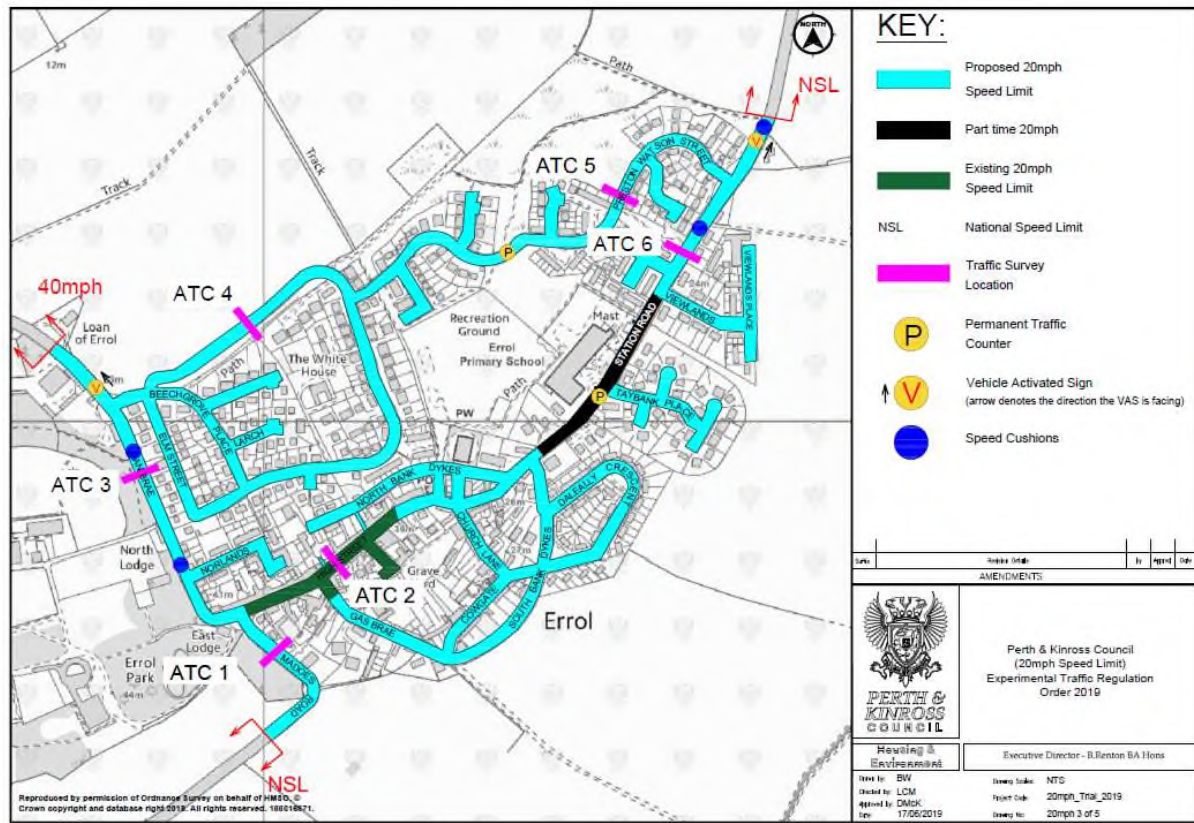


Errol 20mph Speed Limit Trial summary of results

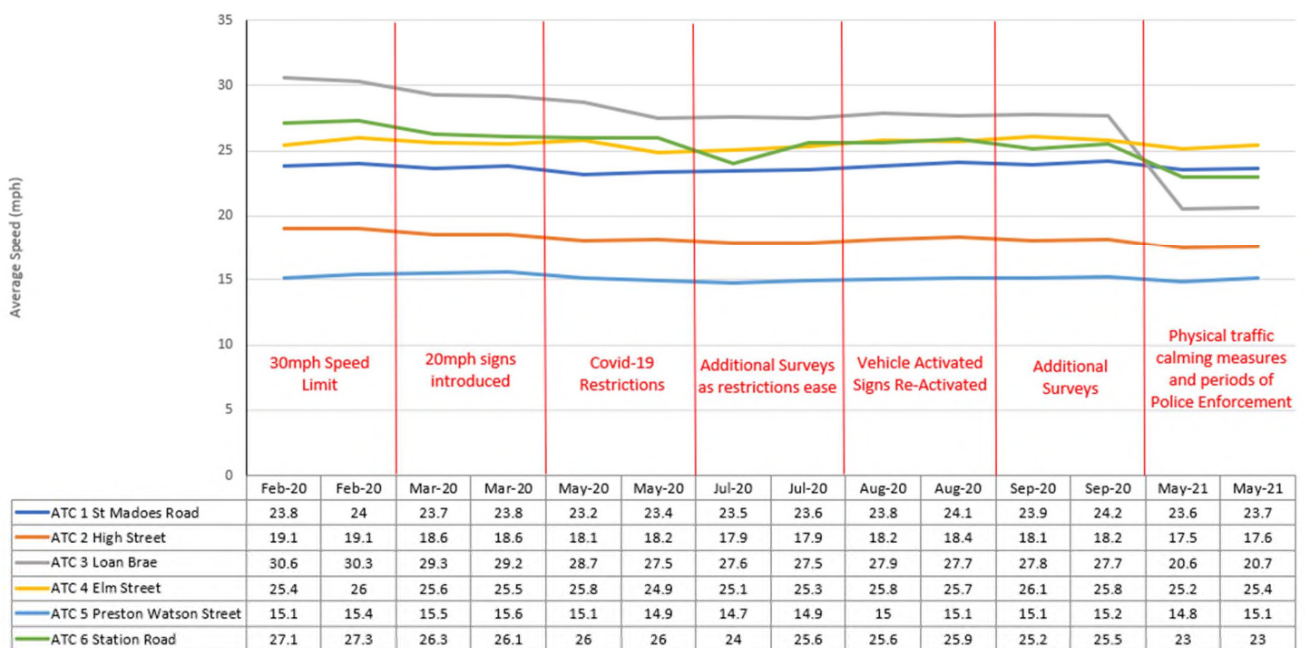
ERROL

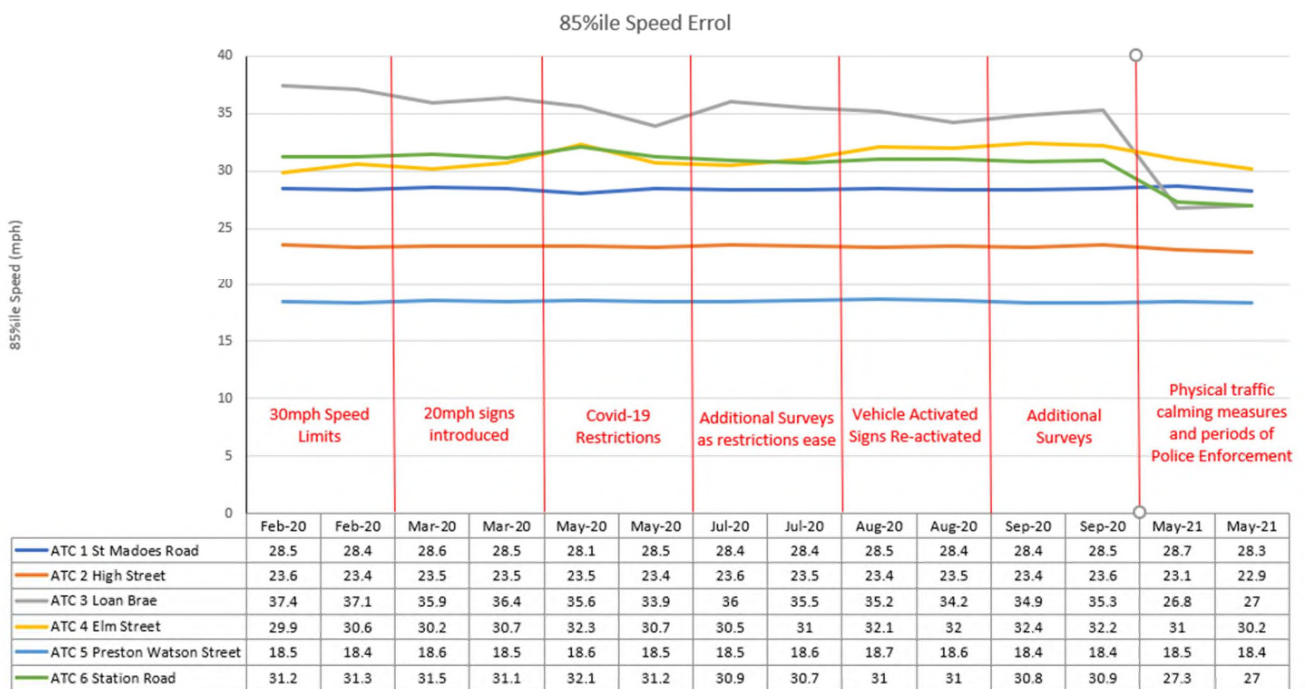


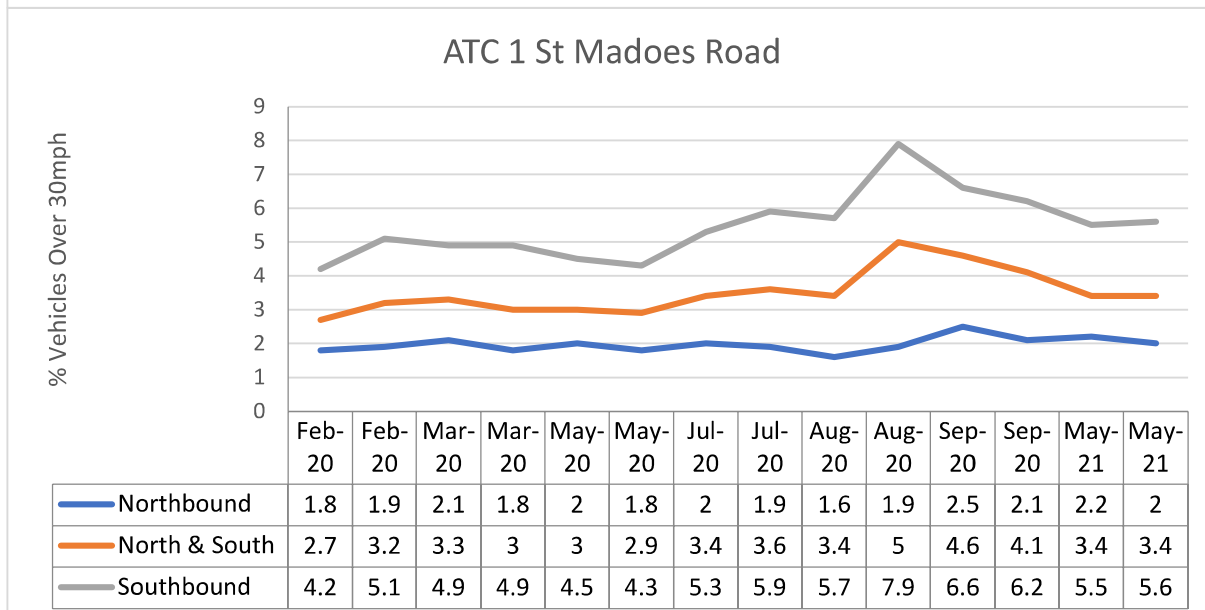
