# Report of a Working Group about the Publication of Information Related to Speed Cameras

#### 1. The Brief

- 1.1. The group was set up in early January to discuss the details of what information related to speed cameras should be published and how.
- 1.2. This is further to Mike Penning's announcement of the Government's commitment to ensure information is published to show what impact cameras are having on collisions and casualty rates and also how the police are dealing with offenders.
- 1.3. The commitment follows from the Coalition agreement. It is designed to increase the accountability of public bodies by making sure information is available to the public.
- 1.4. It is part of a broader commitment to improve the transparency of government data so that the public can make more informed judgements about the work of central and local government.
- 1.5. The geographical coverage of this work is England and it does not cover other parts of the United Kingdom.

# 2. The Working Group

- 2.1. The working group is chaired by Jerry Moore of the Association of Chief Police Officers (ACPO). The membership of the group comprises:
  - 2.1.1. The Association of (Local Authority) Directors for the Environment, Economy, Planning and Transport (Jim Seymour)
  - 2.1.2. Police representatives (Robert Povey, Thames Valley Police; Paul Taylor, ACPO)
  - 2.1.3. Road Safety Partnerships through Road Safety Support (Trevor Hall, Jan Sjorup)
  - 2.1.4. Home Office (Geoffrey Biddulph)
  - 2.1.5. Highways Agency (Jamie Hassall)
  - 2.1.6. Department for Transport (Duncan Price, Pat Kilbey and David Hammond)
- 2.2. The working group has met three times. It may continue to meet to consider other issues related to speed cameras, depending partly on ACPO's plans.

## 3. Information Related to Casualties, Collisions and Speeds

3.1. The working group has considered what casualty, collision and speed information should be published, how it should be published and for which types of camera sites.

#### Which Camera Sites?

- 3.2. Speed enforcement can take place at locations with fixed camera mountings, specifically signed sites for mobile cameras and anywhere else on the network at the police's discretion.
- 3.3. Speed cameras have been used for various reasons including to address a history of collisions at a site, a history of exceeding the speed limit, the protection of workers at road works, traffic management and to address perceptions of excessive speed.
- 3.4. Cameras can be used in the course of normal police operations at places where there are neither fixed camera mountings nor warning signing about the potential use of mobile cameras. It is not feasible to publish site specific casualty or speed information about this type of deployment.
- 3.5. The deployment strategies for mobile cameras (at locations where there is fixed signing that enforcement may take place) vary substantially between police forces. At some locations mobile cameras are deployed frequently and intensively. Other locations may receive relatively infrequent mobile camera enforcement.
- 3.6. Given this variation in how they used, that in some areas sites with a similar level of use will be signed when they would not be signed in other areas and that there are many sites used in response to community concerns; the group does not recommend that all areas must publish collision, casualty or speed data for mobile camera sites.
- 3.7. For frequently-used and signed locations where mobile camera enforcement has been put in place to reduce a history of injury collisions, the group recommends local authorities consider publishing collision, casualty and speed information site by site. This could be helpful in building public recognition for the mobile camera enforcement and would increase accountability. However the group does not consider that publication of collision data for any mobile enforcement sites should be required by Government.
- 3.8. In respect of fixed camera sites, the publication of collision, casualty and speed information for permanent sites is central to the brief of publishing information to improve transparency. The group considers this should apply to all permanent sites for fixed cameras. This would therefore include both spot sites and time/distance (average speed) systems, where the camera equipment used in the sites is used for speed enforcement.
- 3.9. Fixed sites for speed enforcement cameras are used on a temporary basis to ensure some road works are done safely. For major road

works these sites can be in place for a year or two. The publication of information about the numbers of collisions and casualties before, during and after the road works would involve comparing very different road environments (ie colloquially a comparison of 'apples' and 'pears'). Therefore the group recommends against requiring information to be published about the collisions, casualties and speeds at locations with temporary fixed sites for cameras.

3.10. Permanent fixed site cameras are also used to detect traffic signal offences. The brief for the group was to consider the publication of information related to speed enforcement cameras. Therefore the group is not recommending that information about collisions and casualties should be published for traffic signal camera sites. However it recommends local authorities do consider publishing this information site by site.

