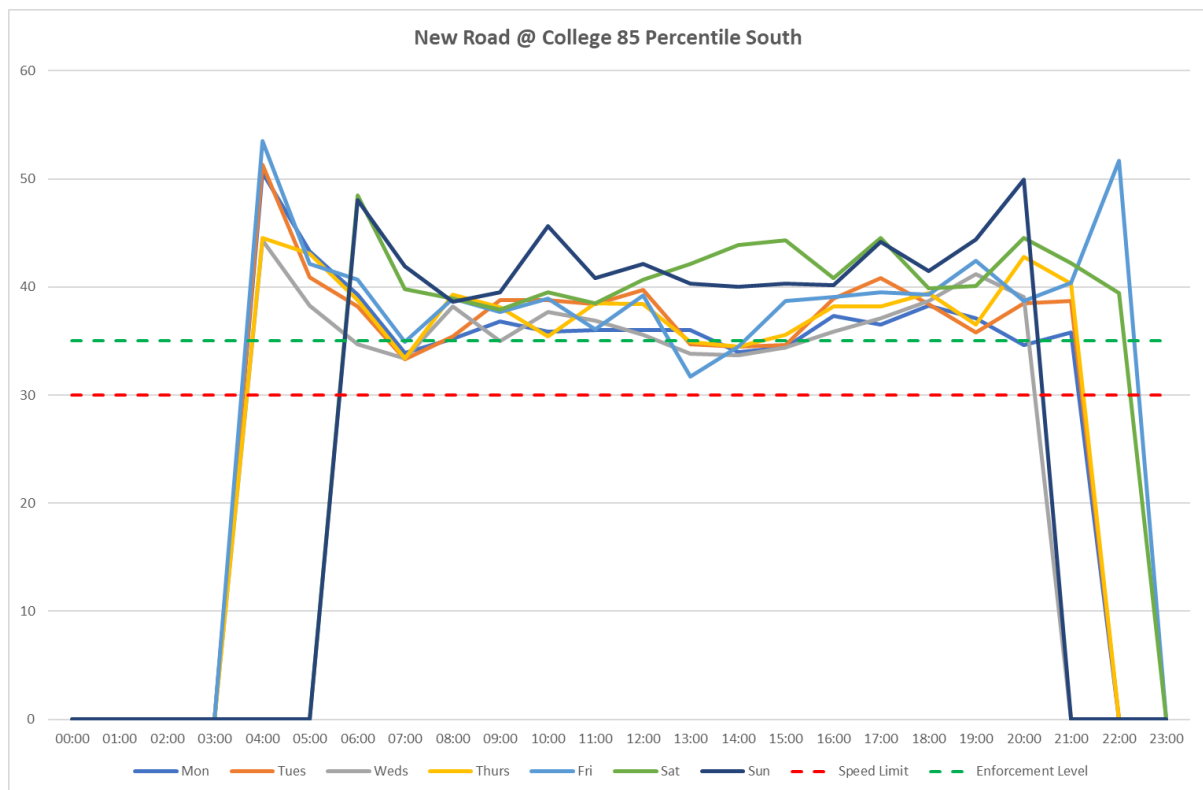
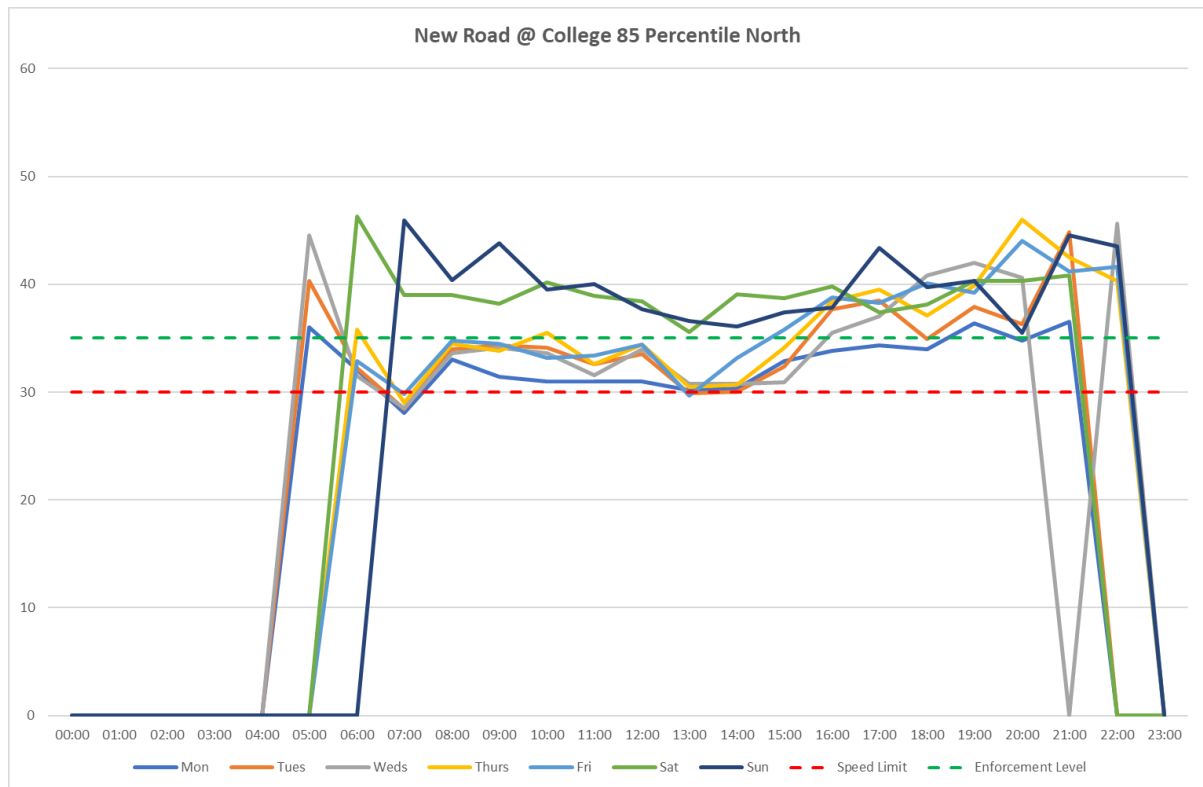
Appendix A – Daily Breakdowns

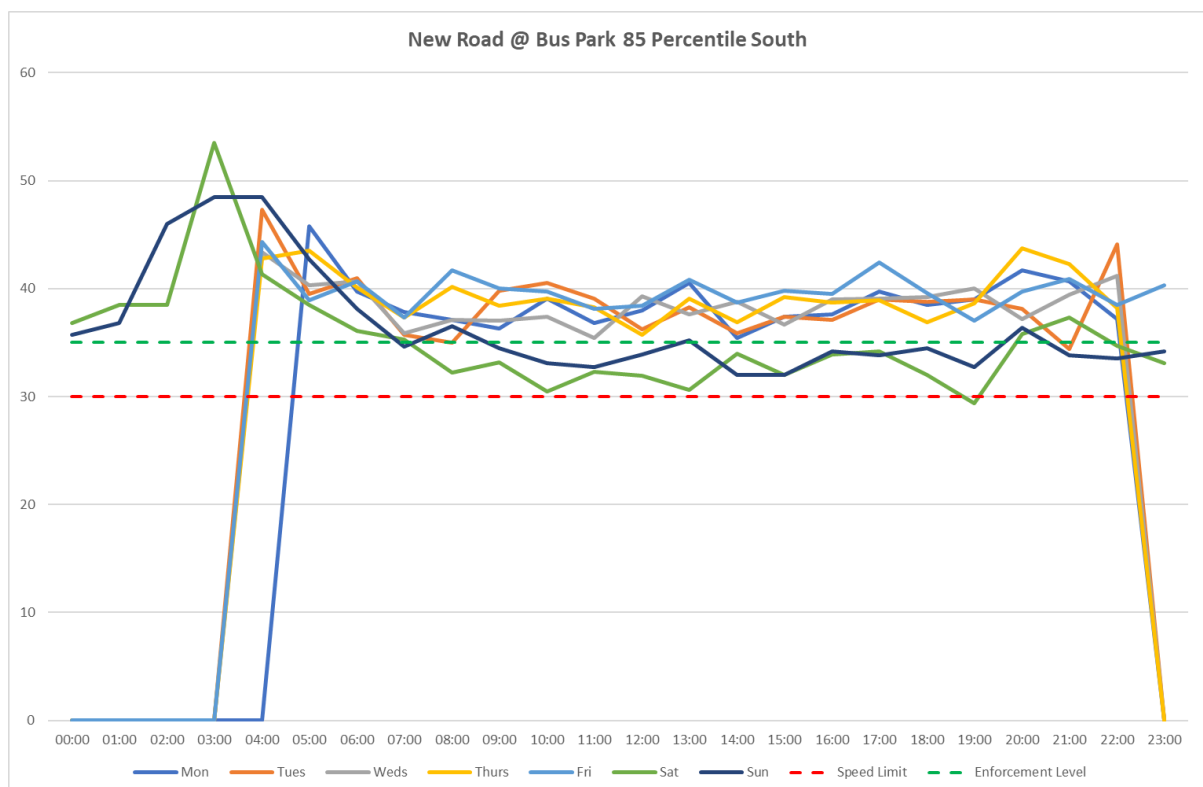