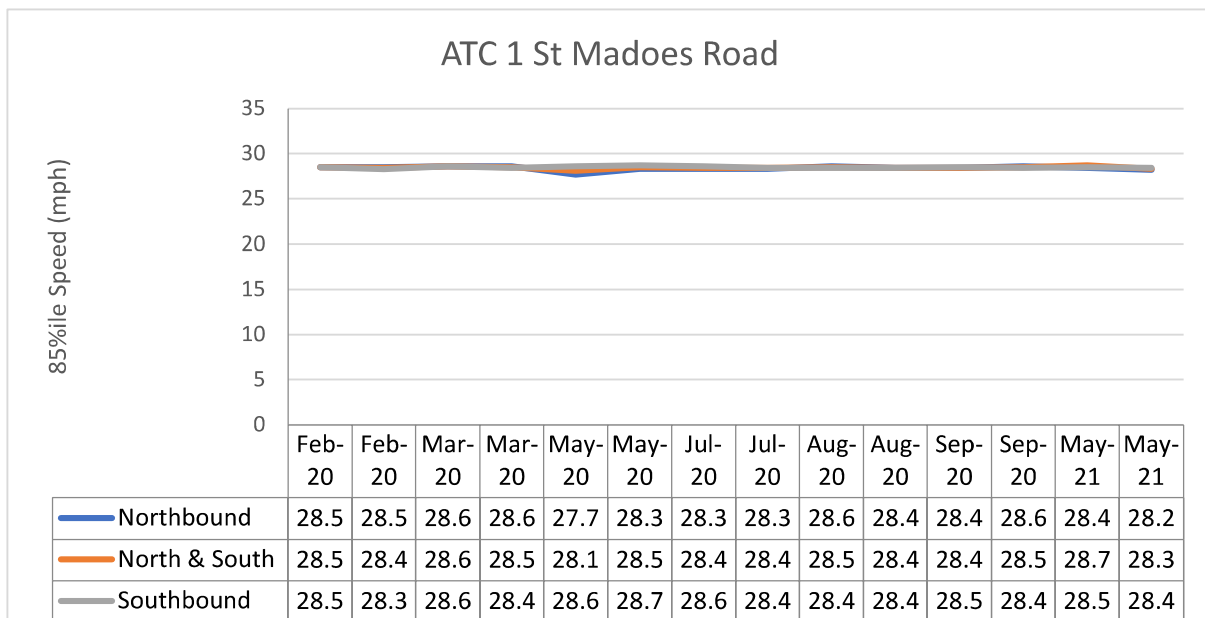
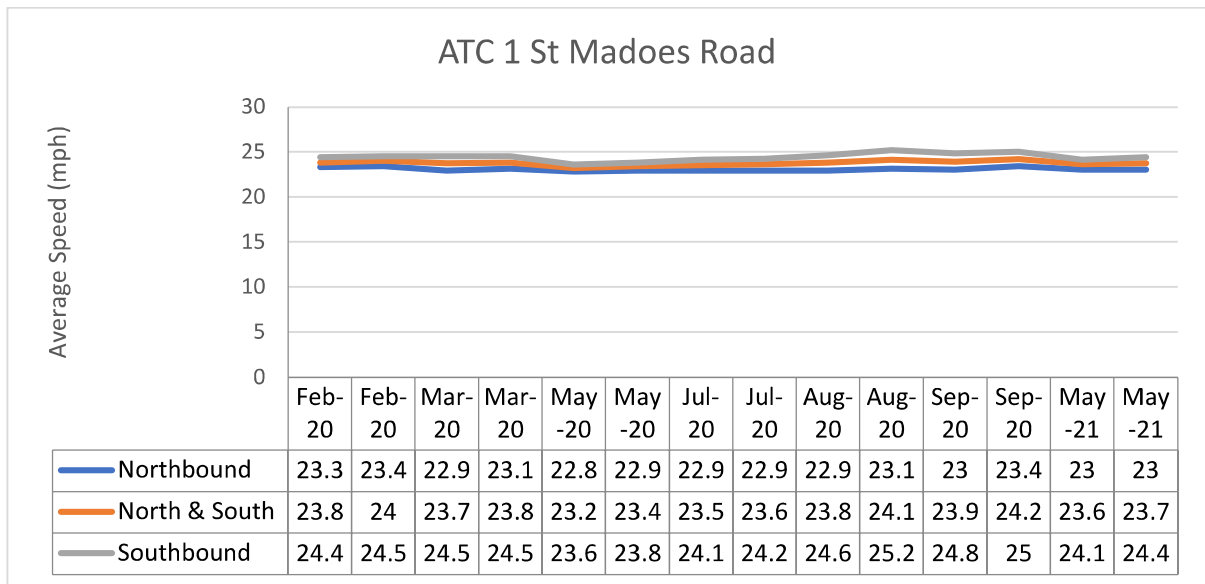
- 3.1 The High Street was already subject to a full-time, mandatory 20mph speed limit installed as part of the Errol Placecheck community engagement project several years ago. A part-time 20mph speed limit operated outside Errol Primary School at school times. This was supplemented by two priority systems installed as speed reduction measures as part of the school travel planning programme.