# **Collision and Casualty Information – Time Periods**

- 3.11. The group has considered what types of collision and casualty information should be published. It recommends publishing information based on STATS19 returns for whole calendar years, with each separate year identified. This provides an appropriate level of detail to look at the safety of a camera site.
- 3.12. Aggregating the data more (for example showing just three year totals) would reduce transparency and not save on costs. Publishing more detailed data for example by quarter would lead to more largely random fluctuations on figures and add little value to the information presented.
- 3.13. The published information also needs to show when each camera site was introduced. Some fixed camera sites were introduced for reasons other than the historical collision record at a site. For example they may have been introduced to ensure a new road or development fitted into the existing road network safely. Where this is the case the working group recommends that some commentary about why the camera was introduced is included in the published material.
- 3.14. The group considers that it is feasible that collision and casualty data for the previous calendar year be published by the end of June of the following year. At this time national figures are being published built up from local returns. It should be possible in many areas to publish data earlier.
- 3.15. The group recommends that collision and casualty data is published back to 1990 for all fixed camera sites. Relatively long runs of data will shed light about whether sites were introduced in response to short term problems or to longer term issues and may be relevant to the consideration of site selection bias. Going back to 1990 will ensure that pre-installation data is visible for even the earliest speed cameras, with a consistent set of data being presented to the public.

- 3.16. For sites introduced after 1995, if data all the way back to 1990 is particularly difficult to obtain or not relevant, the group proposes that information for at least five full years prior to the camera's installation should be the absolute minimum.
- 3.17. Where sites have been decommissioned permanently or removed, the group recommends that information be published only if the local area wishes to publish that historical data. There should be no requirement to publish information about decommissioned sites. Decommissioned sites should continue to be monitored by the local authority to assess any impact on collisions and casualties.

# **Collision and Casualty Information – Further Details**

- 3.18. The severity of collisions and casualties at camera sites is useful and easily obtainable information for the public. At individual site level there are very low numbers of fatalities.
- 3.19. The group recommends that both personal injury and killed or seriously injured (KSI) data are published. This is because, for example if a site continues to experience collisions post-camera installation, but the severity of outcomes is reduced, then the camera would be having a beneficial road safety effect. Sites that demonstrate this sort of effect may benefit from review to ascertain if additional intervention is needed to reduce collisions.
- 3.20. Numbers of collisions and casualties come from the same data source and both are commonly in use. Because existing systems may be used to generate the information, the group recommends that as a minimum collision information be published. Ideally and provided it is cost effective both should be published.
- 3.21. Where both annual collision and casualty data are being published in an historical table, the group recommends highlighting the collision data for example in any graphs. This is because collision data is less volatile than casualty data, which could be distorted by single events, such as a coach crash with multiple casualties.
- 3.22. There are different operational definitions of what constitutes the relevant length of road for collisions and casualties in relation to a fixed camera site. The group discussed whether to recommend a particular definition of the area of influence of a site, such as a standard length of road or type of polygonal area. It concluded that there were different operational practices in different areas and that reprocessing data would add costs to doing the work.
- 3.23. Therefore the group has not recommended a standard definition of what the area over which collision and casualty data is shown for a fixed camera site. However there should be clarity provided in the published material about what is being used in each local authority area.

- 3.24. The group recommends retaining the definition of a camera site from that described previously in the National Rules and Guidance 2006-07 as follows: "A site is defined as a stretch of road where safety camera enforcement takes place. A housing is the structure installed at the roadside which consists of a pole and a box from within which a camera may operate. More than one housing may be present within a safety camera site."
- 3.25. The Highways Agency uses groups of fixed site camera housings to aid the operation of managed and controlled motorways. For these groups of housings, the relevant area is the whole length of the relevant section of managed or controlled motorway.

