

## **A9 Data Monitoring Analysis Report – July 2015**

1. Introduction
2. Casualty Analysis
3. Vehicle Speed Data
4. Offender Numbers
5. Incident Frequency & Impact
6. Journey Time Reliability
7. Traffic Volumes

### **1. INTRODUCTION**

This paper is designed to provide a broad analysis of the trends emerging from the A9 in respect to the key performance indicators of:

- Casualties
- Vehicle Speed
- Offender Numbers
- Incident Frequency & Impact
- Journey Time Reliability

Police Scotland have advised that the quarterly update in respect to the number of drivers prosecuted will be provided for inclusion in this report. This data is owned by Police Scotland and any queries relating to it must be addressed to them.

The data for this report is drawn from the A9 Data Monitoring Report which is published quarterly on the A9 Safety Group website. This analysis covers the period May 2015 to July 2015 (incidents are Q2 Apr – Jun) as an overall assessment of the performance of the route.

### **2. CASUALTY ANALYSIS**

This third quarterly release incorporates the first information in relation to collision and casualty figures covering the period from October 2014 to March 2015. These figures are reported against the average of the equivalent months in the preceding 3 year period (2011 - 2013). It must be emphasised that reporting accident and casualty figures over a period as short as a few months is not typical, with a three year period being considered more appropriate to comment on overall performance.

Over the reported time period, compared to the defined baseline:

- The number of fatal and serious collisions between Dunblane and Inverness is down by over 29%, with fatal and serious casualties down 50%.

- The number of fatal and serious collisions between Perth and Inverness is down by over 5%, with fatal and serious casualties down almost 41%.
- The number of fatal and serious collisions and fatal and serious injuries between Dunblane and Perth is down 100%.
- The total number of injury collisions (including slight injury accidents) between Dunblane and Inverness is down by over 28%, with a reduction in all forms of injury related casualty, again including slight injuries, of just over 50%.
- The number of fatal collisions between Perth and Inverness in the reporting period is 3, some 20% (0.5 accidents) higher than the average figure for the equivalent period over the 3 preceding years. The number of fatalities resulting from these was 4, some 9% higher than the baseline average of 3.67. From October 2014.

Investigations into the fatal collisions have still to be concluded and as such it is not appropriate at this time to provide detailed commentary. Police Scotland have confirmed however that neither excessive speed or overtaking were considered to be the primary causation in any of the fatal collisions. A Transport Scotland Road Safety Officer has also visited the location of each fatal collision and has established that there are no immediate engineering concerns which require to be addressed.

The data used in the A9 Data Monitoring Report is sourced from Transport Scotland Management Information. It should be clarified that due to the detailed verification process this data may vary slightly with the official statistics published by the DfT. The next Scotland wide official statistics for Jan-Mar 2015 will be published by DfT on the 6 August 2015.

### **3. VEHICLE SPEED DATA**

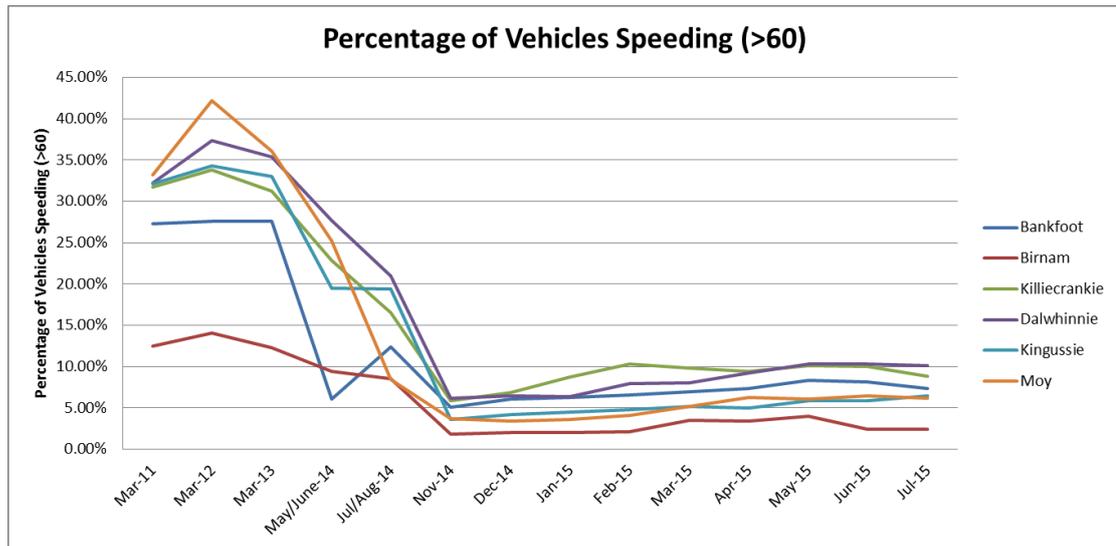
The significant reduction in the number of vehicles exceeding the maximum speed limits along the A9 corridor between Dunblane and Inverness is now suggesting that driver behaviour in terms of speed is much more consistent with the significant reductions experienced in the early months now becoming the established baseline. As intimated in previous reports historical evidence from other average speed camera locations suggested that this was likely to be the trend and that an established pattern is now becoming evident on the A9.

