A9 Data Monitoring and Analysis Report

August 2016

Content

1. Executive Summary

This latest report provides a comprehensive range of data sets designed to evaluate the impact of the A9 Safety Group's strategy for the route between Dunblane and Inverness. This report contains collision and casualty data for the first 18 months of operation of the average speed cameras (to 30 April 2016) which is the mid-point of the evaluation period. The other performance data covers the period to 30 June 2016 unless otherwise stated.

The overall summary is that there continues to be a sustained improvement in driver behaviour and a corresponding fall in collisions and casualties. In human terms 4 fewer people have been killed, 22 fewer seriously injured and 62 fewer people slightly injured on the A9 in this 18 month period compared to the equivalent baseline period. There are also additional benefits brought through reduced incidents and their subsequent impact, which has improved journey time reliability. The main headlines from the data monitoring are:

- The number of fatal casualties between **Dunblane and Inverness** is down by over 33% compared to the baseline average
- The number of 'fatal and serious' collisions between **Dunblane and Inverness** overall is down by over 45%, with fatal and serious casualties down 62%
- There have been no fatal collisions between **Dunblane and Perth** and the number of serious collisions and injuries is down by almost 85%
- The number of 'fatal and serious' collisions between **Perth and Inverness** is down by almost 32%, with fatal and serious casualties down by almost 58%
- The number of serious injury casualties between **Perth and Inverness** is down by over 71%
- The overall number of casualties of all classes between **Dunblane and Inverness** is down by 50%
- The number of vehicles exceeding the speed limit remains low, at 1 in 10 compared to the historic benchmark figure of 1 in 3 and the number of vehicles speeding excessively (more than 10 mph above the speed limit) remains low, with a sustained reduction from the historic benchmark figure of 1 in 10 vehicles to 1 in 250
- The number of vehicles detected by the ASC system which were considered by Police Scotland for further action remains extremely low at an average of 13 per day (less than 0.03% of the overall volume of vehicles using the route).

2. Overview

The A9 Safety Group was set up by Transport Scotland in July 2012. The main aim of the group is to work together to positively influence driver behaviour in a way that helps to reduce road casualty figures on the route before and during the A9 dualling programme.

To assess the impact of the A9 average speed camera system it has been agreed to monitor a number of key performance indicators across the route and compare them on an on-going basis with an established baseline comprising of data gathered prior to the introduction of the camera system. More information on these baselines is contained within this report.

This report is structured as a live document to be updated on a regular basis to allow for regular monitoring against the established baseline. It uses established Transport Scotland data sources and does not contain information on the technical performance of the average speed camera system, the operational management of the system or the number of offenders detected. Where information on offender numbers is presented within this document it has been sourced from Police Scotland; Transport Scotland do not hold detailed information of this nature.

3. Purpose

The A9 average speed camera system (ASC) is the largest route based safety strategy in existence in the UK and is one of a range of measures introduced by the A9 Safety Group to positively change driver behaviour on the route. The overall aim is to reduce casualties while improving journey time reliability through reduced incident occurrence on the route.

The A9 strategy key deliverables are:

- Casualty Reduction – reduction in the number of people being killed or seriously injured
- Reduction in excessive speeding and improvements in speed limit compliance
- Incident frequency reduction
- Improved journey time reliability

From these key deliverables an assessment can be made not only on the key casualty reduction indicator but also an identification of improvements in the operational efficiency on the route. Driver attitude is more of a subjective issue and a repeat of the driver survey carried out in May 2014 was undertaken in March 2015 to provide a comparative analysis on this subject. The report is published at http://a9road.info/

The principle purpose of this report is to provide on-going monitoring of the evidence base emerging from the A9 to support an overall assessment of the impact of the strategy. This will also provide the evidence base for any further supporting engineering or educational measures if required.