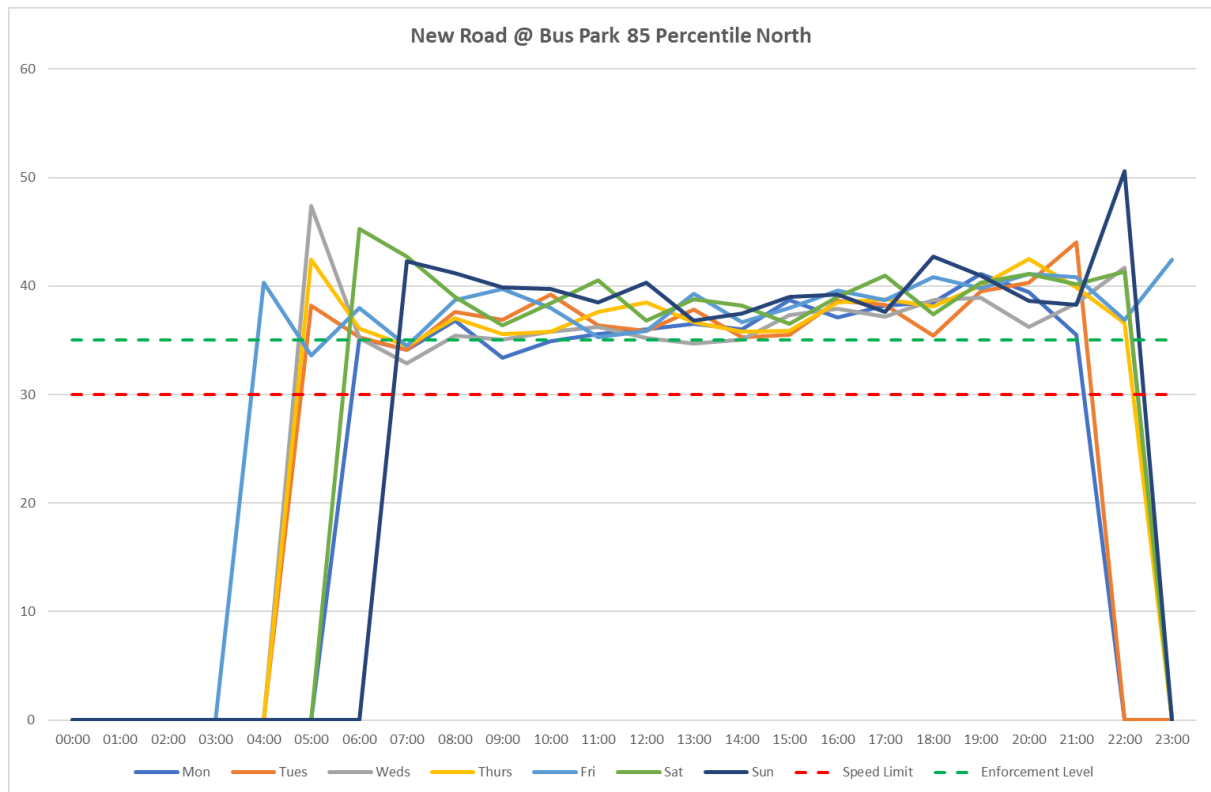
Swanmore Road



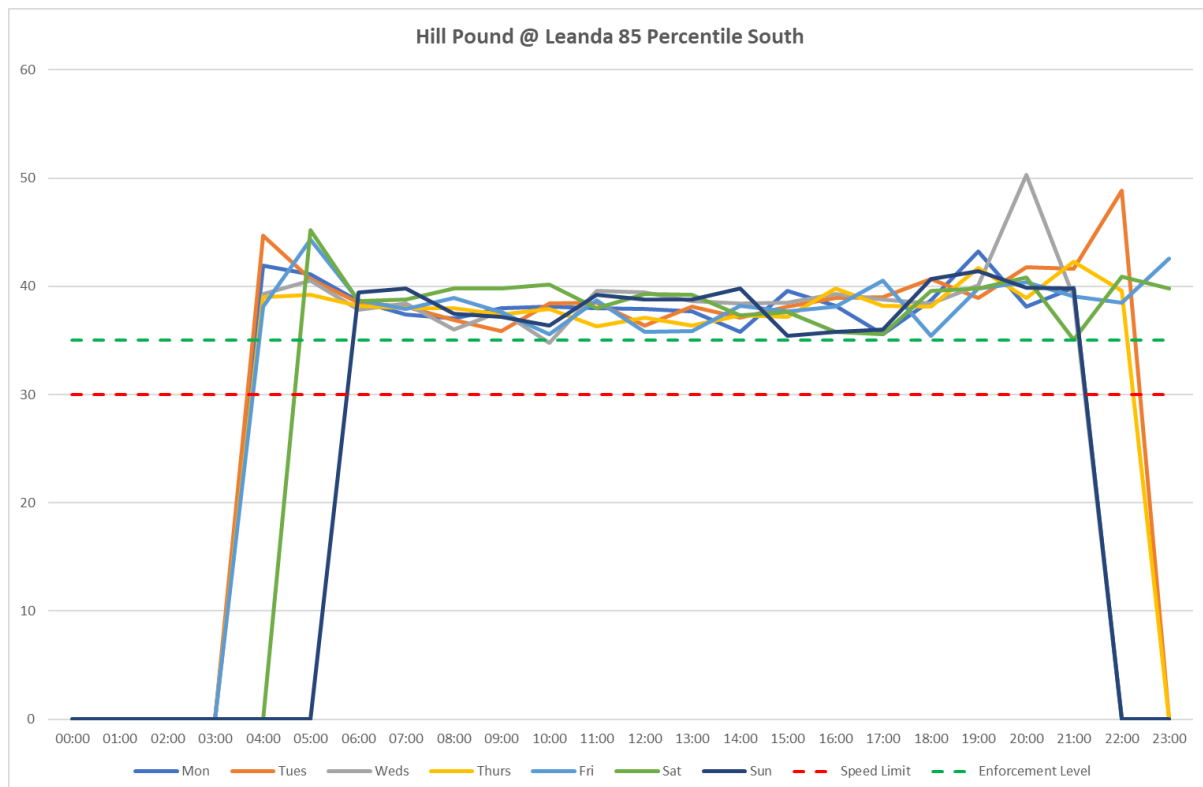
