

# THE SPEED CAMERA SWITCH-OFF : ONE MONTH ON

This report looks at changing offence rates at four camera sites following the well-publicised switching off of speed cameras in Oxfordshire on 1st August 2010.

*What happens if you announce to the public that speed cameras are no longer in operation?*

## Introduction

Following a 40% (£559,886.81) in-year reduction in the specific road safety grant to Oxfordshire, the County Council took the decision to withdraw funding from the partnership and to stop the use of fixed and mobile speed cameras, plus red-light cameras on their road network. A total of 72 fixed cameras were 'switched-off' on the 1<sup>st</sup> August 2010 and the move was well-publicised in the local, national and even international press.

It was agreed that speed monitoring would continue to take place at a handful of sites after 1<sup>st</sup> August to determine the effect the switch-off had on offence rates. The monitoring consisted of an electronic counter attached to the radar units still operational within the camera housings, and set to the appropriate 'threshold'. The threshold for 30mph limits has been 35mph for several years in Thames Valley, meaning an offence is classed as a speed of 35mph or greater. The devices do not record average speeds or the number of vehicles exceeding the posted speed limit. The threshold for 40mph roads is 46mph.

This report looks at the evidence retrieved from four sites (six 'locations') in Oxfordshire in the 32 days following the switch-off.

Camera Number / Location	Camera Site	Speed Limit	Installation Date	Direction of Enforcement
600	A4260 / Oxford Road / Kidlington (1)	40	13/07/1993	North
639	West Way-Cumnor Hill / North Hinksey	30	27/04/1995	West
640	West Way-Cumnor Hill / North Hinksey	30	19/09/1994	East
656	A44 / Oxford Road / Woodstock	30	04/05/1995	South-East
657	A44 / Oxford Road / Woodstock	30	04/05/1995	North-West
670	B480 / Watlington Road / Oxford	30	16/08/1996	North-West

Figure 1. Camera Location Details

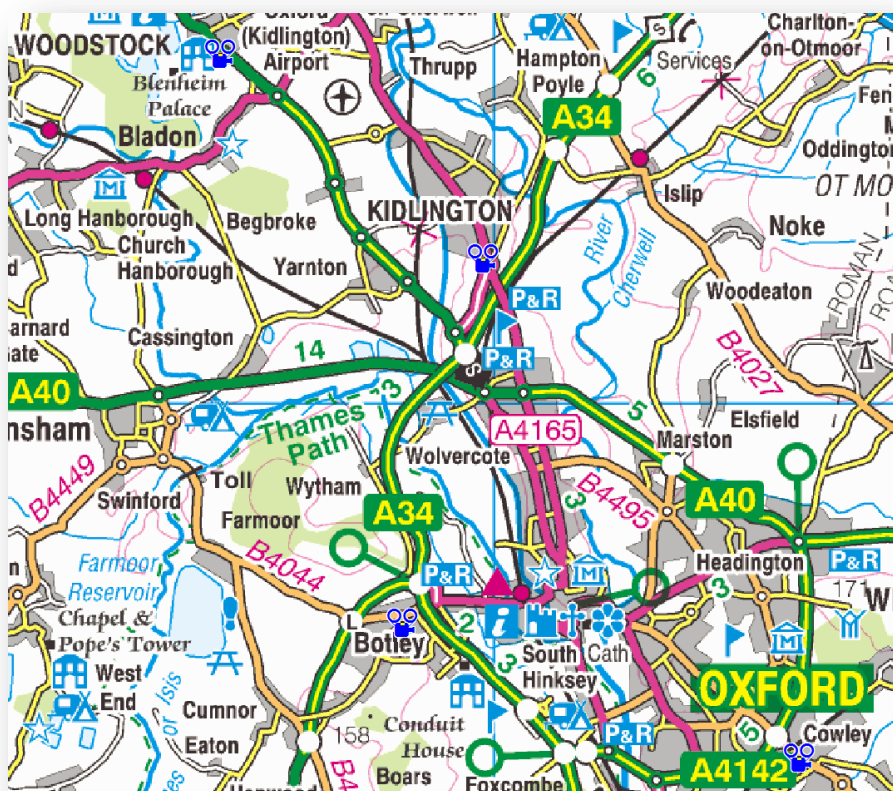


Figure 2. Camera Location Map (Copyright Ordnance Survey)

## Enforcement History

The six locations have been enforced for a total duration of 559 days in the period 2007 – 2010, although not all had been loaded with film in 2010. The average annual offence rates are shown in figure 3 below, along with the average for the period 2007 – 2010. It is worth noting that offence rates have been reducing over time at all locations, with the exception of location 600. The average offence rate has been used for this report, despite the fact that it is higher than the most recent year's result, underestimating the increase in offence rates compared to the most recent trends.

Camera Number / Location	Average Daily Offence Rate - 07-10	Daily Offence Rate - 2010	Daily Offence Rate - 2009	Daily Offence Rate - 2008	Daily Offence Rate - 2007
600	0.6	1.3	0.6	0.5	
639	16.7		15.5	16.9	17.3
640	10.0	11.3	6.3	12.7	13.9
656	44.1	36.3	37.6	43.9	56.0
657	21.6	18.6	19.4	26.2	23.1
670	7.0		6.3	6.8	9.0

*Figure 3 – Previous Offence Rates*

## Survey Results

Three cameras were monitored at a time with one location (670) monitored for the entire period from the 5<sup>th</sup> August through to the 1<sup>st</sup> September. Figure 4 below shows the raw data collected over the period.