4. Baseline Data Sources

Casualties

The casualty baseline methodology follows established practice for road safety schemes in providing the data for the three years before the introduction of the scheme and the three years after. In respect to the A9 data the baseline data is taken from the 1 January through to 31 December for each calendar year from 2011 through to 2013. Normally data capture would involve the immediate 3 year period preceding the start of the project but given the visible 7 month construction programme during 2014 for the ASC the A9 Safety Group decided to exclude this period to ensure that baseline data was not influenced by this activity. The casualty classification is also in standard format with the 'Killed Seriously Injured' (KSI) being the key performance indicator.

The Road Accident statistics are compiled from returns made by Police Scotland which follow an agreed national standard known as 'Stats 19'. These returns are subject to a validation process and given the steps involved this effectively means that it can take up to 9 months before accurate statistics are available.

While the above structure will be used to formally evaluate the impact of the cameras and this will be published in due course there is a desire to provide an understanding of how the route is performing in real time. To provide this understanding we are now at the mid-point in the project where the available casualty data facilitates the provision of a comparison with the equivalent baseline figure. This information is provided in Appendix 'A'.

Speed

The Vehicle Speed and Speed Enforcement Summary Report 2012 was the primary evidence base for establishing vehicle speeds across the A9 and in respect to the Perth to Inverness section the data has been utilised as the baseline for comparison purposes. This data was gathered during a neutral month to avoid the influence of seasonal variations. The report is published at: http://a9road.info/uploads/publications/

Between Dunblane and Perth the baseline figure was established in September 2014 using portable equipment positioned near to the then proposed camera sites which had not been constructed at that point.

The analysis data is gathered from counter sites positioned as closely as possible to where the baseline figures were determined. Due to maintenance upgrades and other limitations this was not possible in every section and the closest alternative was used instead.

The data gathered is spot speed from the respective counters and not average speed which is assessed by the camera system for enforcement purposes. To allow for consistency in the analysis data is gathered from all sites during the first week of each month (Mon – Sun). This will allow for seasonal trends to be incorporated within all data sets.

On some occasions data sets are not available from specific sites due to technical reasons. The majority of traffic counter sites are solar powered and prolonged poor weather in winter with limited daylight hours can impact on power availability. Maintenance and resurfacing schemes can also interrupt data collection.

Incidents

The incident frequency data is gathered from Traffic Scotland's incident management database and looks at all incidents on the A9 resulting in a carriageway closure or restriction. It does not include weather related closures (it does include incidents which may happen during weather events) or planned closures such as road works.

The analysis of this data is based on restriction time with the output given in hours. The analysis does not consider anything which may have impacted on the closure times.

The data output does provide an overall comparison in terms of the operational efficiency of the route and the subsequent journey time reliability.

Journey Times

Journey Times on the A9 are measured using Bluetooth technology and the available data is sourced from Transport Scotland's established journey time stations immediately north of Inveralmond Roundabout, Perth and immediately south of the A96 Raigmore junction, Inverness. The data is gathered in a similar fashion to the speed data in that it comprises of the first week of each month. A further filter has also been applied to use only the time period 07:00 to 19:00 each day which provides a more realistic picture of travel time during normal traffic conditions.

Roadworks can significantly impact on journey times and while routine maintenance on the route is to be expected where there have been significant projects leading to delays these are qualified. The commencement of the dualling programme may also impact journey times and to cater for this reporting will include by section on either side of dualling works.

Traffic Volumes

To allow for a comparison of traffic volumes on the A9 between Perth & Inverness data has been taken from three counting stations on this stretch of the route to provide an overview of activity. The current baseline shown will be expanded with each month to provide the comparative analysis year on year.

The figures represent the seven day annual average daily flow which is the standard reporting format for this type of data

5. Casualty Analysis

As indicated in Section 4 collision and casualty figures are subjected to an extended validation process and this report considers the validated data available up until 30 April 2016.

