

**Questions answered by presenters from the ACRS NSW Chapter Seminar
“Driver distraction and camera-detected mobile phone use” held on 19 August 2020**

#	Question	Answer	Provided by (BC = Bernard Carlton, AJ = Alexander Jannink)
1	In the compliance data slide, it implies that compliance is improving. Is this consistent between fixed and mobile sites?	Transport for NSW (TfNSW) have observed improvement in compliance at both fixed and transportable mobile phone detection sites. Overall, TfNSW has observed that non-compliance is slightly higher at transportable sites than at fixed sites.	BC
2	While I note that NSW's 5 demerit points is higher than other states, will NSW be adopting the \$1000 financial penalty of Qld and WA?	In NSW, from 1 March 2020, mobile phone detection cameras have enforced illegal use of mobile phones while driving or riding. The penalty for offending drivers is five demerit points and a \$349 fine (\$464 in a school zone). The penalty increases to 10 demerit points during double-demerit periods. These fines and demerit point penalties apply to both camera-detected offences and infringements issued by NSW Police. The new camera enforcement program significantly increases the likelihood of offending drivers being detected and prosecuted. There are currently no plans to increase the penalty level to \$1000.	BC
3	What are the targets for both total number of vehicles assessed and for proportion of all vehicles? Will NSW be advocating for a national commitment through TIC and TISOC to see equivalent targets nationally?	The target is 135 million vehicle checks per year by June 2023. This is a rate of about 20 checks per registered vehicle in NSW. While establishing similar enforcement programs is a matter for the relevant jurisdiction, NSW is a participating jurisdiction in the Infrastructure and Transport Senior Officials’ Committee (ITSOC - previously TISOC) and the Minister is a member of the Infrastructure and Transport Ministers’ Meeting (ITIM - previously TIC). Road safety is a standing agenda item in these national governance forums. These forums support the development of a National Road Safety Strategy, national road safety targets and consistent application of evidence based best practice road safety policy and practice. The Mobile Phone Detection Camera (MPDC) program is still relatively new and jurisdictions are monitoring its implementation and outcomes. The national forums will provide an opportunity to examine the outcomes of the MPDC program to identify opportunities for national consistency in best practice automated camera enforcement including communication and education.	BC
4	Given the historical success in campaigns to	In NSW, a comprehensive public education program is in place across a range of	BC

	stigmatise drink driving, will there be a coordinated national campaign to drive cultural change around the acceptance of mobile phone use while driving?	communication channels including television, radio, social media, and outdoor, to raise community awareness about the MPDC program. The campaign includes key messages about the road rules, which penalties apply for camera detected offences and to thank drivers for driving safely. Transport for NSW is also using Variable Message Signs (VMS) and has installed fixed signs on key routes to ensure drivers are aware of camera-based enforcement of illegal mobile phone use. While TfNSW is not able to determine national campaigns, NSW is a participating jurisdiction in the Infrastructure and Transport Senior Officials' Committee (ITSOC - previously TISOC) and the Minister is a member of the Infrastructure and Transport Ministers' Meeting (ITIM - previously TIC). Road safety is a standing agenda item in these national governance forums. These forums support the development of a National Road Safety Strategy, national road safety targets and consistent application of evidence based best practice road safety policy and practice. The MPDC program is still relatively new and jurisdictions are monitoring its implementation and outcomes. The national forums will provide an opportunity to examine the outcomes of the MPDC program to identify opportunities for national consistency in best practice automated camera enforcement including communication and education.	
5	Do you think there are potential human rights issues with licensing the ability to see through windscreens and undertake AI analysis of the resulting images in some countries with alternative legal and human right structures?	Our solution is designed to identify the dangerous road safety behaviour (such as phone use) and then to discard all other images and associated data. Our mission is road safety improvement not surveillance.	AJ
6	With regards to cradles for phones, is a magnetic connection okay, or does it need to be 'fixed' in a cradle?	Addressed during the presentation question time	
7	There was reference to regular audit of AI to ensure it is operating as intended. What is the method? How is it impacted if 90% of images are irretrievably deleted?	Images that the artificial intelligence (AI) detects as potentially showing an offence are referred for human review. The AI process limits human review of images as around 90% of images captured are never viewed and are deleted within an hour of being taken. When an audit is initiated a sample of images are selected before deletion and then deleted once the audit is complete. During the early stages of the program TfNSW has been conducting weekly audits to ensure the AI is detecting as per our business rules before images of compliant drivers are deleted. The frequency of the audits will be adjusted over time to ensure positive customer outcomes in an efficient	BC

