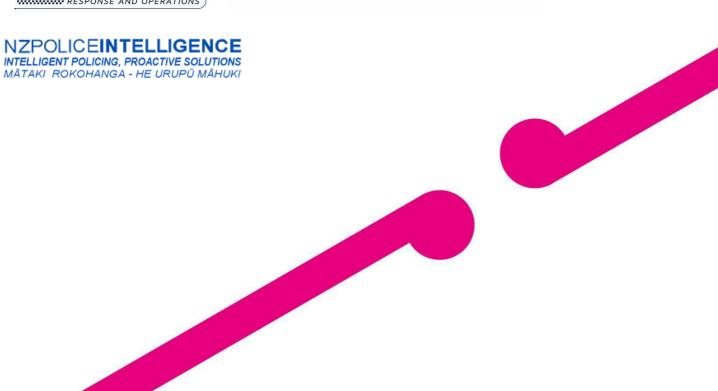


Appropriate Tactical Settings

Insights and Evidence Brief August 2021









Purpose

The purpose of this Insights and Evidence Brief is to provide a rapid review of general arming of Police and potential impacts any change in tactical settings might have for New Zealand. Specifically, it reviews the most up to date and available international literature and draws on New Zealand Police data to assist in understanding the safety and community impact of general arming of Police. This review is guided by a terms of reference that asked four specific questions. These are:

Question One:

Does the available evidence suggest that criminals tend to respond like-for-like in terms of Police's settings i.e. is there a risk of an arms race?

Question Two:

Given our workplace includes all the people in it i.e. the public, is it a likelihood that more people (Police or non-Police) would be shot if Police were routinely armed?

Question Three:

Would there be any other benefits or dis-benefits from routine arming, particularly relating to officer and public safety?

Question Four:

What other tactical capability do other "generally armed" international jurisdictions have to enhance officer and public safety?



List of terms

Abbreviation	Term	Definition
AOS	Armed Offenders Squad	Specialist unit maintained in each Police district to deal with people who are, or are believed to be, armed and a danger to themselves, the public or Police.
ART	Armed Response Team	Team of specialist AOS personnel mobile and ready to respond with a range of tactical options to events where significant risk is posed to the public or Police.
BWC	Body-worn cameras	Specialist equipment to record footage of use of force events.
CS Spray	2-chlorobenzalmalononitrile gas spray	An incapacitant, more commonly known as tear gas, in an aerosol canister. Used by British police. Not to be confused with OC Spray.
DCC	District Command Centre	Operational command centre which ensures Police staff are deployed to the right place at the right time to prevent crime and road trauma.
EBPC	Evidence Based Policing Centre	Joint partnership between New Zealand Police, the University of Waikato, ESR, and Vodafone New Zealand, which uses practitioner-based research, information, crimescience, theory, and problemsolving methods to inform practice, implement measures to prevent crime and improve allocation of Police resources to better protect the public.
National CCI Hub	Critical Command Information Hub	An Intelligence unit which brings together the CCI components (performance, intelligence, Our Business, demand, resources, and evidence-based policing) to identify risks and opportunities for the National Tasking and Coordination process, and produce Insights Reports into topics endorsed by the Strategic Tasking and Coordination Governance Group.
NIA	National Intelligence Application	Main Police operational system for records and case management.
NMI	Neuro-muscular Incapacitation	Involuntary incapacitation of the muscle tissue caused by stimulation of neurons. The desired effect of a TASER.
PCA	Perceived Cumulative Assessment	Officer's assessment, and continuous reassessment, of an incident based on information known about the situation and the subject's behaviour, using the TENR



Abbreviation	Term	Definition
		(Threat, Exposure, Necessity, Response) model.
PST	Public Safety Team	General Duties officers organised into teams to provide policing services within a District.
RORE	Response and Operations Research and Evaluation team	The RORE team undertakes research, analysis, and evaluation of response and operations issues to assist with evidence-based decision making, improve Police and public safety, and maintain public trust and confidence in New Zealand Police through transparency and accountability.
TOR	Tactical Options Report	Reported tactical option/s use by an officer, in accordance with reporting requirements.
TRP	TASER Replacement Project	Project initiated to recommend & implement an approved tactical option (energy system).
3T	Turnover	Closure type code for incident involving vehicle or person stop.