This report contains a comparison of the first 18 months of data with the baseline figures (see Section 4 for explanation) which continues to show a sustained drop in injury collisions and casualties across the route. The headline figures from the data are:

- The number of fatal casualties between **Dunblane and Inverness** is down by over 33% compared to the baseline average
- The number of 'fatal and serious' collisions between **Dunblane and Inverness** overall is down by over 45%, with fatal and serious casualties down 62%
- There have been no fatal collisions between **Dunblane and Perth** and the number of serious collisions and injuries is down by almost 85%
- The number of 'fatal and serious' collisions between **Perth and Inverness** is down by almost 32%, with fatal and serious casualties down by almost 58%
- The number of serious injury casualties between **Perth and Inverness** is down by over 71%
- The overall number of casualties of all classes between **Dunblane and Inverness** is down by 50%

Since the last report there have been no fatal collisions on the A9 within the monitoring area.

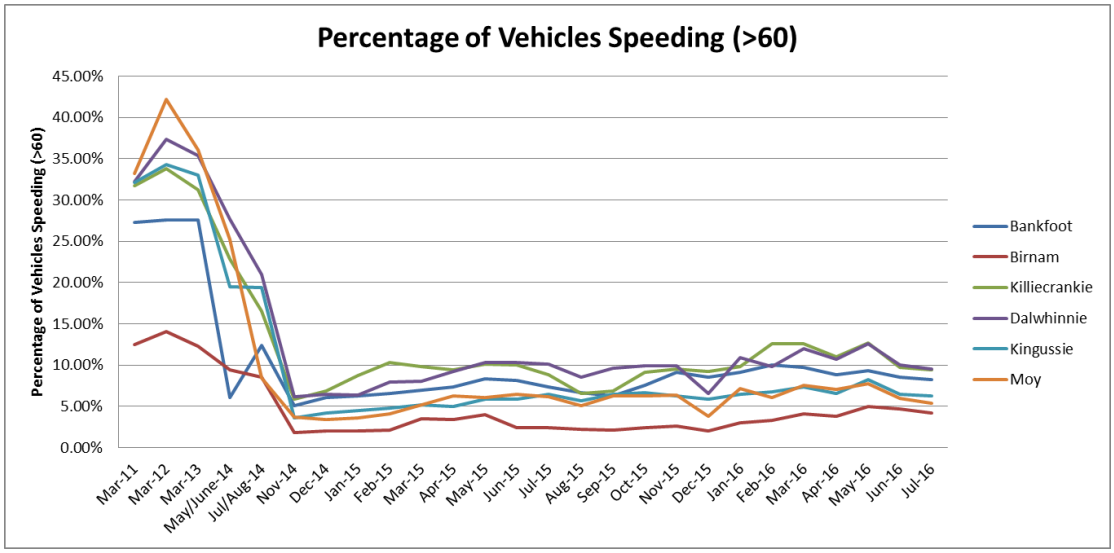
6. Vehicle Speed Data

There has been very little change to the speed profile along the route with the data continuing to support a sustained change in driver behaviour. The latest data continues to demonstrate high levels of compliance and the occurrence of vehicles travelling at more than 10 mph above the speed limit continues to be exceptionally low.

As previously reported there were some minor concerns about variability of speed and incidents on the southbound downhill stretches south of Perth. BEAR Scotland as members of the A9 Safety Group have now investigated this and no further mitigation measures are deemed necessary with the incident causations not being attributed to either the carriageway layout or any visibility issues. The latest data is suggesting that the speed profile is now fairly consistent and there has been no repeat of the incident type on this stretch.

The previous report also indicated some variability on speed on the single carriageway section immediately north of Killiecrankie. The monitoring exercise on this stretch is still on-going.

The graph below represents the speed profile between Perth to Inverness and continues to demonstrate the established driver behaviour pattern on this section of the route.