- 3.2 For the trial, the 20mph speed limit was made full-time and extended to cover the entire village. Loan Brae connects to a 40mph from Inchcoonans. The other approaches to the village are subject to the national speed limit. The road alignment and road widths of the High Street, and the older parts of the village to the south, are poor ensuring lower vehicle speeds. The new housing layout across the north of the village has been constructed with a sequence of physical traffic calming measures.
- 3.3 Six traffic counters were installed – on High Street, St Madoes Road, Loan Brae, Elm Street, Preston Watson Street and Station Road. Vehicle-activated signs were located on Loan Brae and Station Road. The location map, speed tables and speed charts for Errol are contained in Appendix 3.
- 3.4 Before the trial, the average vehicle speed on High Street was 19mph. The existing 20mph speed limit was self-regulating due to the poor horizontal alignment, restricted road width and presence of parked vehicles. Following the introduction of the various traffic calming measures, the average speed dropped to 17.5mph. The 85th percentile speed remained in the low 20s throughout the trial. Less than 1% of vehicles were recorded travelling above 30mph. No vehicles were recorded travelling at excessive speeds.

- 3.5 On St Madoes Road, both the average and 85th percentile speeds remained constant in both directions, at 24mph and 28mph respectively. The percentage of vehicles travelling above 30mph fluctuated between 4% and 6% but was unaffected by the introduction of traffic calming measures in the village. No vehicles were recorded travelling at excessive speeds during the trial. This travel pattern is largely explained by the 90-degree bend at the southwest of the village, which demonstrates how physical measures (to either the horizontal or vertical alignments) suppress vehicle speeds.
- 3.6 On Loan Brae, the average speed before the trial was 30mph and the 85th percentile speed was 37mph. Northbound, outgoing traffic travelled around 2mph faster than southbound, incoming traffic. Vehicle speeds reduced in increments of 2mph following the introduction of the first two traffic calming measures (signs and VAS). The reduction in the number of vehicles travelling above 30mph was more pronounced, dropping by 18% from 51% to 33%. The number of vehicles travelling at excessive speeds fluctuated between 2% and 7% over the survey periods. Following the introduction of the speed cushions, the average speed dropped to 20mph and the 85th percentile speed dropped to 27mph, a reduction in both speed categories of 10mph. There were no recorded excessive speeds after the speed cushions had been installed.
- 3.7 On Elm Street, the average vehicle speed in both directions throughout the trial remained at 25mph. The 85th percentile speed remained at 30mph although northbound traffic was 2mph faster than southbound. The percentage of vehicles travelling above 30mph fluctuated between 12% and 15%. There were no vehicles recorded at excessive speeds.
- 3.8 On Preston Watson Street, average and 85th percentile speeds throughout the trial remained at 15mph and 18.5mph respectively, although northbound traffic was slightly higher than southbound. No vehicles were recorded travelling above 30mph or at excessive speeds. No vehicle-activated signs were installed on these streets as they had existing traffic calming features (ramps).
- 3.9 Installing the 20mph speed limit signage had minimal impact on vehicle speeds on Station Road. Speeds dropped by around 1mph in each direction. There was a similar 1mph reduction following the introduction of the vehicle-activated sign. The signs and the VAS had no impact on the 85th percentile speed. There was a 2% drop each time on the percentage of vehicles travelling above 30mph (20% to 18% to 16%). 3 vehicles a day were recorded travelling at excessive speeds which dropped to 2 following the activation of the VAS.
- 3.10 Physical traffic calming measures had the most significant impact on general and excessive vehicle speeds. Following the introduction of the speed cushions, the percentage of drivers travelling above 30mph dropped from 30% before the trial to 7.5% and a single vehicle was detected each day travelling at excessive speed. Average speed was 23mph and the 85th percentile speed was 27mph. Speeds were 2mph higher northbound leaving Errol than southbound incoming traffic.
- 3.11 The poor road environment on the High Street, the road alignment on the St Madoes Road and the ramps on Preston Watson Street reveal that physical measures have the greatest impact on vehicle speeds and driving behaviour. Despite the presence of physical measures on Loan Brae and Station Road, the vehicle speeds are still too high for the lower limit to be self-enforcing. Adjustments or additions to the trial measures on some streets will need to be considered to bring the 85th percentile speed down further.