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Firearm Presentation	Presenting a firearm at a person.
Firearm Discharge	Discharge of a firearm at a person.
Sponge Round	Mid-range less-lethal projectile discharged from a 40mm launcher.
TASER Show	TASER presentation, arcing, or laser painting.
TASER Use	Using a TASER by discharge with probes and/or contact stun.
OC Spray	Spray burst/s of OC (Oleoresin Capsicum) spray.
Dog	Police dog bite or other dog-related deployment injuries to a person.
Baton	Striking a person with a baton.
Empty Hand Tactics	Empty hand techniques (e.g., physical restraint, strikes) which can be used to distract or physically control a person, or for an officer to defend themselves or another.
Handcuffs-Restraints	Includes handcuffs with pain compliance and/or with another tactical option, spitting hoods, restraint chair.

Thresholds for reasonable use of force	
Cooperative	Willingly responds when approached.
Passive resistant	Refuses verbally or with physical inactivity.
Active resistant	Pulls away, pushes away, or runs away.
Assaultive	Intent to cause harm, expressed verbally, through body language/physical action.
Grievous Bodily Harm or death	Shows action intended to or likely to cause grievous bodily harm or death to any person.



Comments on data

Figures provided are the most accurate available at the time of analysis. Efforts have been made to clean and correct any identified data entry errors; however, minor inaccuracies may still exist. As such, these figures may not be consistent with future reports.

All data has been validated through an internal review process.

Except where otherwise indicated, figures are given for the whole of New Zealand. District-level threat is managed via a temporary routine carriage authorisation from the District Commander. We have taken a national perspective on data as routine arming is a national-level question with blanket implementation throughout New Zealand.

We have not divided data by ethnicity or otherwise commented on implications of routine arming for the Treaty of Waitangi principles. This is a significant project and falls outside the scope of the terms of this report to address. However, we acknowledge Māori are typically disproportionately negatively affected by some aspects of Policing and law enforcement in general. It is reasonable to anticipate that, if no other positive steps are taken to change this, Māori may be disproportionately negatively affected if Police were routinely armed.

Data drawn from the Tactical Options Reports (TOR) database includes reports which had completed the review process as of the date the data was extracted for that year's Tactical Options Annual Research Report. TOR data for 2010 includes records only from 1 July onwards, when the TOR database was brought into operation. TOR data for 2021 is comprised of records up until 7 July which had completed the review process as of that date and is subject to change. A "TOR event" is the reportable use of one or more tactical options by one officer against one individual; multiple TOR events can occur at the same incident.

STG and AOS staff are exempt from reporting TASER and firearms presentations (but not discharges), so data regarding these presentations is not included in any analyses.

Data from the Gun Safe database was extracted on 29 July 2021. Each event that was reported as involving a presentation and/or discharge of a firearm at Police was individually examined, verified, and coded for further information, using the written descriptions of circumstances. Substantial effort has been made to clean, code, and add missing events to the Gun Safe database. That is, the Gun Safe data used in this report is much more accurate than raw Gun Safe data directly from RIOD. However, it is possible that there are still some events that meet the criteria for Gun Safe but have not been added. It is important to note that Gun Safe data only covers a short period, and with so few incidents it may not be appropriate to generalise from the data.