Perth to Inverness Speed Profile

Police Scotland have advised that since the system went live on the 28th October 2014 through to 24 July 2016 there have been 8,015 vehicles detected by the system exceeding the speed limit which warranted further action. The latest quarterly data indicates that the

average of 13 vehicles per day detected exceeding the operational threshold has remained consistent. To put some perspective around this figure this equates to an operational compliance in the region of 99.97% or 8,015 vehicles from a total of around 22 million vehicle journeys on the A9 during this period.

These figures do not include the dualling construction between Kincraig and Dalraddy which is monitored by a separate ASC system and is subject to a temporary 40 mph limit. Police Scotland publish the figures separately for this stretch.

7. Incident Frequency & Impact

The latest data set incorporates the incident data from the second quarter of 2016 which continues to support the sustained reductions in both frequency and impact reported in earlier data releases.

Breakdowns of heavy goods vehicles are now one of the principal causes of restrictions being placed on the route and going forward it is intended to look more closely at the causes of the breakdowns to consider what if any preventative measures may be appropriate for the haulage industry to consider.

It was also noted during the analysis that three incidents north of Perth attributed more than 50% of the overall restriction time with the recovery of a shed load being particularly problematic for the recovery agencies.

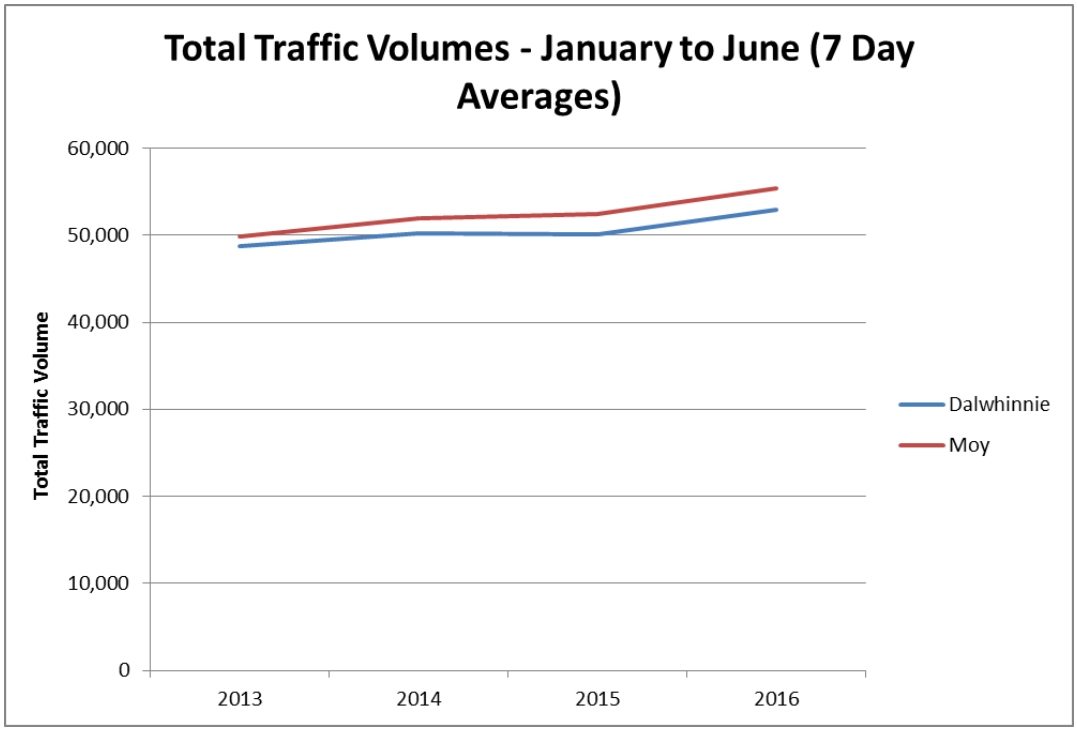
8. Journey Time Analysis – Perth to Inverness

In line with other data sets the journey time analysis continues to demonstrate consistency in performance across the route with journey times well within the original projected range. The major roadworks project between Kincraig and Dalraddy has had minimum impact on overall journey times to date.