# **Speed Information**

- 3.26. The group considers that speed information on top of collision and casualty information will also be of assistance to the public. Cameras should have had speed surveys done before and after their installation and in many cases more than once before or afterwards. In some cases speed surveys will have been done at more than one location near a fixed camera site, making it important to check on associating surveys at the same locations with each other and avoiding associating surveys done at different locations near a site.
- 3.27. Often two types of speed will be particularly relevant to speed enforcement a measure of the average speed (for example median or mean) and a measure of relatively high speeds (for example the 85<sup>th</sup> percentile speed). The group recommends that at least one of each of these two types of key speeds available from each set of speed surveys be published.
- 3.28. The group recommends that summary information from all relevant existing speed surveys be published. Surveys within the same year could be aggregated. It has not recommended that fresh surveys should be done for example if speed surveys have not been done for many years. This is because its remit is about the publication of existing information.

### **Template**

3.29. The group has agreed that the template exemplified as appendix 1 complies with its recommendations about the publication of collision, casualty and speed data. Its widespread use would assist the public looking at information across areas. However the group recognises local partnerships use different data management systems. It therefore has produced the template for those areas which wish to use it but does not recommend its use should be compulsory.

- 3.30. The group considers that the responsibility for the publication of this collision, casualty and speed information should rest with the responsible highway authorities. The reasons for this include that long term collision investigation and scheme development (including highways engineering) are highway authority responsibilities. Local authorities are subject to a statutory duty to investigate and study patterns of collisions. They are also responsible for fixed camera housings, signing and lining.
- 3.31. Local highway authorities can chose to have the responsibility discharged through a road safety partnership if one exists locally. This may be more efficient where several local authorities are members of a partnership.
- 3.32. For the publication of data for the relevant cameras on trunk roads, the Highways Agency would liaise with local authorities and partnerships in respect of fixed site cameras installed before 2007 where information may well be held locally. For managed and controlled motorways the working group proposes that the Highways Agency publishes information centrally. The group agrees that the responsibility for publishing information about all relevant cameras on trunk roads should rest with the Highways Agency.
- 3.33. The group also recognises the need to discuss with Transport for London whether it will publish data related to all cameras in London or whether this responsibility would be shared with the London Boroughs.
- 3.34. The group endorses the need for a central hub providing links to the local websites where this information would be published. The group proposes that the Department for Transport website should be the location of this hub.

#### 4. Information Related to Numbers of Offences and Disposals

4.1. The group has considered whether offence data should be published at site level, local authority level or police level. It has also considered whether the police, local authorities or Government should be responsible for the publication of the data. The type of offence data and whether to distinguish between different types of disposal have also been considered.

#### At what level should data be made available?

- 4.2. Numbers of offences detected can be produced from individual cameras and housings. These can be aggregated to camera sites where multiple housings are in situ or a mix of fixed and mobile equipment is used.
- 4.3. The option of publishing numbers of offences detected by fixed cameras at site level would provide a lot of information to the public. The group has considered this but recommends against it because:
  - 4.3.1. it could compromise the deterrent effects of sites where enforcement is carried out relatively infrequently; and
  - 4.3.2. there have been cases of sites identified as being heavily used then being vandalised.
- 4.4. Also much enforcement is carried out via mobile cameras. Here offence data at site level would be even more likely to undermine the deterrent effect at some locations, including some related to community concerns. The effects of one concentrated period of mobile camera enforcement can last for up to a year at a location. Site by site offence data could compromise that.
- 4.5. Offence data is aggregated routinely to police force level, with returns being made to Government at that level. The group therefore recommends that the minimum requirement for publishing offence data should relate to information aggregated at the police force level rather than the often smaller scale of the local highway authority level.
- 4.6. However the group recognises that local authority level data may be of significance interest, including both at highway authority level and (in two tier areas) the shire district level. It therefore recommends that locally on a case-by-case basis further consideration is given to disaggregating police force level data. It would not be appropriate to do this if this compromises operational effectiveness when the level of enforcement in any local authority area is relatively low, because of the risk of compromising the deterrent effect of enforcement.