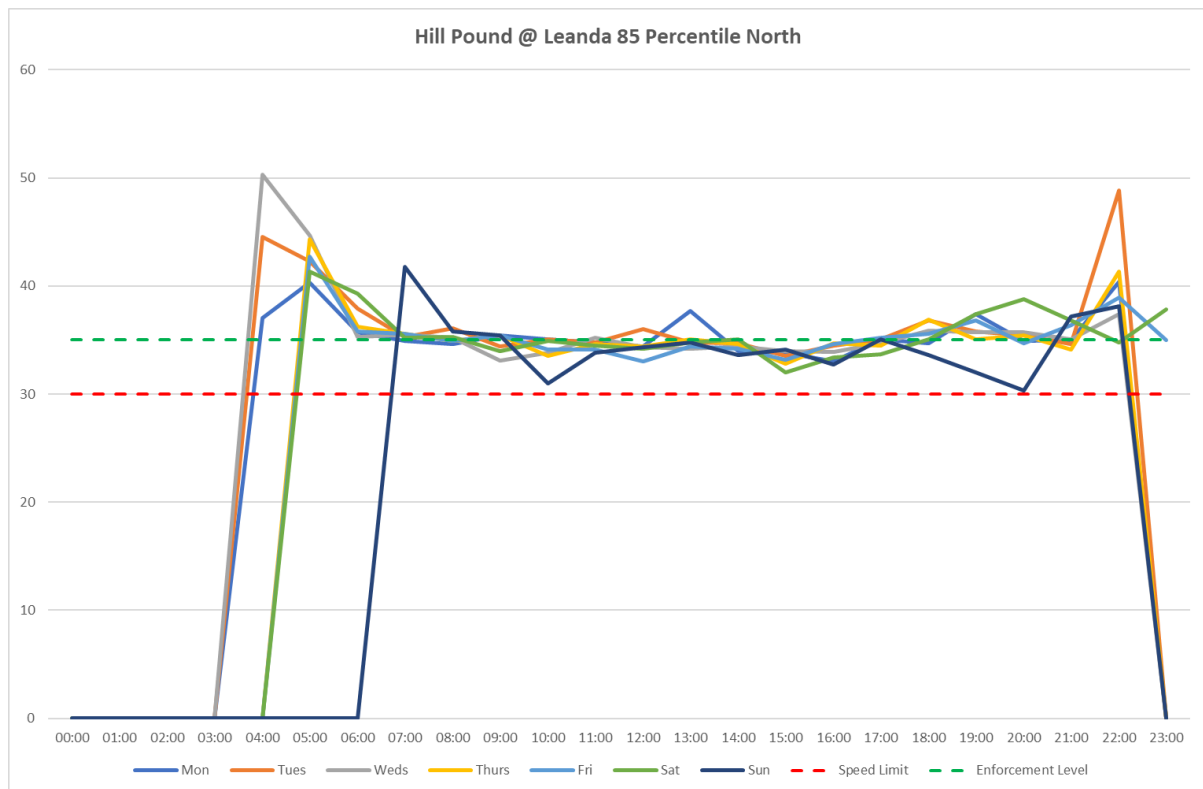
New Road

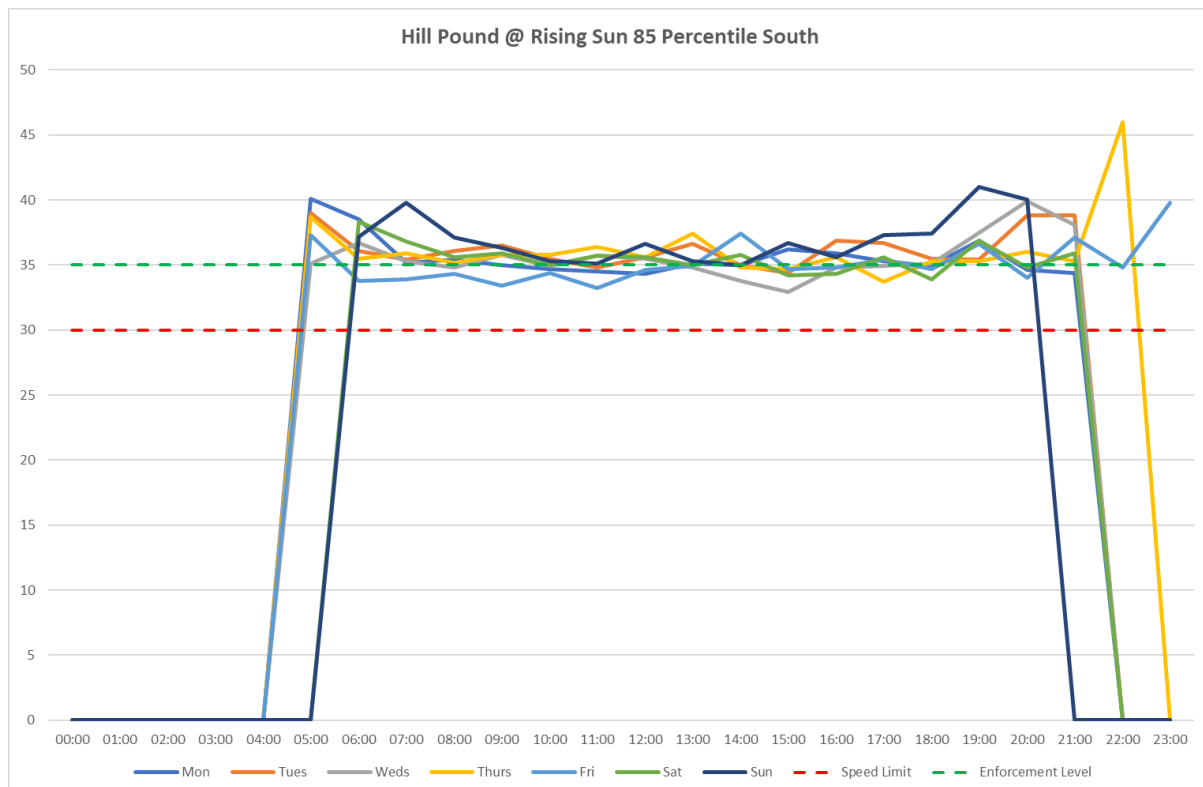
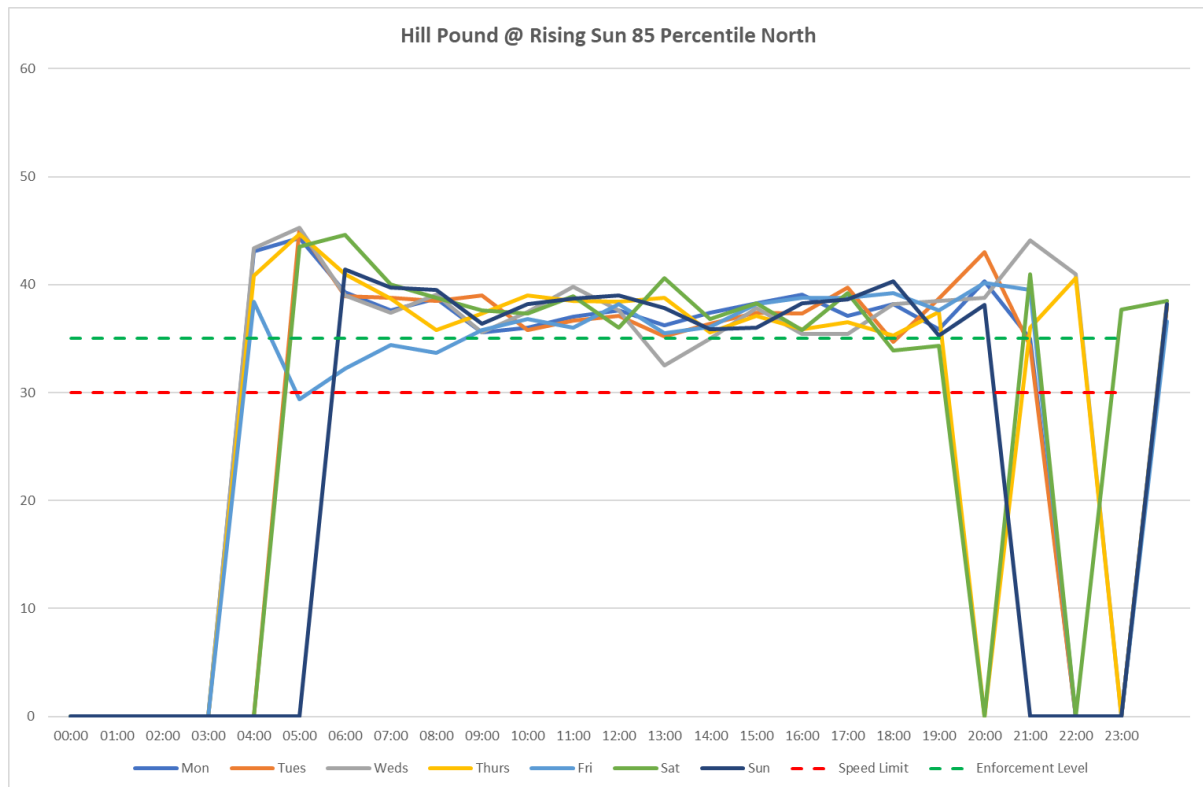