9. Traffic Volumes

Traffic counters are indicating that traffic growth continues to be sustained along the length of the A9 with growth in the first 6 months of 2016 averaging 6.7% on the Dalwhinnie section and 5.8% on the Moy section. Long term technical difficulties with Birnam counter site has not allowed for a comparison but is considered to be comparable with the rest of the route.

The diagram below reflects this growth.



Perth to Inverness - Traffic Volumes

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Appendix A Collision & Casualty Analysis – Dunblane to Perth

DUNBLANE TO INVERNESS - 18 MONTHS ASC OPERATION TO THE END OF APRIL 2016

DUNBLANE - PERTH COLLISIONS

Year	Fatal	Serious	KSI	Slight	TOTAL
2011	1	3	4	14	18
2012	0	5	5	20	25
2013	1	3	4	19	23
3 Year Total	2.00	11.00	13.00	53.00	66
18 Month Average	1.00	5.50	6.50	26.50	33.00
First 18 Months ASC	0	1	1	18	19
% Average Variation	**-100.0%**	**-81.8%**	**-84.6%**	**-32.1%**	**-42.4%**

PERTH - INVERNESS COLLISIONS

Year	Fatal	Serious	KSI	Slight	TOTAL
2011	6	5	11	29	40
2012	5	8	13	30	43
2013	4	10	14	22	36
3 Year Total	15.00	23.00	38.00	81.00	119.00
18 Month Average	7.50	11.50	19.00	40.50	59.50
First 18 Months ASC	7	6	13	26	39
% Average Variation	**-6.7%**	**-47.8%**	**-31.6%**	**-35.8%**	**-34.5%**

DUNBLANE - INVERNESS COLLISIONS COMBINED

Year	Fatal	Serious	KSI	Slight	TOTAL
2011	7	8	15	43	58
2012	5	13	18	50	68
2013	5	13	18	41	59
3 Year Total	17.00	34.00	51.00	134.00	185.00
18 Month Average	8.50	17.00	25.50	67.00	92.50
First 18 Months ASC	7	7	14	44	58
% Average Variation	**-17.6%**	**-58.8%**	**-45.1%**	**-34.3%**	**-37.3%**

DUNBLANE - PERTH CASUALTIES

Year	Fatalities	Seriously Injured	Killed or Seriously Injured	Slightly Injured	TOTAL
2011	1	3	4	20	24
2012	0	5	5	25	30
2013	1	3	4	33	37
3 Year Total	2.00	11.00	13.00	78.00	91.00
18 Month Average	1.00	5.50	6.50	39.00	45.50
First 18 Months ASC	0	1	1	22	23
% Average Variation	**-100.0%**	**-81.8%**	**-84.6%**	**-43.6%**	**-49.5%**

PERTH - INVERNESS CASUALTIES

Year	Fatalities	Seriously Injured	Killed or Seriously Injured	Slightly Injured	TOTAL
2011	8	16	24	60	84
2012	8	16	24	91	115
2013	6	17	23	39	62
3 Year Total	22.00	49.00	71.00	190.00	261
18 Month Average	11.00	24.50	35.50	95.00	130.50
First 18 Months ASC	8	7	15	50	65
% Average Variation	**-27.3%**	**-71.4%**	**-57.7%**	**-47.4%**	**-50.2%**

DUNBLANE - INVERNESS CASUALTIES COMBINED

Year	Fatalities	Seriously Injured	Killed or Seriously Injured	Slightly Injured	TOTAL
2011	9	19	28	80	108
2012	8	21	29	116	145
2013	7	20	27	72	99
3 Year Total	24.00	60.00	84.00	268.00	352
18 Month Average	12.00	30.00	42.00	134.00	176.00
First 18 Months ASC	8	8	16	72	88
% Average Variation	**-33.3%**	**-73.3%**	**-61.9%**	**-46.3%**	**-50.0%**