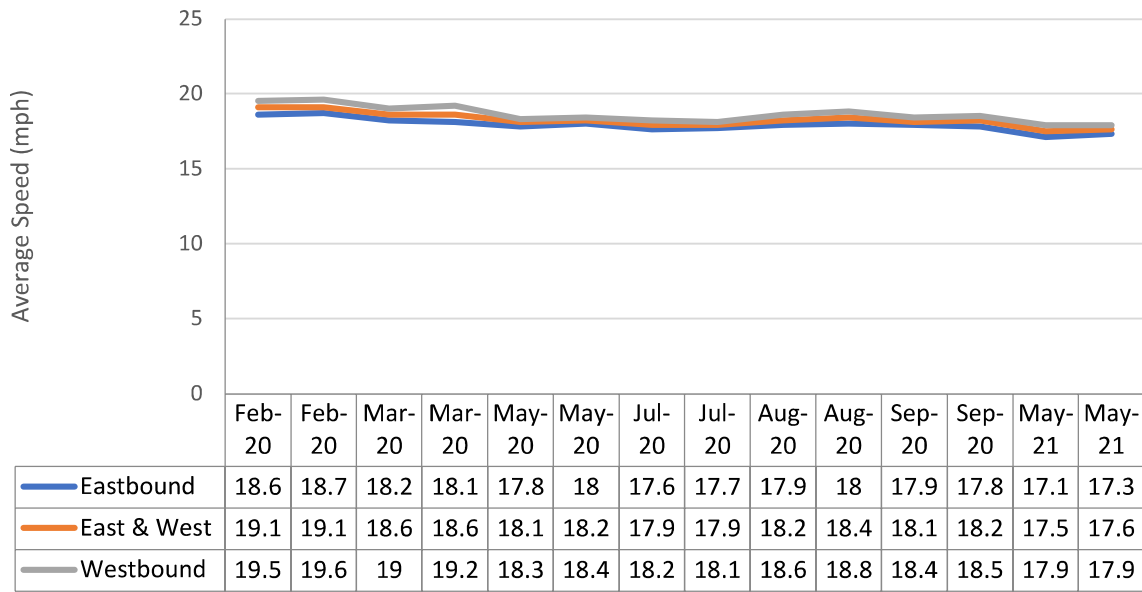
Average Speed Error



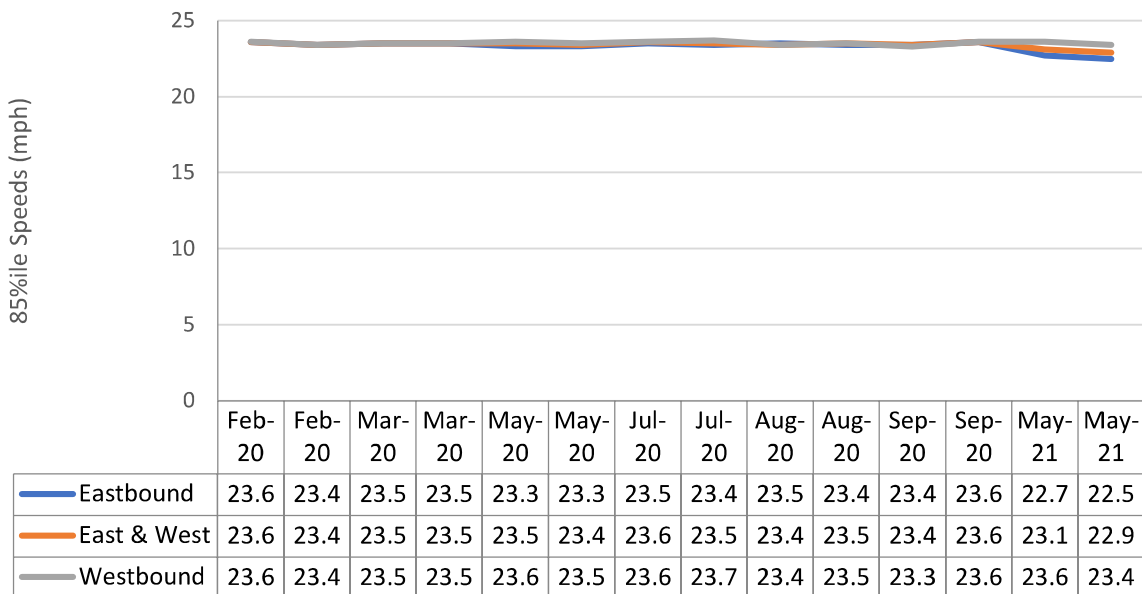