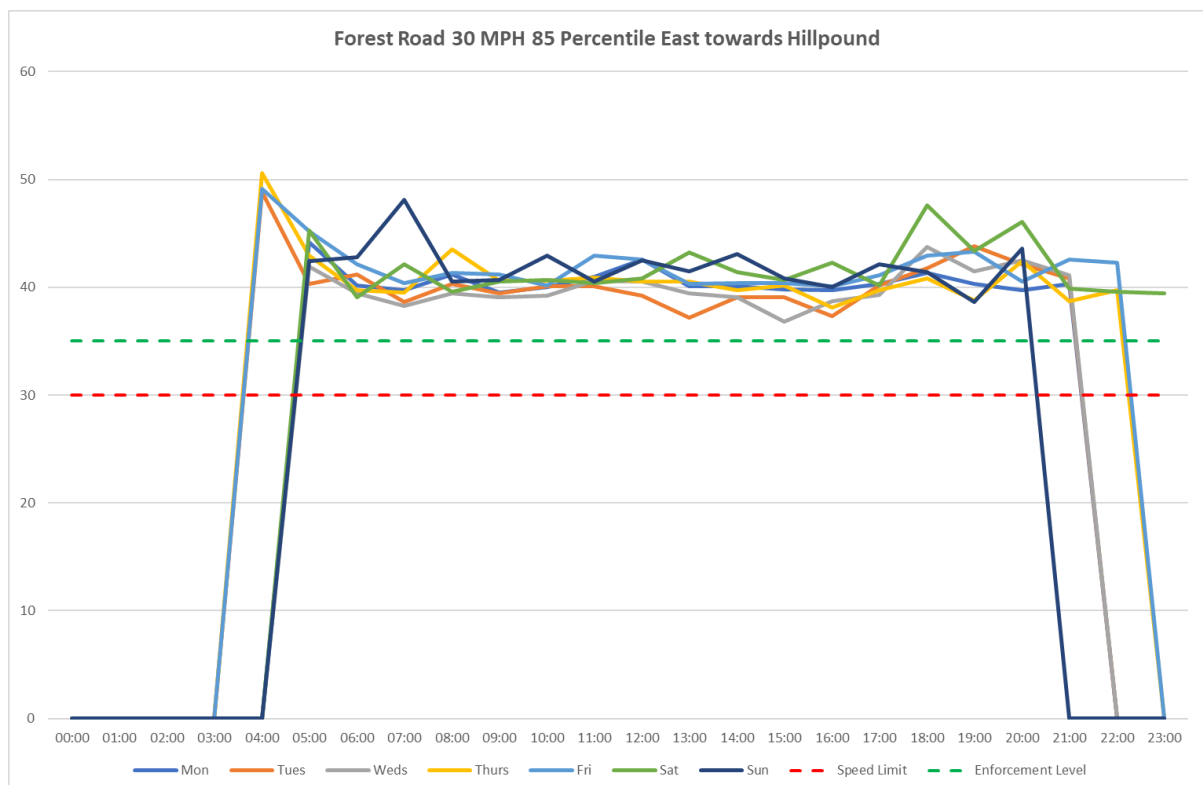
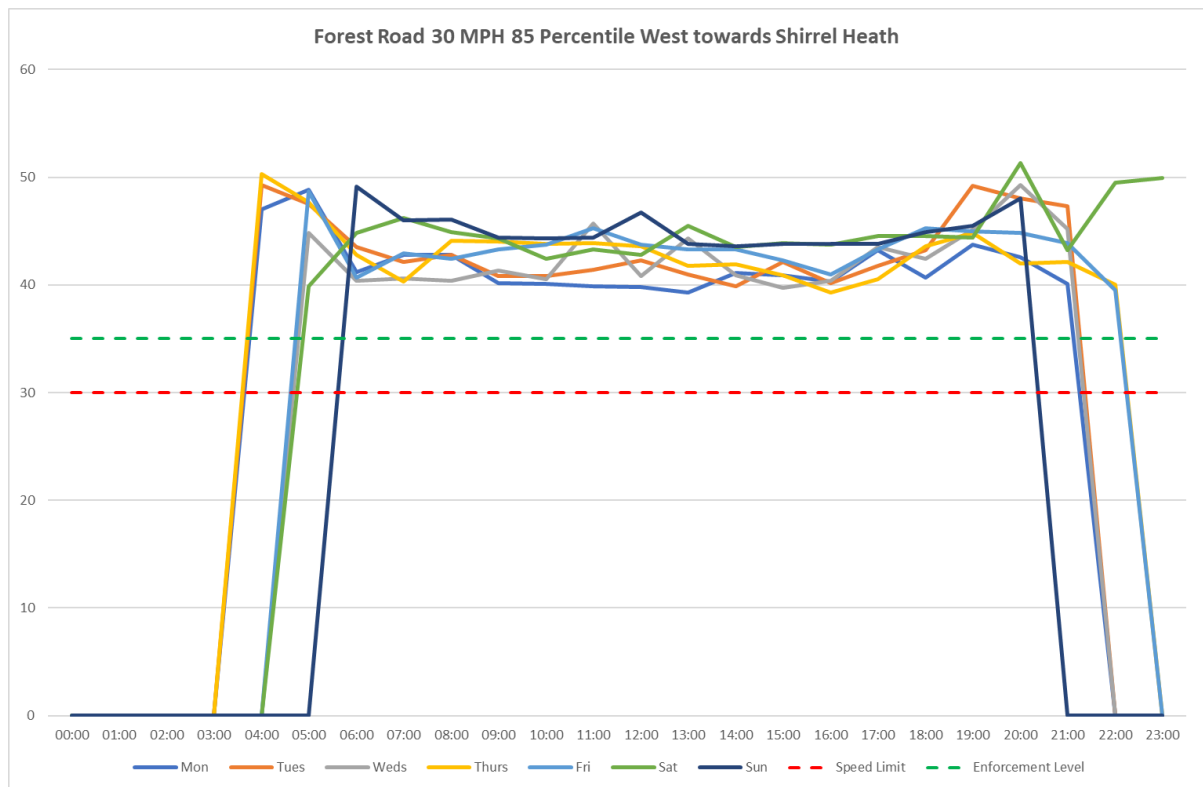


Hill Pound

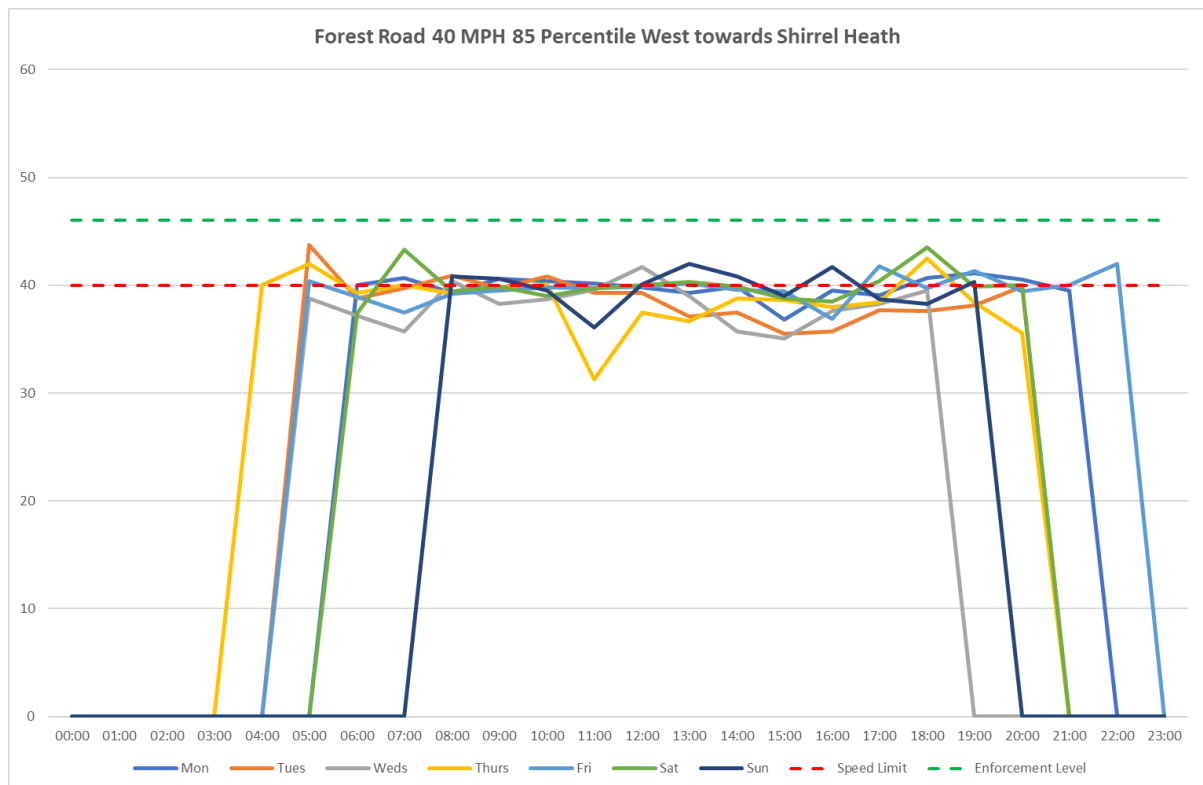