		and effective way.	
8	If we know the benefit of not having overt signage on a roadside enforcement program, why can't we remove the signs at fixed speed camera locations?	Addressed during the presentation question time	
9	What if a driver is captured holding something else that equally distracts the driver like eating or fixing make up?	Addressed during the presentation question time	
10	Is there any initiative from TfNSW to understand WHY drivers are using their phone while driving? By this way we know the root cause and we can stop (or at least discourage) drivers using their phone.	<p>From the 'Community Attitudes to Road Safety - 2017 Survey Report' we are aware of common reasons why people use their mobile phone while driving or riding, as respondents reported making calls (both legally and illegally) (40% of respondents) and using their phone for other illegal activities like browsing the internet or taking photos (21%). Program communications has been a top priority to ensure the community is aware of the program and the rules that apply.</p> <p>During the warning letter period there was a focus on “Know the rules” – with a google search returning our Mobile Phone Rules page at the top of their search results.</p> <p>When we transitioned to enforcement, we leveraged an existing campaign tag-line “Stop it... or cop it”.</p> <p>A total of 326 signs, including 22 fixed permanent signs and 304 Variable Message Signs, are being used as part of a broad communications campaign to help inform the community about the program.</p> <p>There is also web and social media content.</p>	BC
11	Current infringement rate of 0.24% (1 in 420). Is there a difference in the infringement rates observed by the fixed and portable cameras?	Overall, TfNSW has observed that non-compliance is slightly higher at transportable sites than at fixed sites.	BC
12	An infringement rate of 1.2% during the pilot, down to 0.34% in the grace period and down to 0.24%. This is a reduction of nearly 80% in a little over a year. This is a commendable outcome. Are you surprised/encouraged at the success of the program to date?	We are pleased by the success of the program to date and encouraged that the program will help contribute towards reducing road trauma in NSW and contribute towards our road safety targets including zero trauma by 2056.	BC
13	How does the detection work for heavy	Addressed during the presentation question time	

	commercial vehicles (e.g. trucks)?		
14	With mobile use causing distraction, does hands-free considered as part of the enforcement?	Addressed during the presentation question time	
15	Noting the difference in anticipated casualties prevented without overt signage as opposed to with overt signage, is there any intent to convert this concept to include existing speed and red light cameras across the State?	Addressed during the presentation question time	
16	Will the cameras be moved and targeted to respond to the evidence and data that unfolds – i.e. in locations or areas where higher illegal mobile phone use is detected?	Addressed during the presentation question time	
17	How are deployment sites selected?	Addressed during the presentation question time	
18	What are the numbers of fixed cameras compared with mobile cameras?	Currently, eighteen mobile phone detection cameras are operating in NSW. There are 13 fixed cameras and five transportable cameras. More transportable cameras will be operational in the last quarter of 2020. The number of cameras are expected to increase to at least 45 cameras in NSW by June 2023.	BC
19	What have we learned about the age of offenders from worst to best?	The program is designed to be a deterrence for drivers of all ages on NSW roads.	BC
20	Has this system been adopted by other nations?	Addressed during the presenter introductions and presentations	
21	What is the false positive rate for the cameras? How many are identified as false positive by a human reviewer?	The technology in the MPDCs uses AI to automatically analyse images and identify those that are likely to show a driver using a mobile phone and identify images that the system deems unlikely to contain an offence. The system has been designed so that images of compliant drivers can be quickly, automatically and irretrievably deleted without human review within an hour. The system includes that images that may include an offence are referred for further review and verification by appropriately trained officers prior to issuing any penalty notices.	BC
22	Can you please clarify, is it legal for a full licence holder to have their phone sitting in their cup rest or passenger seat if not touching it or does it need to be in a mount at all times?	Addressed during the presentation question time	

	Similarly does the cameras pick up for novice drivers having their phone in view i.e. on their passenger seat (which is now illegal)?		
23	Are there ways for drivers to avoid detection e.g. black clothes, black phone, black steering wheel? Would the AI still detect mobile phone use?	Addressed during the presentation question time	
24	Has the adjudication process had to deal with many hand-held UHF radios?	Hand-held UHF radios have not presented a challenge for the program in accurately detecting and enforcing illegal mobile phone use by drivers.	BC
25	Are there plans to expand the number of cameras? Particularly in regional NSW ...	Addressed during the presentation question time	
26	Can you envisage any non-enforcement related applications for your tech? E.g. preventative for drivers?	We are focused on influencing the greatest change in behaviour by drivers on our road network, and we believe enforcement is the most effective tool at present.	AJ
27	As this technology will be obsolete when level 5 autonomous vehicles are prevalent, what lifetime do you expect for this technology?	We know that technology will continue to play a key role in delivering safer travel, consistent with the Future Transport vision of a trauma-free transport network by 2056. While advances in vehicle safety technology will likely have a role, we expect the eradication of illegal mobile phone use as a road safety issue will be many years away. All NSW road safety camera enforcement programs, including the new MPDC Program, are subject to monitoring and evaluation. The Government will monitor and evaluate the program over a number of years and may adjust its policy settings into the future to ensure positive road safety outcomes.	BC
28	How accurate are the cameras at determining a mobile phone over another similarly sized object in, or on, the driver's hand, and then how accurate is the Officer screening process to not issue an infringement incorrectly? How many are challenging issued infringements?	Addressed during the presentation question time	
29	How would the trailer units be utilised to deliver a mobile point to point speed enforcement capability?	Each trailer unit is already able to record licence plates of vehicles, and to capture evidence of the vehicle's location and time of passage. By having multiple cameras, these records can be combined (much like Safe-T-Cam or other average speed systems). The traceable distance between the units can be determined most simply by ensuring units are deployed at pre-surveyed locations. Other changes to average	AJ