# Who Should Be Responsible for the Data Publication?

4.7. Offence data is not owned by local authorities. The police are responsible for processing data and providing aggregate returns for

- Government. Therefore if a local agency is to be responsible for publication the group recommends it should be the police not local authorities.
- 4.8. Offence data is published by Government based on police returns. For example offence statistics at police force level are available to 2006 on the Ministry of Justice site at <a href="http://www.justice.gov.uk/about/docs/motoring-offences-and-breath-stats-2006-ii.pdf">http://www.justice.gov.uk/about/docs/motoring-offences-and-breath-stats-2006-ii.pdf</a>. Post 2006 aggregate speed camera offence data is published by the Home Office at <a href="http://www.cjp.org.uk/publications/archive/police-powers-and-procedures-england-and-wales-2008-09/">http://www.cjp.org.uk/publications/archive/police-powers-and-procedures-england-and-wales-2008-09/</a>.
- 4.9. However these figures can be published a long time in arrears, which limits their usefulness as an aide to transparency. The group therefore recommends that DfT and ACPO consider further whether publication can be accelerated and figures published earlier by ACPO, local police or Government. This could include publishing figures covering whole years or six month periods at force level.
- 4.10. The group has also made contact with the <a href="www.police.uk">www.police.uk</a> team in the Home Office. The group recommends continuing explore options for using the site to publish aggregate offence data in the slightly longer term.

# What Type of Offence Data?

- 4.11. The group considered whether to publish numbers of Notices of Intended Prosecution (NIP) or numbers split by the type of final disposal (which could be a speed awareness course, a fixed penalty notice or a summons to appear in court).
- 4.12. The group concluded that it would be desirable to publish information at police force level split by the final disposal type. For particular years, or six month periods, this might be in addition to numbers of NIPs, as the numbers of NIPs will be available sooner than the split of them by final disposal type for a particular period.
- 4.13. Further work will need to be undertaken to check the feasibility of this and establish the most efficient process to achieve this.
- 4.14. The vast majority of camera activity relates to speeding offences and the vast majority of speeding offences are detected by camera. The group proposes that for completeness the offence data relates to all speeding offences detected in an area, regardless of how they were detected. As with the collision and casualty information the group is not recommending that offence data at traffic signals cameras should be included in the published aggregated offence data.

# 5. Deployment Strategies

- 5.1. The group considered what advice it should give about the publication of deployment strategies for speed or camera enforcement.
- 5.2. There is a wide variety of local deployment strategies in use. A deployment strategy could involve a few high level principles that result in different levels of activity at different camera sites for example concentrate enforcement where casualty problems have been greatest. Other strategies are more detailed and for example identify which individual camera sites are planned to have high, medium or low rates of activity. In still other areas, the deployment strategy allows for significant deployment of mobile cameras right across the road network.
- 5.3. The group has examined a number of deployment strategies. It does not consider having one in place to be burdensome one of the examples it had sight of was three paragraphs long.
- 5.4. The group is not recommending a particular type of deployment strategy be adopted. It does, however, recommend that all areas should have (or develop) and publish a deployment strategy related to speed or camera-based enforcement.
- 5.5. Where local authorities are contributing to the costs of speed or camera enforcement, for example by maintaining fixed camera fittings, the group recommends that local authorities should ensure deployment strategies are published alongside the information about collisions, casualties and speed information.
- 5.6. Where local authorities are not contributing towards the costs of speed camera enforcement, the group recommends that they encourage the police to publish a deployment strategy (for example related to mobile equipment).

#### 6. Conclusions

- 6.1. The groups has therefore concluded, in respect of casualty, collision and speed information that:
  - site by site casualty, collision and speed information for permanent fixed camera sites can and should be published by local authorities (or by other organisations, such as partnerships on their behalf);
  - the information should usually include annual collision and casualty data back to 1990 for the numbers of killed and seriously injured and all personal injuries;
  - similar site by site information for mobile camera sites should not need to be published; and
  - the Department for Transport should set up a central hub providing links to the local websites where this information would be housed
- 6.2. It concludes in respect of offence and deployment information that
  - site by site records of offence numbers should not need to be published;
  - as a minimum police force level offence data for speeding should be published (with the possibility of local arrangements to disaggregate that to the local highway authority scale) and that DfT and ACPO should consider further how to accelerate the publication of that information:
  - ideally at police force level data related to the numbers of notices of intended prosecution and the final disposal methods should be published, but the practicalities need to be checked further; and
  - those local authorities which support camera enforcement financially should ensure that a deployment strategy is published.