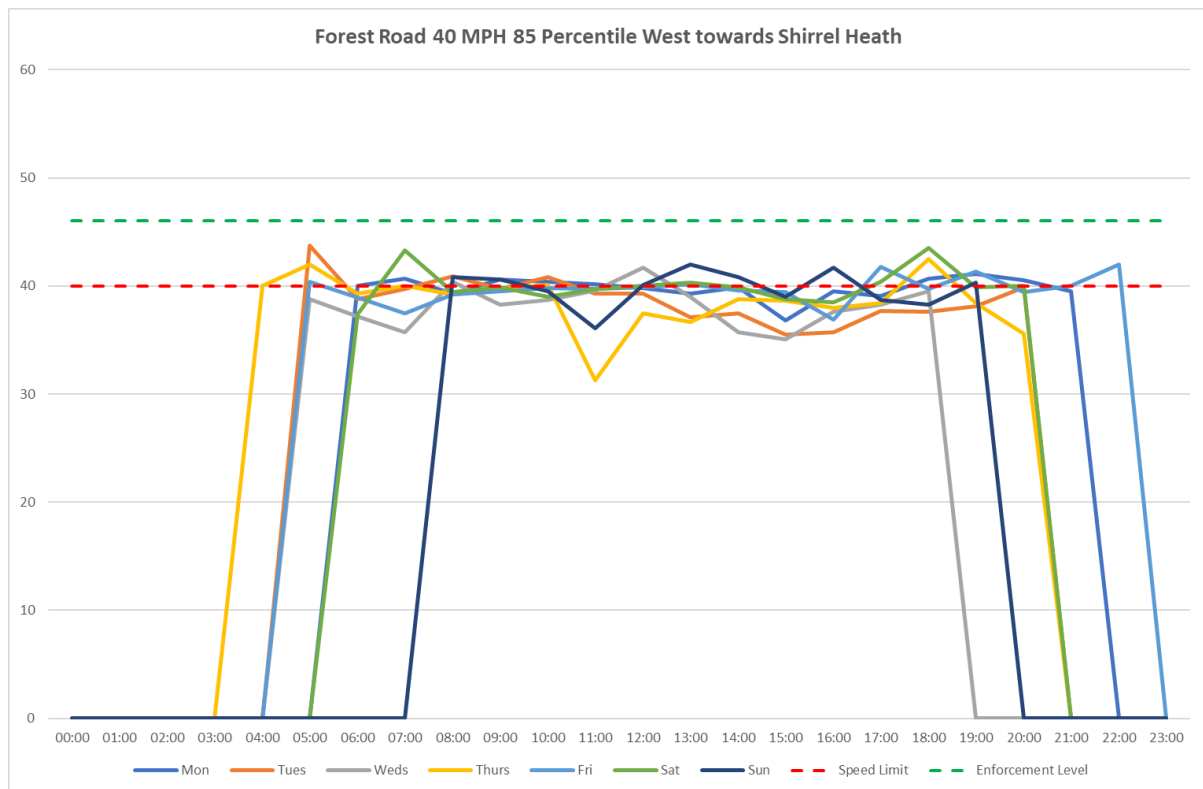




Forest Road 30 MPH Section

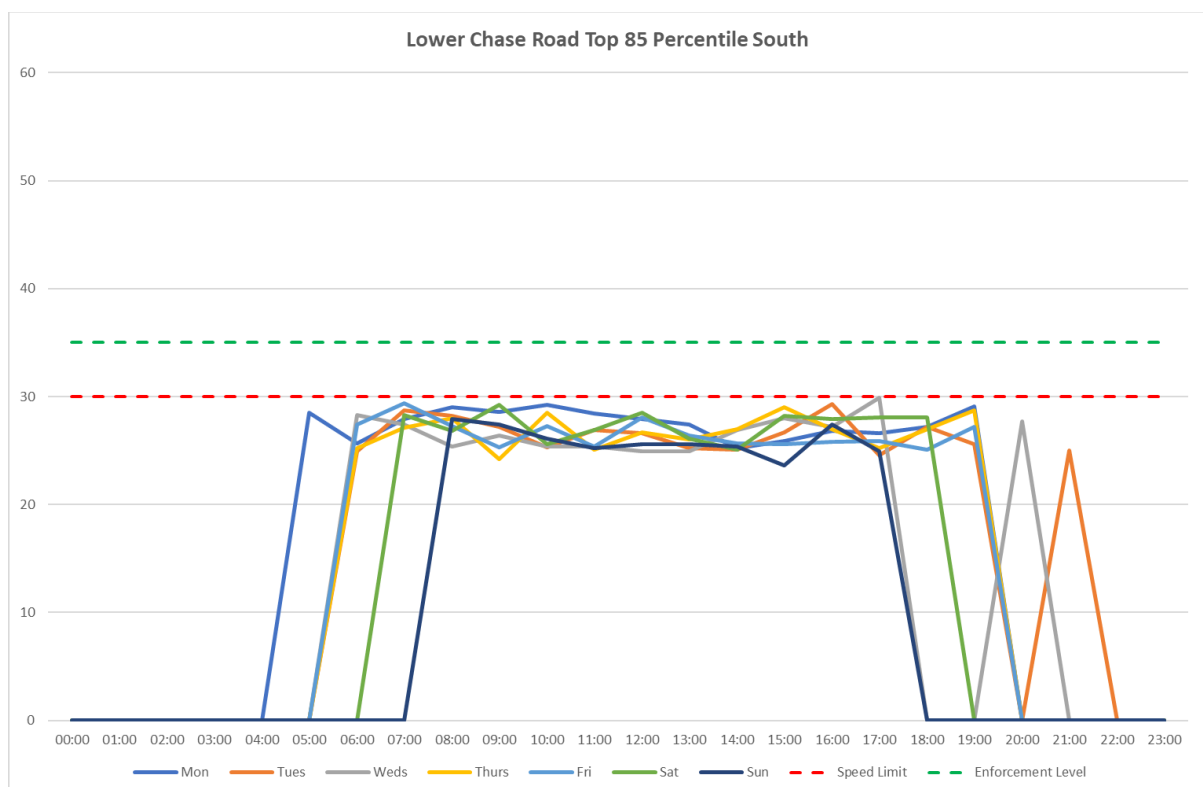
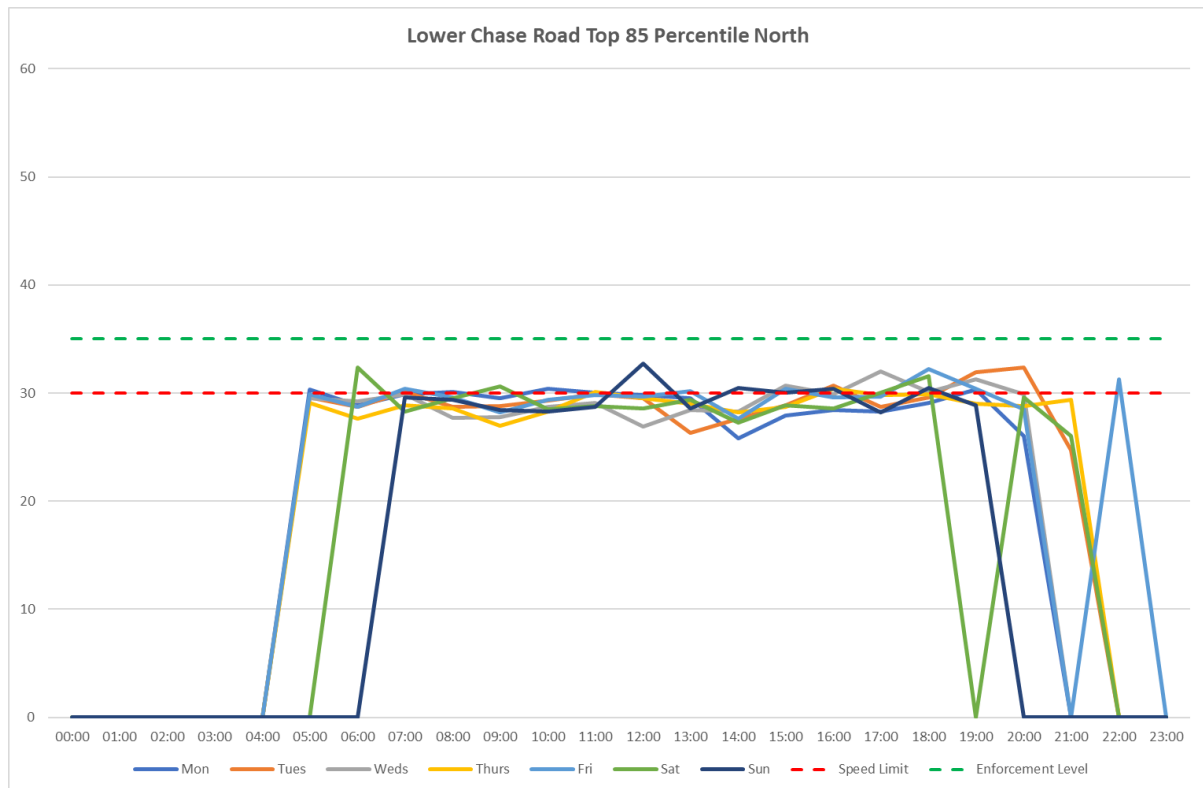