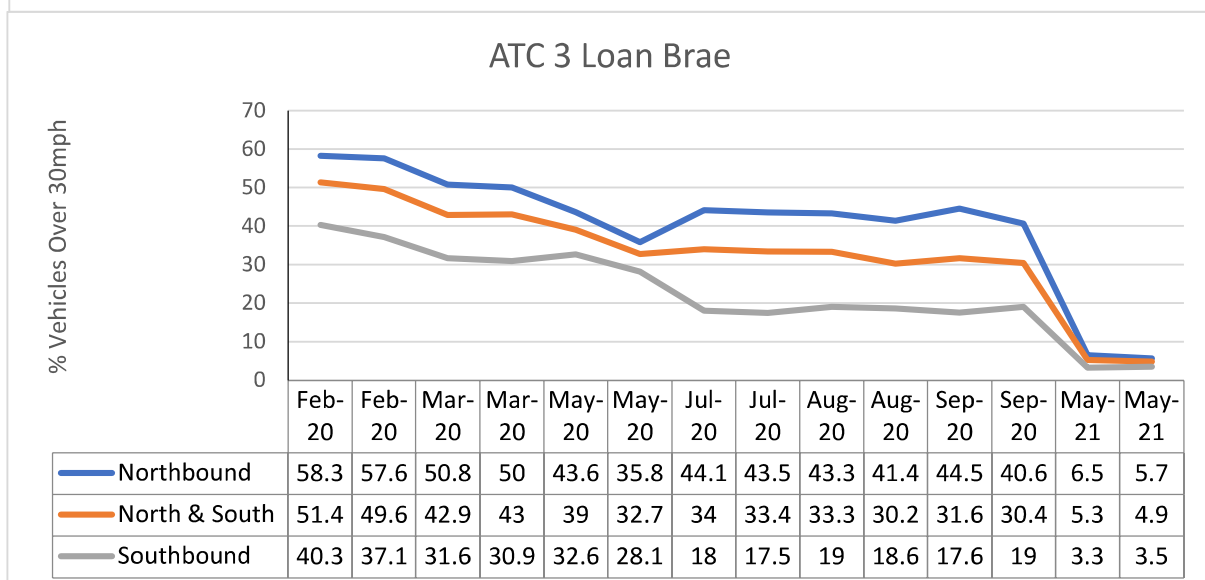
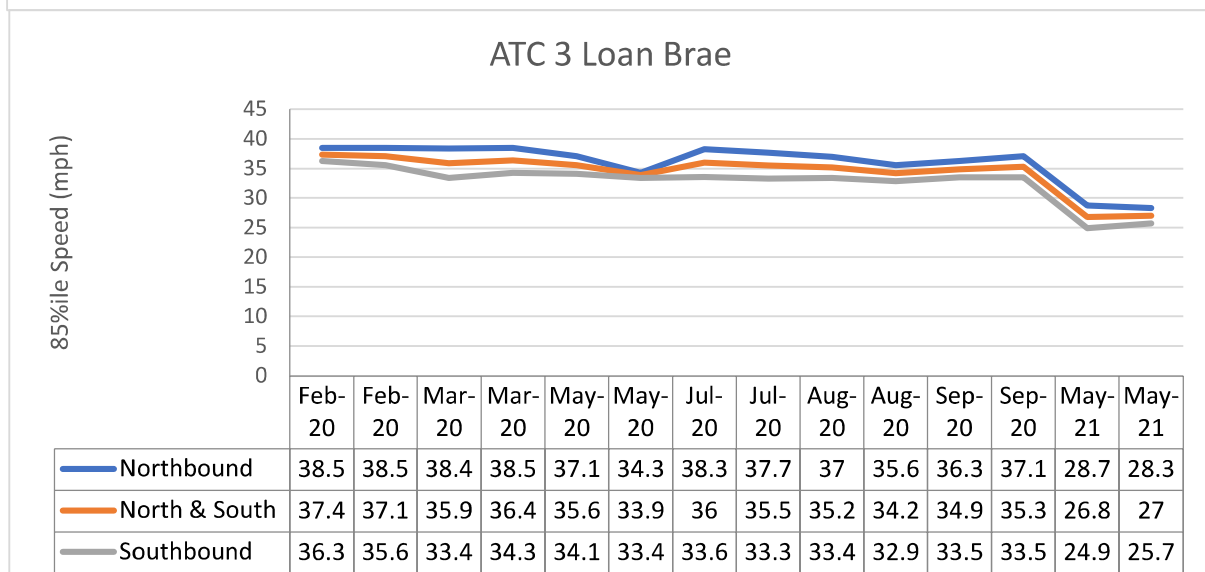
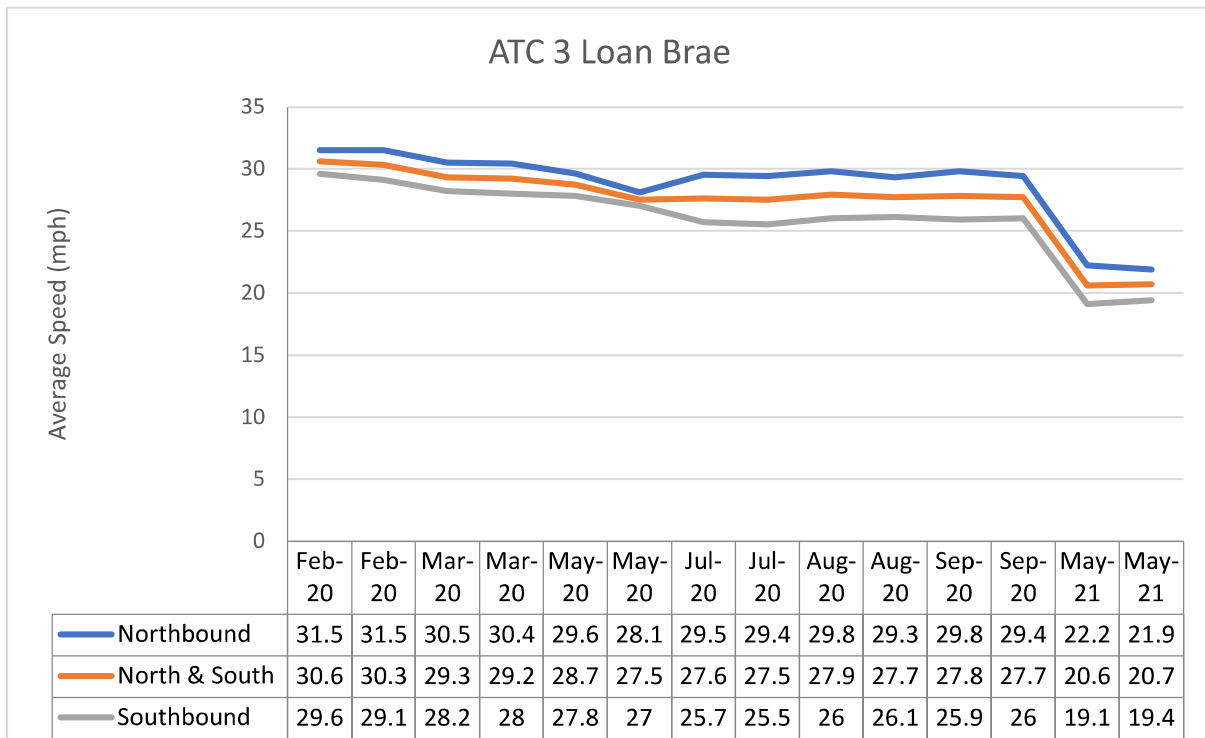