Appendix B - Vehicle Speed Data – Dunblane to Perth

SPEED ANALYSIS DUNBLANE - PERTH (SPOT SPEED)

Sites	SEPTEMBER 2014				DECEMBER 2014				MARCH 2015				JUNE 2015			
	>70	70 - 80	80 - 90	>90	>70	70 - 80	80 - 90	>90	>70	70 - 80	80 - 90	>90	>70	70 - 80	80 - 90	>90
Dunblane N/B	32.70%	29.21%	3.49%	0.00%	5.99%	5.67%	0.24%	0.08%	NOT AVAILABLE				8.76%	8.46%	0.26%	0.04%
Crieff N/B	28.47%	25.10%	3.37%	0.00%	NOT AVAILABLE				5.44%	5.32%	0.11%	0.01%	6.03%	5.89%	0.13%	0.01%
Auchterarder N/B	29.44%	25.42%	3.71%	0.31%	NOT AVAILABLE				8.01%	7.91%	0.08%	0.02%	NOT AVAILABLE			
Broxden S/B	27.74%	25.73%	2.01%	0.00%	7.63%	7.45%	0.16%	0.02%	10.22%	9.91%	0.28%	0.03%	13.15%	12.73%	0.39%	0.03%
Dunning S/B	33.28%	28.87%	4.04%	0.37%	9.59%	9.27%	0.28%	0.04%	11.65%	11.21%	0.39%	0.05%	13.22%	12.69%	0.48%	0.05%
Blackford S/B	24.81%	21.68%	2.89%	0.24%	5.47%	5.36%	0.10%	0.01%	NOT AVAILABLE				NOT AVAILABLE			

Sites	SEPTEMBER 2015				DECEMBER 2015				MARCH 2016				JUNE 2016			
	>70	70 - 80	80 - 90	>90	>70	70 - 80	80 - 90	>90	>70	70 - 80	80 - 90	>90	>70	70 - 80	80 - 90	>90
Dunblane N/B	8.32%	8.06%	0.23%	0.03%	NOT AVAILABLE				9.70%	9.40%	0.27%	0.03%	7.25%	6.98%	0.23%	0.04%
Crieff N/B	6.58%	6.45%	0.12%	0.01%	4.29%	4.21%	0.07%	0.01%	NOT AVAILABLE				NOT AVAILABLE			
Auchterarder N/B	NOT AVAILABLE				8.29%	7.93%	0.27%	0.09%	12.72%	12.16%	0.42%	0.14%	11.58%	11.07%	0.39%	0.12%
Broxden S/B	13.87%	13.45%	0.40%	0.02%	11.04%	10.71%	0.31%	0.02%	16.95%	16.42%	0.51%	0.02%	11.30%	10.95%	0.32%	0.03%
Dunning S/B	15.74%	15.16%	0.51%	0.07%	NOT AVAILABLE				NOT AVAILABLE				12.33%	11.76%	0.50%	0.07%
Blackford S/B	NOT AVAILABLE				NOT AVAILABLE				NOT AVAILABLE				NOT AVAILABLE			

Appendix C - Vehicle Speed Data – Perth to Inverness

SPEED ANALYSIS PERTH - INVERNESS (SPOT SPEED)