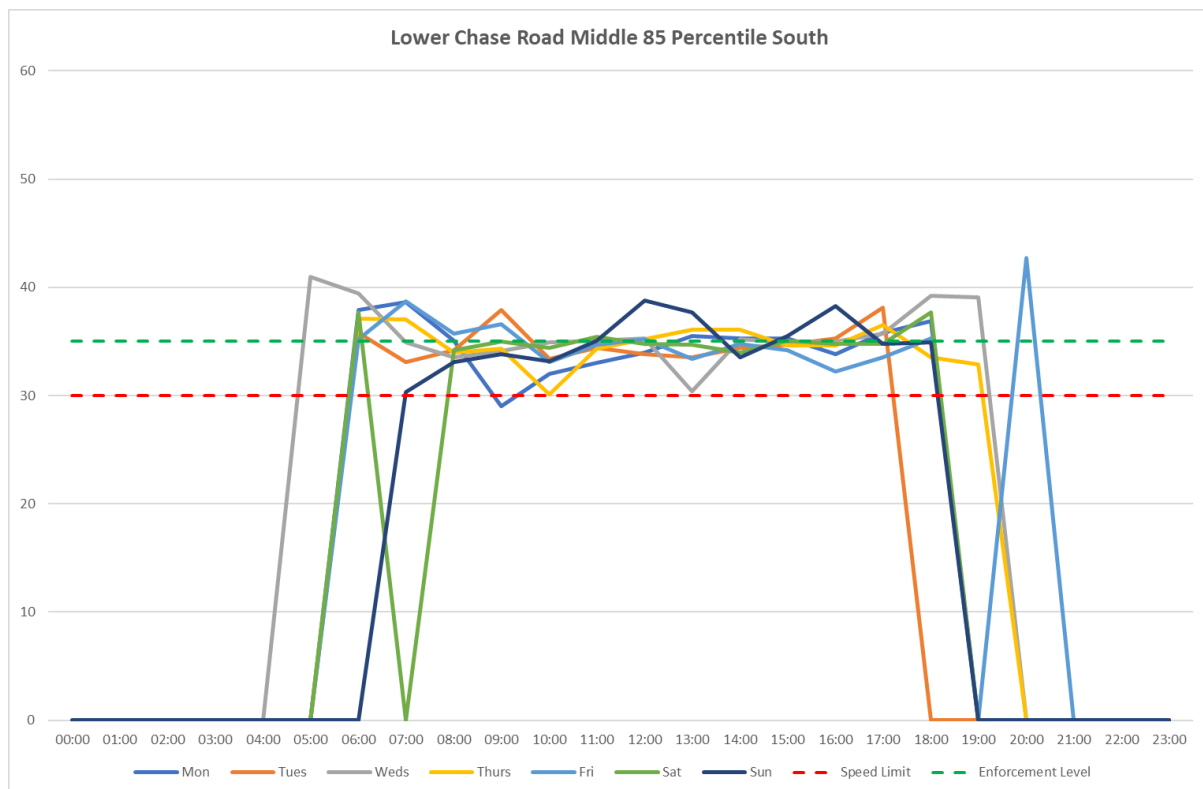
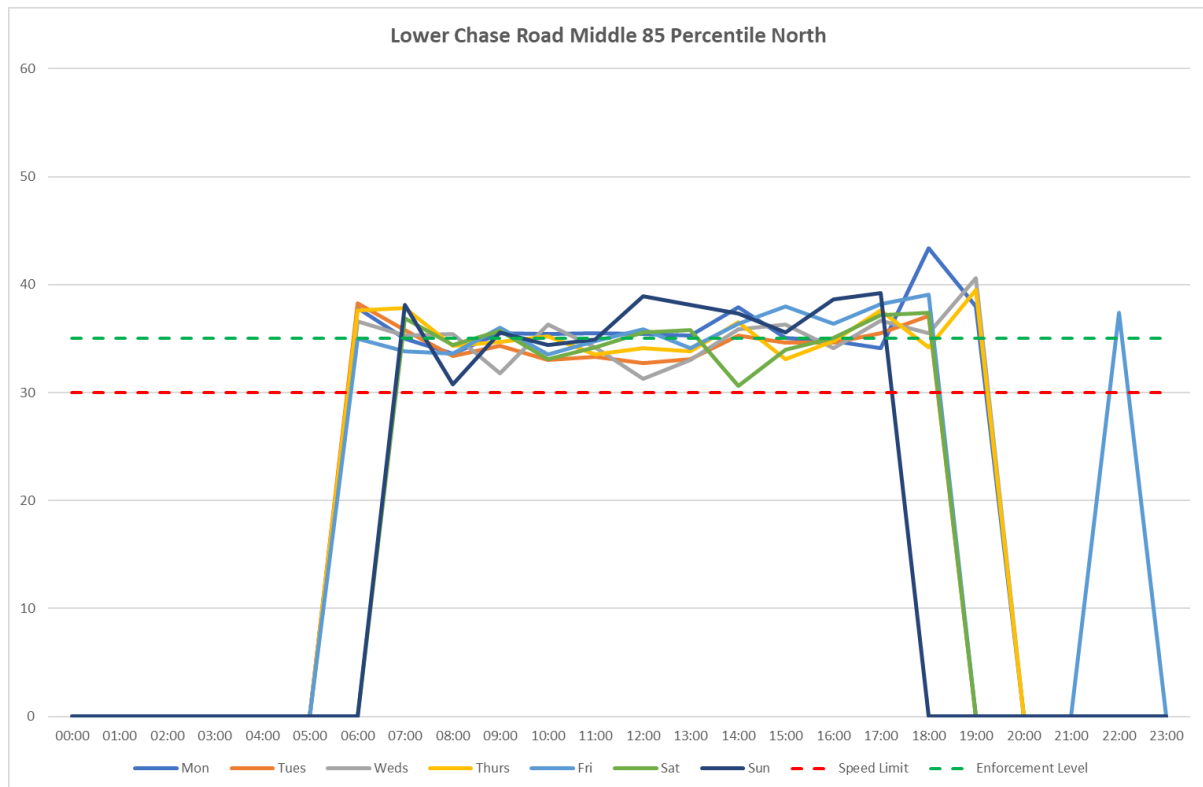
Forest Road 40 MPH Section