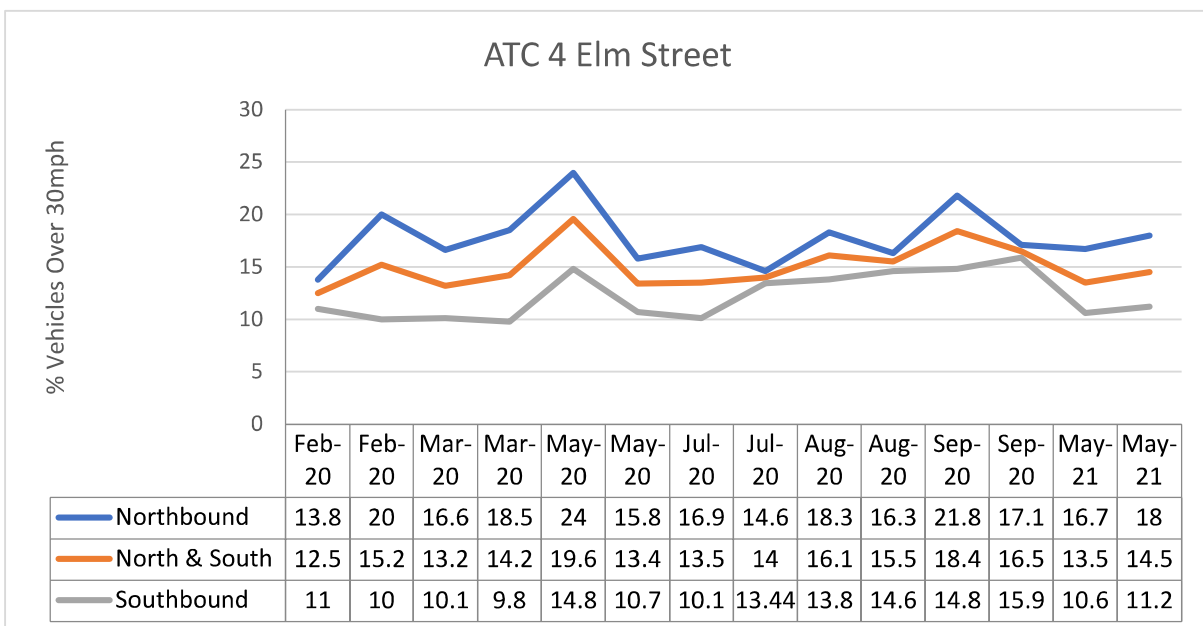
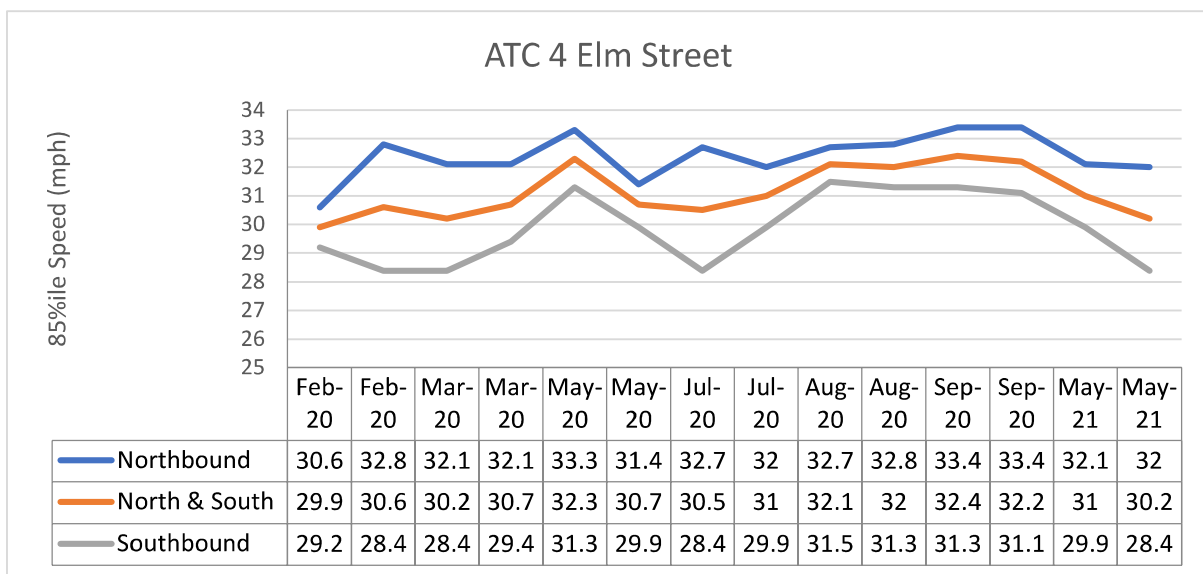
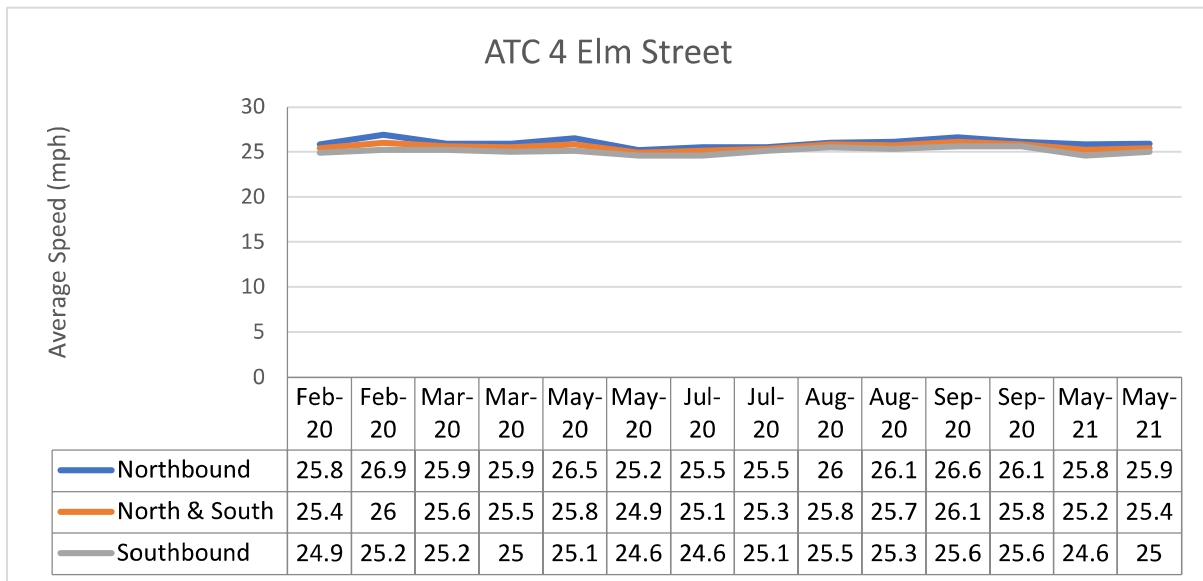
ATC 2 High Street