Sites	MARCH 2012				DECEMBER 2014				MARCH 2015				JUNE 2015			
	>60	60-70	70-80	>80	>60	60 - 70	70 - 80	>80	>60	60 - 70	70 - 80	>80	>60	60 - 70	70 - 80	>80
Bankfoot	27.60%	24.03%	3.23%	0.34%	6.06%	5.65%	0.37%	0.04%	NOT AVAILABLE				8.19%	7.68%	0.47%	0.04%
Birnam	14.10%	12.62%	1.31%	0.17%	2.04%	1.93%	0.08%	0.03%	3.51%	3.36%	0.14%	0.01%	2.38%	2.28%	0.07%	0.03%
Faskally	NOT AVAILABLE				3.12%	3.02%	0.10%	0.00%	5.26%	5.12%	0.14%	N/A	5.31%	5.19%	0.12%	N/A
Killiecrankie	33.85%	27.41%	5.63%	0.81%	6.86%	6.57%	0.26%	0.03%	9.86%	9.35%	0.46%	0.05%	10.06%	9.50%	0.50%	0.06%
Dalwhinnie	37.39%	28.32%	7.53%	1.54%	6.49%	6.17%	0.28%	0.04%	8.04%	7.68%	0.34%	0.02%	10.32%	9.76%	0.50%	0.06%
Kingussie	34.27%	26.95%	6.16%	1.16%	4.22%	3.93%	0.25%	0.04%	5.19%	4.80%	0.34%	0.05%	5.88%	5.42%	0.40%	0.06%
Moy	42.25%	34.22%	7.08%	0.95%	3.38%	3.32%	0.06%	0.00%	5.19%	5.12%	0.07%	0.004%	6.45%	6.28%	0.15%	0.02%

Sites	SEPTEMBER 2015				DECEMBER 2015				MARCH 2016				JUNE 2016			
	>60	60 - 70	70 - 80	>80	>60	60 - 70	70 - 80	>80	>60	60 - 70	70 - 80	>80	>60	60 - 70	70 - 80	>80
Bankfoot	6.23%	5.81%	0.38%	0.04%	8.55%	8.03%	0.47%	0.05%	9.68%	9.08%	0.54%	0.06%	NOT AVAILABLE			
Birnam	NOT AVAILABLE				NOT AVAILABLE				NOT AVAILABLE				NOT AVAILABLE			
Faskally	3.90%	3.79%	0.11%	N/A	5.19%	5.08%	0.11%	N/A	7.49%	7.35%	0.14%	N/A	NOT AVAILABLE			
Killiecrankie	6.90%	6.51%	0.33%	0.06%	9.27%	8.83%	0.40%	0.04%	12.56%	11.88%	0.60%	0.08%	9.77%	9.03%	0.66%	0.08%
Dalwhinnie	9.65%	9.16%	0.43%	0.06%	6.54%	6.27%	0.26%	0.01%	11.95%	11.33%	0.55%	0.07%	10.01%	9.30%	0.62%	0.09%
Kingussie	6.49%	6.00%	0.43%	0.06%	NOT AVAILABLE				7.34%	6.80%	0.49%	0.05%	6.47%	5.75%	0.63%	0.09%
Moy	6.23%	6.10%	0.11%	0.02%	3.78%	3.72%	0.05%	0.01%	7.51%	7.36%	0.14%	0.01%	5.96%	5.77%	0.15%	0.04%

Appendix D - Incident Analysis – Dunblane to Inverness

INCIDENTS

	Perth - Inverness		Dunblane - Perth		A9 Total	
	Incidents	Restriction	Incidents	Restriction	Incidents	Restriction
2013 Baseline	**135**	**282**	**49**	**121**	**184**	**403**
2014 Total	**62**	**124**	**90**	**120**	**152**	**244**
2015 Total	**71**	**167**	**53**	**65**	**124**	**232**
Q1 2016	11	24	9	11	20	35
Q2 2016	15	32	7	7	22	39

Appendix E - Journey Time Analysis – Perth to Inverness

JOURNEY TIMES

PERTH - INVERNESS

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Jun-13 N/B	116	116	115	117	120	111	109
Jun-13 S/B	115	118	118	116	124	114	110
Dec-14 N/B	131	131	132	128	124	116	124
Dec-14 S/B	134	133	135	134	131	118	127
Mar-15 N/B	125	129	128	127	124	114	116
Mar-15 S/B	127	128	124	124	123	116	116
Jun-15 N/B	123	122	122	124	121	116	116
Jun-15 S/B	125	123	122	124	122	117	115
Sept -15 N/B	122	122	122	122	121	120	116
Sept-15 S/B	122	122	123	122	123	125	130
Dec-15 N/B	129	130	128	135	139	119	120
Dec-15 S/B	129	131	129	140	139	119	120
Mar-16 N/B	123	125	125	126	124	117	119
Mar-16 S/B	124	126	125	126	125	118	118
Jun-16 N/B	125	125	124	125	123	120	118
Jun-16 S/B	124	125	129	124	124	119	119