The latest data from the A9 continues to demonstrate this profile and while there is a slight drop in the numbers exceeding the speed limit it continues around 1 in 15 vehicles compared to the benchmark figure of 1 in 3. The impact of the system on driver behaviour in respect to vehicles travelling at more than 10 mph above the speed remains consistent with the latest monitoring figures indicating a reduction of 95% from the benchmark figure which equates to a reduction from 1 in 10 vehicles to 1 in 250.

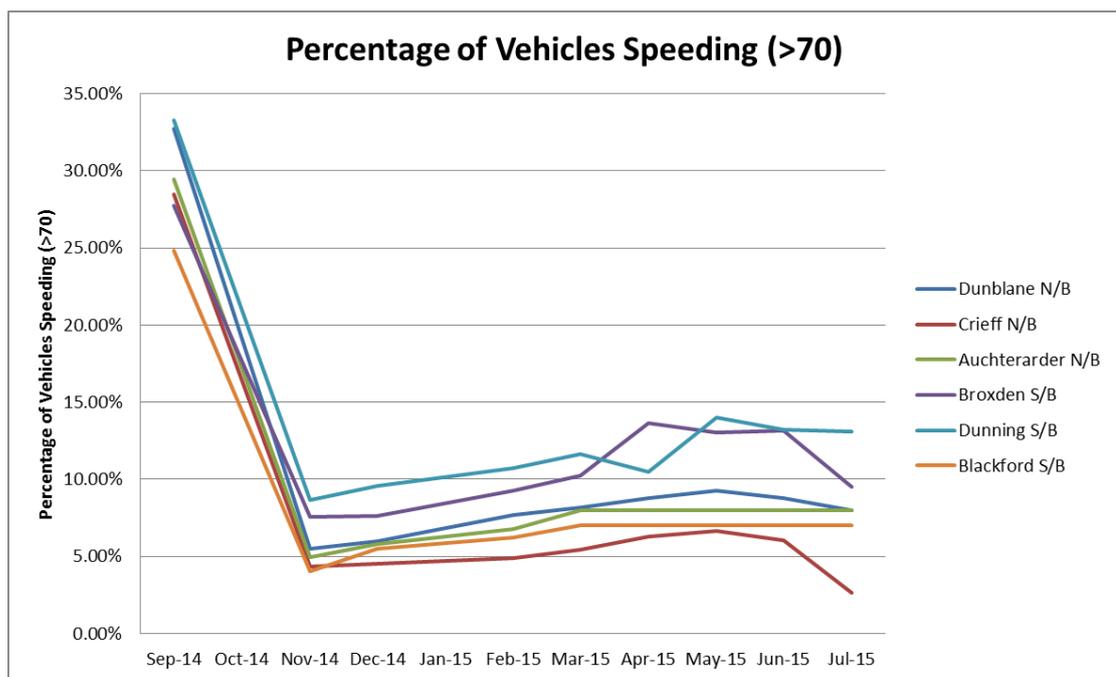
The data incorporates all vehicles including emergency service vehicles which may have been recorded responding to an emergency.

There continues to be intermittent issues with the data collection on the Dunblane to Perth stretch due to technical and third party issues however the available data also continues to evidence similar reductions to those being experienced north of Perth.

The graphs below represent the speed profiles of the Perth to Inverness and Perth to Dunblane sections. Both graphs are clearly indicating the emerging driver behaviour patterns on both sections of the route.