5<sup>th</sup> April 2011

# Appendix 1

Example A

 Site ID
 Site 1

 Road length
 0.56

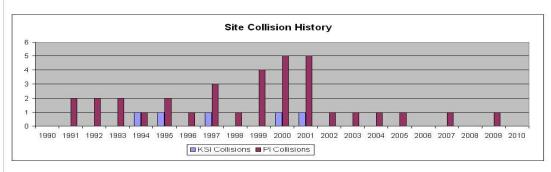
 Speed limit range
 30

 Date established
 24/03/2002

#### Collision and Casualties information

Year	Col	lisions	Casualties			
	KSI Collisions	PI Collisions	KSI Casualties	Pl Casualties		
1990	0	0	0	0		
1991	0	2	0	2		
1992	0	2	0	3		
1993	0	2	0	3		
1994	1	1	1	2		
1995	1	2	1	3 2 3		
1996	0	1	0	1		
1997	1	3	1	5		
1998	0	1	0	2		
1999	0	4	0	5		
2000	1	5	1	9		
2001	1	5	1	6		
2002	0	1	0	1		
2003	0	1	0	1		
2004	0	1	0	1		
2005	0	1	0	2		
2006	0	0	0	0		
2007	0	1	0	1		
2008	0	0	0	0		
2009	0	1	0	2		
2010	<u> </u>	12	=	12		

KSI: killed or serious injured
PI: personal injury



#### Speed survey data by location

		.oc1 30			Location ID Speed limit	Loc2 30		
Year	Speed data				Speed data			
	Average (mph)	85th %	% over	%15mph or over	Average (mph)	85th %	% over	%15mph or over
1990			25			7.5%	(FI)	7.5%
1991	24	12	( = )	12	( = )	(=)	848	(4)
1992	ne.		0 <del>5</del> 0.	1 <del>-</del>	950	20 <del>2</del> 8	255	0 <del>=</del> 8
1993		14	29-2	5-	1943	5=6	000	(#C
1994	10		856		454	200		NES
1995	-	=	3=3	-	949	0-0	1141	(=)
1996								
1997	te.		S#3		383	5=6	990	5-6
1998	12	≅	10 <u>1</u> 20	12	727	923	2	V=37
1999	1-	æ	3=3	-	3-3	( <del>=</del> 0	10-01	(=0)
2000	12	22	9220	12	929	9237	323	1/277
2001	92	~~	1520	12	727	9237	121	929
2002	28.83	35.78	45.6	2.18	29	36	46	2
2003	24	32	26	2	24	32	24	2
2004			35	5 <del>-</del>	3 <del>=</del> 3	190	ti <del>e</del> ti	(=)
2005	34.7	40.7	78.7	5.5	12=1	9=81	1540	949
2006	17		(1 <del>-</del> )	15	100		989	1,000
2007	82	32	0.20	12	12	923	15437	120
2008	· ·		(1 <del>-</del> )	E	(-)	( <del>-</del> )	989	1=1
2009	12	iii	64=3	12	(4)	( <b>=</b> 3)	848	(=)
2010			10-10	-	1000	0.00	200	(50)

		.oc3 80				E0			
Year		Speed data				Speed data			
	Average (mph)	85th %	% over	%15mph or over	Average (mph)	85th %	% over	%15mph or over	
1990	S=	=	(18)	:=	(1-)	3,=33	888	(=)	
1991	12	12	(4 <b>=</b> ):	(iii	0.40	(=)	948	(=)	
1992	1.50 A.50	-	25		25	850	979	151	
1993	12	12	(4=)x	<u> </u>	(4-)	7=3	848	(=)	
1994	1 <del>-</del>	-	150	-	150	180	(270)	1.5	
1995		94	29-2	-	383	5=6	000	0.00	
1996	1-		17.EX		NEX.	270	9570	0.50	
1997	-	19	()=()	-	383	(=)	19401	(=)	
1998	u=		950	-	10 <del>-</del> 0	250	2570	AEX	
1999	1-		SE3	-	383	0.00	50603	0.00	
2000	92	12	WER	=	7/27	767	222	757	
2001	1-		8=8	·	3-3	5 <del>-</del> 8		(=0	
2002	29	36	46	2 2	727	1027	-	757	
2003	24	32	24	2	(1 <del>4</del> )	2,000	888	2(=)2	
2004	12	22	827	=	323	929	WE9	929	
2005			** <del>**</del> **	-	( <del>-</del> )	199	-	2,000	
2006	25.7	28.2	6.4	0.1	-	1923	1020	121	
2007	10.00 (10	Paradiana in	00 EA	100 mm	35E3	0.00	(270)	150	
2008	14	12	(4=)\	=	(4 <u>4)</u>	(=3)	949	(4)	
2009	s <del>-</del>	175	25-5		10-1	0.000	(27)	150	
2010	04	12	(44)	84	-	37=33	848	-	