Camera Number	Loaded	Unloaded	Number of Days	Offences	Offences per day
640	23/08/2010	01/09/2010	9	366	40.7
656	23/08/2010	01/09/2010	9	1208	134.2
670	23/08/2010	01/09/2010	9	178	19.8
639	10/08/2010	23/08/2010	13	581	44.7
656	10/08/2010	23/08/2010	13	1503	115.6
670	10/08/2010	23/08/2010	13	235	18.1
600	05/08/2010	10/08/2010	5	4	0.8
657	05/08/2010	10/08/2010	5	110	22.0
670	05/08/2010	10/08/2010	5	62	12.4

*Figure 4– Post Switch-Off Monitoring Data*

At the one site continuously monitored it is possible to see an increasing offence rate at each visit, although the largest leap is after the first 'unload' which coincided with the first publication of offence results in the media.

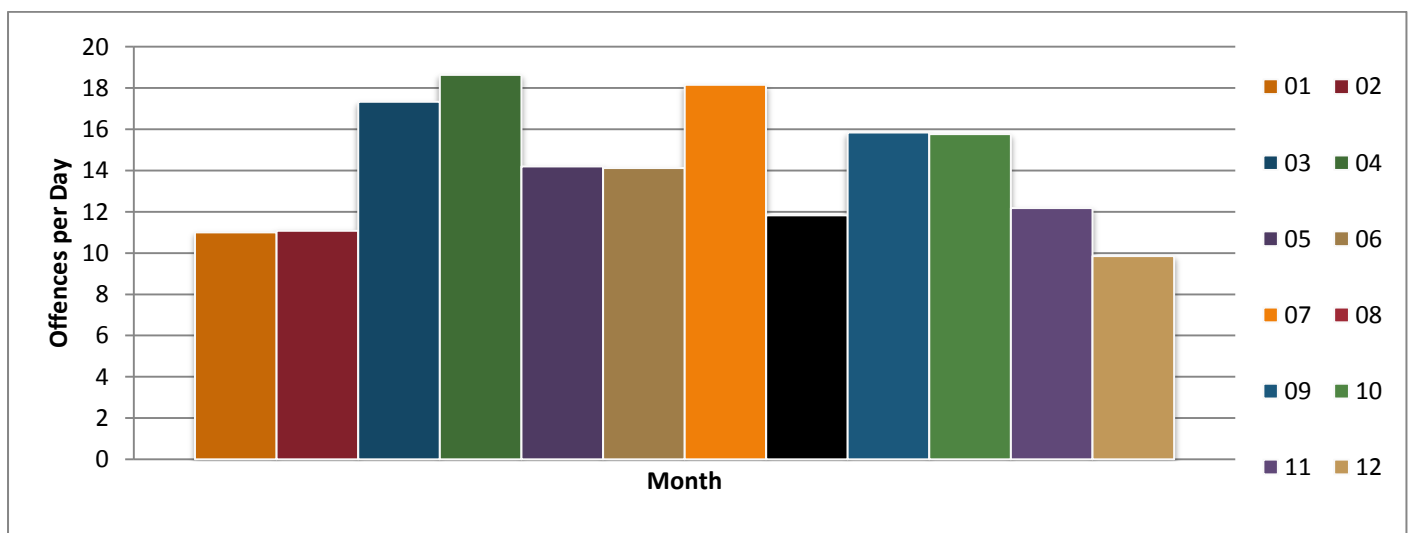
In order to further analyse the results, Figure 5 on page 4 of this report looks at the change in offences rates at the three locations monitored on the three different dates. This shows a similar jump in offending rates towards the end of August. The combined results for the period 5<sup>th</sup> – 10<sup>th</sup> August show an average increase in offences of 1.2x (20%) compared to the 2007 – 2010 average offence rates. If the 2009 offence rates are used then the increase is 1.3x, with location 670 showing the largest jump.

By the time the cameras were unloaded again on the 23<sup>rd</sup> August, the increase in offence rates was now 2.6x (3.0x compared to 2009 averages). Another 9 days later on the 1<sup>st</sup> September at the final check, offence rates had increased to 3.2x (3.9x compared to 2009).

	10/08/2010	23/08/2010	01/09/2010
<b>Expected Offences (2007-2010 average)</b>	29.2	67.8	61.2
<b>Recorded Offences</b>	35.2	178.4	194.7
<b>Increase (factor)</b>	1.2	2.6	3.2
<b>Sites surveyed</b>	(600,657,670)	(639,656,670)	(640,656,670)
<b>2009 Offence Rates</b>	26.4	59.4	50.2
<b>Increase (factor)</b>	1.3	3.0	3.9

*Figure 5– Post Switch-Off Analysis*

One consideration was the fluctuating offence rate by month. It had been said after the release of the initial data that August may be the highest month for offence rates, thus causing the apparent increase. Figure 6 below show the average offence rates per month (numbered 01 for January, 02 February etc.) at Oxfordshire’s fixed camera sites between 2007 and 2010. August (shown in black below) is actually lower than average showing 11.8 offences per day versus 14.2 for the rest of the year.



*Figure 6 – Average Offence Rates at Oxfordshire Fixed Cameras 2007 - 2010*

## Summary and Next Steps

The results, although only at a limited number of locations for a short period of time, indicate that motorists do alter their speed choices when they know a fixed speed camera is not loaded. Even the most conservative analysis shows a 2.9 to 4 times increase in offending at sites only one month after the switch-off. If seasonal variations and more recent offence rates are taken into account then the increases are significantly higher. Local authorities around the country should bear these results in mind if they are considering a similar approach to Oxfordshire as the deterrent effect of the housing alone is diminished by public announcements regarding their operational capacity.

It will be several months before casualty data is available at the location to see if there is a correlation between the increase in offence rates and an increase in recorded injury collisions.

*Richard Owen, Operations Manager, Thames Valley Safer Roads Partnership – September 2010*