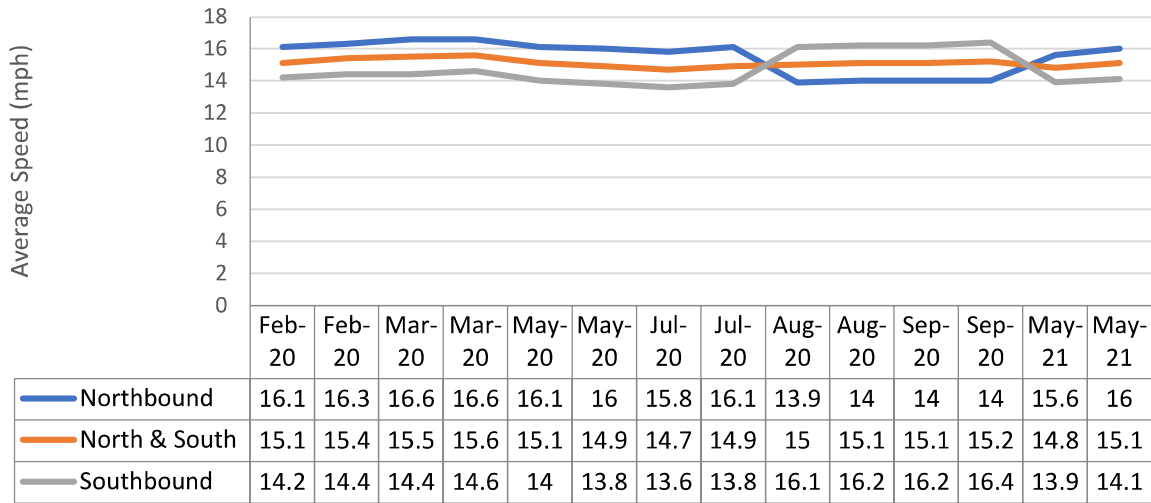
ATC 2 High Street







ATC 5 Preston Watson Street



ATC 5 Preston Watson Street