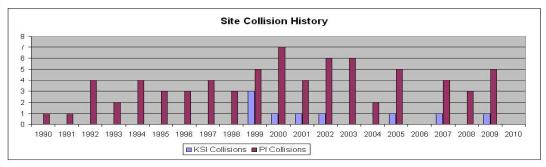
Site name Example B

Site ID Site2 Road length 0.97 Speed limit range 30 Date established 08/09/1995

#### Collision and Casualties information

Year	Coll	isions	Casualties			
	KSI Collisions	PI Collisions	KSI Casualties	Pl Casualties		
1990	0	1	0	1		
1991	0	1	0	1		
1992	0	4	0	4		
1993	0	2	U	2		
1994	0	4	0	5		
1995	0	3	0	3		
1996	0	3	0	3		
1997	Ū	4	Ū	4		
1998	0	3	0	3		
1999	3	5	0 3	3 5 8		
2000	1	7	1	8		
2001	1	4	1	4		
2002	1	6	1	6		
2003	0	6	0	9		
2004	0	2	0	9 2 6		
2005	1	5	1	6		
2006	0	0	0	0		
2007	1	4	2	5		
2008	0	3	0	4		
2009	1	5	1	7		
2010		7/27		7027		

KSI: killed or serious injured PI: personal injury



#### Speed survey data by location

		.oc1 30			Speed limit	Loc2 30		
Year	Speed data				Speed data			
	Average (mph)	85th %	% over	%15mph or over	Average (mph)	85th %	% over	%15mph or over
1990	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	낕	1/2/	100	N21	920	323	727
1991	te.		Se3		3e3	0-0	0.00	( <del>=</del> 0
1992	1/4	12	1020	12	121	0.20	848	140
1993	1 <del>.</del>	15	( <del>-</del> )	e <del>-</del>	( <del>-</del> )	1,=10	988	1 <del>-</del> 2
1994	84	22	22	12	349	949	W48	120
1995	100	15	(1 <b>=</b> )	in the	(1 <del>4</del> )	7,977	888	7,000
1996	124	· ·	65=3	14	(A)	( <b>=</b> 1)	848	(=)
1997	1 <del>-</del>	-	15 <del>-</del> 5	. <del>.</del>		7 <del>-</del> 2	(FI)	7 <del>-</del> 2
1998	84	12	(4=)	<u>=</u>	( <del>-</del> )	/(=3)	848	(=)
1999	1=	15	82 <b>-</b> 8	-	25 <del>7</del> 8	150	(275)	1 <del></del>
2000		16	286		383	283	((4))	(#6
2001	27.97	32.93	20.73	0.57	27.4	32.27	17.78	0.52
2002	92	22	920	12	920	9 <b>2</b> 3	222	127
2003	te.		200		383		080	0.00
2004	12	12	920	FE	920	929	222	1/27
2005	100		9=1	<del>-</del>	( <del>-</del> )	1,=11	9 <del>.5</del> 9	199
2006	26.1	31.5	23.3	0.3	349	928	1848	123
2007	8=	=	9 <del>-</del> 7	STATE OF THE PARTY	( <del>-</del> )	0,000	989	(9)
2008	12	12	1927	12	1920	121	(SE2)	120
2009		=	35 <del>-</del> 3	-	15 <del>-</del> 1	150	(2 <del>1</del> 5)	1 <del>=</del> 1
2010	84	12	0.40	122		(=)	848	780

Speed limit Speed limit Speed data Speed data %15mph or over Average (mph) 85th % % over %15mph or over 85th % Average (mph) % over 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009