Perth to Inverness Speed Profile



Dunblane to Perth Speed Profile

#### 4. OFFENDER NUMBERS

Since the system went live on the 28<sup>th</sup> October 2014 through to 20 July 2015 there have been 4,100 vehicles detected by the system exceeding the speed limit which warranted further action. While there has been a rise in vehicles detected over the previous reporting period this remains an extremely high level of compliance for a system operating on a 24/7 basis in all conditions. As in previous reports, to put some perspective around the figure this

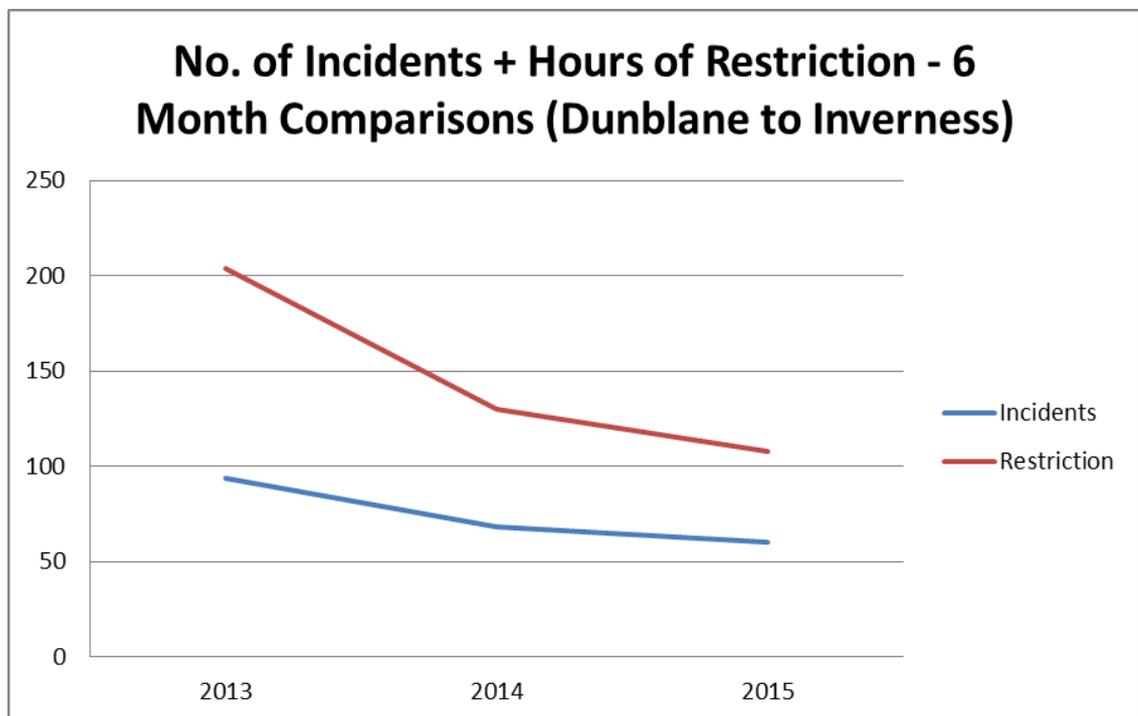
equates to an average of 15 vehicles per day across the whole of the enforcement area based on an average daily traffic volume in each direction of over 10,000 vehicles between Perth & Inverness and 24,000 vehicles between Dunblane and Perth. In percentage terms the compliance figure remains over 99.96% of the average daily traffic volume on the A9.

**5. INCIDENT FREQUENCY & IMPACT**

There is now sufficient incident data to compare the first six months over the last three years with the 2013 figure which as indicated in previous reports was considered to be the baseline figure. Using this baseline, the first six months of 2015 demonstrates a reduction in incidents by 43% and an 89% reduction in incident impact across the whole of the Dunblane to Inverness stretch.

The biggest reduction has been recorded on the Dunblane to Perth section while there has been more variability on the Perth to Inverness section which saw a rise during the last three months. As previously reported winter weather has the potential to significantly impact on Perth to Inverness section which was evident in the winter of 2015. Closures north of Perth due to serious incidents also generally impact on traffic more significantly given the available road space and the detailed police investigation requirements. During the 2<sup>nd</sup> quarter of 2015 two major closures were responsible for 68% of the overall incident impact times.