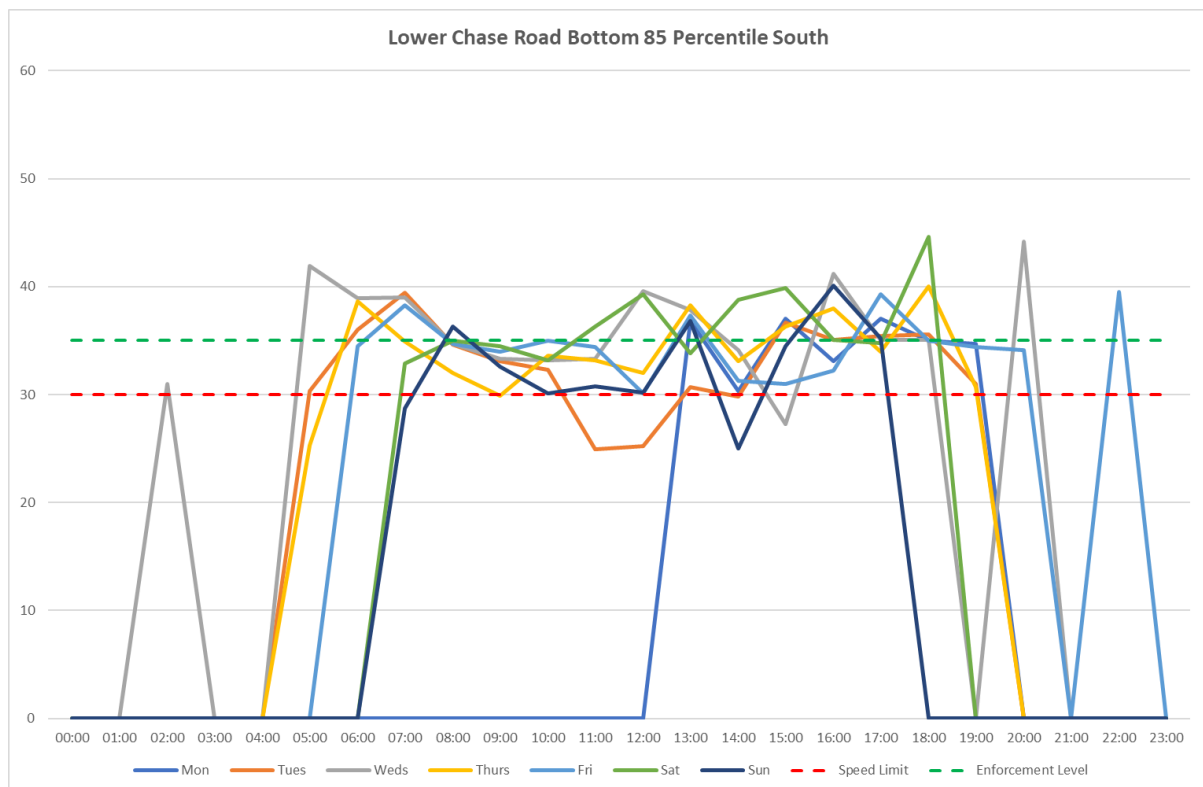
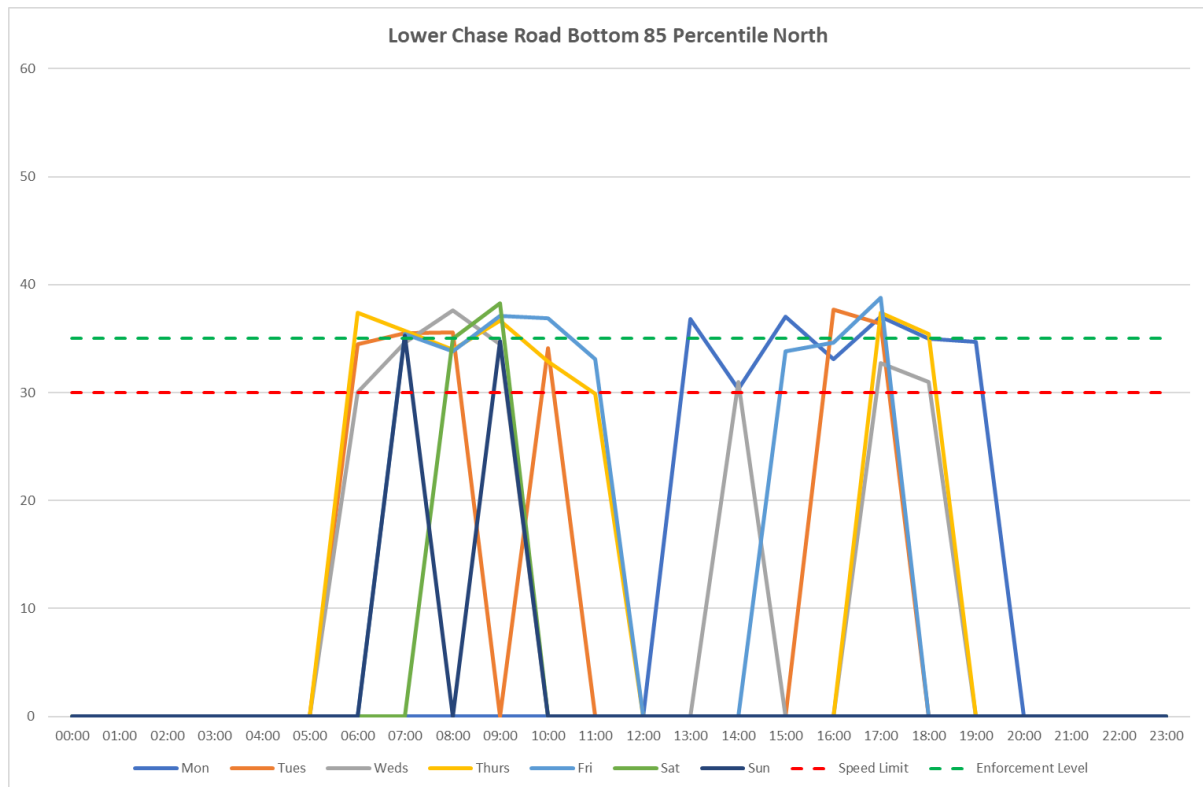


Lower Chase Road

Please note where zero is recorded the volume of traffic is below the number to allow 85 percentile to be calculated







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