VARIATION

Dec-14 N/B	15	15	17	11	4	5	15
Dec-14 S/B	19	15	17	18	7	4	17
Mar-15 N/B	9	13	13	10	4	3	7
Mar-15 S/B	12	10	6	8	-1	2	6
Jun-15 N/B	7	6	7	7	1	5	7
Jun-15 S/B	10	5	4	8	-2	3	5
Sept -15 N/B	6	6	7	5	1	9	7
Sept-15 S/B	7	4	5	6	-1	11	20
Dec-15 N/B	13	14	13	18	19	8	11
Dec-15 S/B	14	13	11	24	15	5	10
Mar-16 N/B	7	9	10	9	4	6	10
Mar-16 S/B	9	8	7	10	1	4	8
Jun-16 N/B	9	9	9	8	3	9	9
Jun-16 S/B	9	7	11	8	0	5	9

PERTH - KINGUSSIE

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Dec-15 N/B	78	79	79	94	90	75	74
Dec-15 S/B	78	78	79	89	91	74	74
Mar-16 N/B	77	78	78	78	77	73	74
Mar-16 S/B	76	77	78	77	77	72	73
Jun-16 N/B	78	77	77	78	76	74	73
Jun-16 S/B	76	77	83	77	77	73	74

AVIEMORE - INVERNESS

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Dec-15 N/B	33	34	32	34	32	29	29
Dec-15 S/B	33	35	32	33	31	29	29
Mar-16 N/B	30	30	30	30	30	29	28
Mar-16 S/B	30	31	30	30	30	28	28
Jun-16 N/B	30	30	30	30	30	28	28
Jun-16 S/B	30	30	30	30	29	28	29

Appendix F – Traffic Volumes Perth to Inverness

Traffic Volume Figures - 7 Day Annual Average Daily Flow (Two Way)

2014 COMPARISON WITH 2013 BASELINE	
Birnam Average	**2.7%**
Dalwhinnie Average	**2.5%**
Moy Average	**2.9%**

2015 COMPARISON WITH 2013 BASELINE	
Birnam Average	**1.9%***
Dalwhinnie Average	**3.2%**
Moy Average	**5.4%**

* Some assumption due to technical problems

2016 COMPARISON WITH 2015

Birnam	January	February	March	April	May	June	July	August	September	October	November	December
2015	9,436	11,701	12,426	14,853	14,446	15,364	N/A	N/A	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A	N/A	N/A						
% Increase/Decrease												

Birnam Average

Dalwhinnie	January	February	March	April	May	June	July	August	September	October	November	December
2015	5,590	7,235	7,669	9,498	9,822	10,120	11,547	12,256	10,399	9,817	7,315	6,681
2016	6,340	7,545	8,612	9,632	10,096	10,742						
% Increase/Decrease	**13.4%**	**4.3%**	**12.3%**	**1.4%**	**2.8%**	**6.1%**						

Dalwhinnie Average **6.7%**

Moy	January	February	March	April	May	June	July	August	September	October	November	December
2015	6,365	7,787	8,326	9,772	10,033	10,347	11,498	12,233	10,663	9,866	8,216	7,680
2016	7,122	8,182	9,133	9,880	10,460	10,660						
% Increase/Decrease	**11.9%**	**5.1%**	**9.7%**	**1.1%**	**4.3%**	**3.0%**						

Moy Average **5.8%**

Note: technical difficulties are continuing to cause difficultieswith the Birnam data station