Incident frequency and impact can be influenced by a wide number of factors and the data provided does not consider this aspect in detail and represents an indication of trends used alongside the other monitoring data. This trend continues to show an overall reduction in incident numbers and subsequent impact when considered against the 2013 baseline



Incident Frequency & Impact

**6. JOURNEY TIME (Perth – Inverness)**

The journey time data continues to remain within the scope of the original predictions with the latest data set demonstrating improvements over the 2013 baseline rising to a maximum of 9 minutes above the baseline. The original projection was of rises between 4 and 14 minutes dependent on the day of the week.

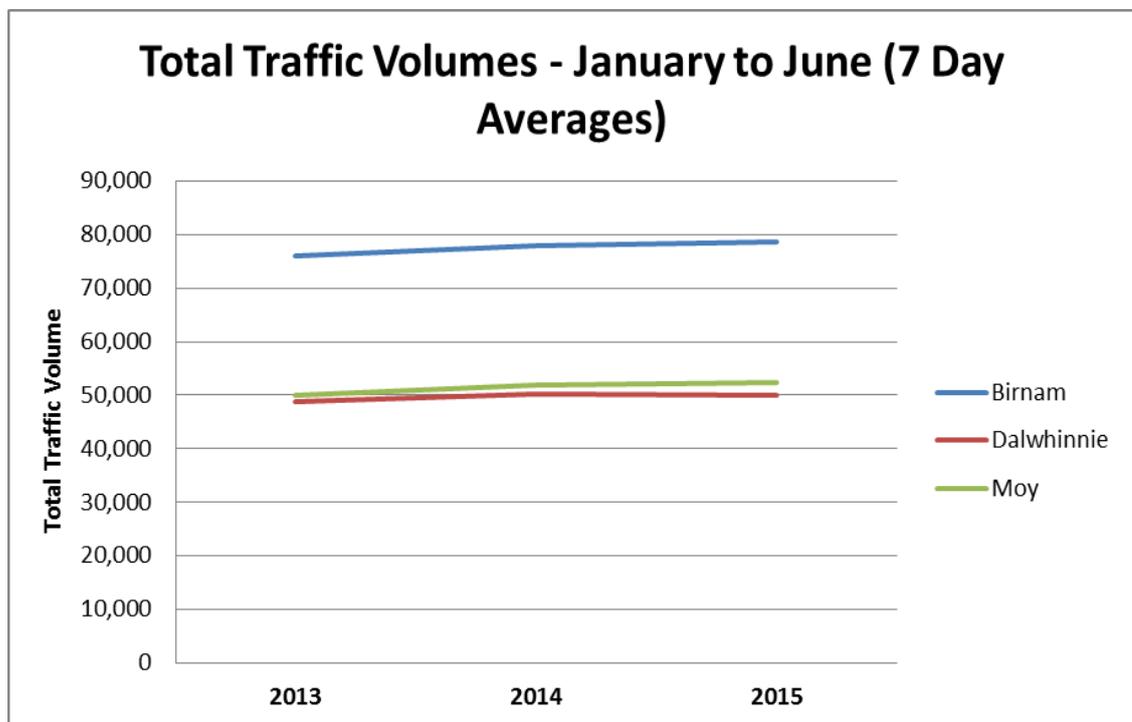
The data is now demonstrating an established pattern and indicates that overall journey times have not been influenced significantly. The original projections were based on a static traffic flow while the counter stations have been recording traffic growth along the network.

The smoothing of the journey times against rising traffic volumes on the route continues to provide a strong indicator in terms of changes to driver behaviour.

## 7. TRAFFIC VOLUMES (Perth – Inverness)

The traffic volume figures provide a comparison month on month between 2013 and 2015 in respect to three counting stations broadly representing traffic flow along the A9. As previously reported the figures can show a degree of variability in traffic volumes throughout the comparison period but the profile is a rising volume of traffic on the A9.

The graph below illustrates the trend of increased traffic growth on the A9 when comparing the equivalent periods over the past three years. The percentage growth in traffic across the route in this comparison period varies from 2.69% at Dalwhinnie, 3.37% at Birnam and 5.12% at Moy. This equates to an average growth of 3.73% between Perth and Inverness.



A9 Traffic Volume Comparison