		speed enforcement approach would provide cost savings to agencies, for example by assuming a 'as the crow flies' between two locations rather than requiring a detailed shortest possible distance survey.	
30	Is the drinking of beverages such as hot coffee seen as a contributor to road crashes, and could the phone use detection tech be used to reduce this risk?	Addressed during the presentation question time	
31	Has there been challenges in court for these fines? As a jurisdiction who has not yet attempted to employ this technology, our prosecution unit would be interested in any relevant cases or case law you may have encountered.	Addressed during the presentation question time	
32	Has there been any camera vandalism and was there another camera monitoring the camera site to deter vandals?	Addressed during the presentation question time	
33	Are there other 'distraction' behaviours that the AI can detect?	Addressed during the presentation question time	
34	Tell us more about how you'd do the drink and drug testing?	Not clear what this question is asking	BC
35	Legislation around distraction in Australis is headed towards performance based regulations. Is Acusensus thinking about how their technology might be adapted to operate in a performance-based regulatory environment? This would require detection of other human and vehicle behaviours that are indicative of distraction from other sources, not just mobile phones.	Mobile phones are the leading source of preventable distraction, hence our focus on this issue. As an organisation dedicated to road safety, we are committed to working with authorities to address behaviours that are dangerous including other forms of distraction. As legislation is drafted, there is an inherent need to balance the actual behaviours that cause risk with how a behaviour can be policed and enforced. An example of different approaches: Australian regulations specify that it is illegal to touch a mobile phone while operating a vehicle, while UK regulations specify it is illegal to use a device for a communication purpose. The former is relatively easy to police, while the latter presents substantial challenges for enforcement (whether by police or by camera). It would in our view be a step backwards for road safety to move from the Australian approach to the UK approach, and we should be mindful of this as a society when considering any regulatory change.	AJ
36	Are the risks of hand held and hand's free	As Bernard said during the webinar, when a person's hands are holding a mobile	BC

	mobile phone pose similar distraction risks?	<p>phone, their hands are not engaged in the physical task of driving while that person is also mentally distracted from the cognitive task of driving. Driving is a complex activity; anything that takes your hands off the wheel, eyes off the road or mind off the driving task is dangerous, not just for you, but everyone else on the road. Being distracted when driving increases the risk of a crash. Simply taking your eyes off the road for longer than two seconds, doubles the risk of a crash. Research has found that hand held mobile phone use while driving is associated with at least a four-fold increase in the risk of having a casualty crash, while texting increases the crash risk even further.</p>	
37	Do I understand correctly that mobile deployment requires mobile reception? That is deployment in remote areas may not be possible?	Checking for illegal mobile phone use in areas with no mobile phone reception is not a priority of the program.	BC
38	Will driverless cars ultimately render the technology less effective?	We know that technology will continue to play a key role in delivering safer travel, consistent with the Future Transport vision of a trauma-free transport network by 2056. While advances in vehicle safety technology will likely have a role, we expect the eradication of illegal mobile phone use as a road safety issue will be many years away. All NSW road safety camera enforcement programs, including the new MPDC Program, are subject to monitoring and evaluation. The Government will monitor and evaluate the program over a number of years and may adjust its policy settings into the future to ensure positive road safety outcomes.	BC
39	Deterring not use seat belts is crucial as well, it contributes to road crashes and fatalities have you thought about adapting the cameras AI to detect not using seat belt? or developing a new system to detect not using seat belts?	Addressed during the presentation question time	
40	During the description of how the system works it was said that when the camera is triggered a flash goes off. As there are 3 cameras, then there must be 3 flashes. Wouldn't these be a distraction to the driver?	The mobile phone detection camera system incorporates a number of cameras and an infra-red flash to capture clear images of passing vehicles in all traffic and weather conditions. The flash is practically invisible to the human eye and does not cause a distraction.	BC