The Frontline Safety Improvement Programme (FSIP) survey from late 2020 is referenced in this report. It offers valuable insights into the perspectives of front-line Police Officers on safety. There were 363 responses to that survey, with different levels of response across the districts and service centres, as well as between urban and metro staff. We reiterate the comments given in that survey around relying on the data: "Given the variability [of the level of response across the workforce], the overall findings may not accurately reflect the districts with lower representation than expected based on workforce numbers, and findings should be applied cautiously to avoid over-generalisation."

The introduction and changes in availability of tactical options over the years should be considered when comparing yearly differences in New Zealand Police data, in particular, the introduction of permanent firearms storage in Police vehicles in July 2012 and the introduction of routine TASER carriage on 31 July 2015.

The studies included in the literature reviewed generally include countries or regions considered to share sufficient historical, social, cultural, and economic background characteristics to make comparative analysis as robust as possible. However, such comparative studies are largely uncontrolled and country variations remain. Thus, conclusions should be considered with these limitations in mind.

Regarding the literature reviewed, it is important to acknowledge a lack of published research on the impact of routine armament, which is difficult to research given that the majority of the world's Police are routinely armed. It is likely that a body of unpublished literature may exist within different jurisdictions around the world, however, this was not able to be examined due to time constraints.



Executive Summary

- 1. This summary highlights the key findings from a rapid review of general arming of Police and the potential impacts any change in tactical settings might have for New Zealand.
- 2. NZ Police recognises the importance of officers' feelings of safety in the challenging situations that may be encountered on the frontline, and this review is focused on ensuring arming and safety decisions are taken based on the best possible evidence and insights.
- 3. The evidence indicates that routine arming of Police could increase risks to public safety and the number of subjects shot, rather than improving safety of Police and the public. However, there is no clear evidence that routine arming increases the use of firearms by offenders. Other factors are driving the increase in arming by gangs and organised crime groups.
- 4. The review found that routine arming could negatively impact the relationship between Police and some members of the community. This would undermine New Zealand Police's commitment to policing by consent, diversity in our workforce and strong relationships with communities.
- 5. A key consideration identified through this review was the importance of officers' feelings of safety in the challenging situations that may be encountered on the front line. There is a significant body of research in respect of tactics and equipment in relation to this. While further exploration of these options is outside the scope of this product, we endorse an evidence-based review of options that fall short of routine arming, but which may still contribute to officers feeling safer doing their frontline jobs.

The evidence is inconclusive about whether routine arming increases staff safety and would likely result in greater risks to the public

- 6. Following a review of Gun Safe incidents where a firearm was presented at unarmed Police, and considering how these incidents might have differed if Police were routinely armed, it is possible to conclude that more people (Police and non-Police) would have been shot.
- 7. Between 1 March 2019 and 29 July 2021, there were 25 recorded events on Gun Safe involving firearms being presented at Police but not subsequently discharged. In 11 of these events, Police were unarmed. However, in all 11 events, Police successfully retreated or used other tactics/equipment to resolve the event.
- 8. In six of these 11 events, it was later revealed that the subject's firearm was not loaded. In the other cases, subjects had both the opportunity and capability to shoot but did not do so.
- 9. It is difficult—if not impossible—for Police Officers to determine if a subject has the intent to discharge a firearm, especially during a quickly unfolding event. It is not known what Police would have done in these 11 events had they been armed, or the consequences for their safety.
- 10. There were 21 events recorded in Gun Safe, from 1 March 2019 to 29 July 2021, involving a firearm being discharged at Police. As these events involved discharging firearms at Police vehicles, dogs, and premises, and not just Police staff, it is unlikely that the firearm was discharged in response to the availability, or not, of attending Police being armed
- 11. The evidence indicates that routine arming of Police would likely increase the number of subjects shot (including fatally).
- 12. Estimates indicate that if Police firearms had been used in the 3,457 tactical option/use of force events that reached the threshold for firearm use (grievous bodily harm/death) over the last 11 years, it could have resulted in an additional 92 events involving Police shooting a subject (roughly 8 per year), resulting in 43 deaths.
- 13. As a comparison, New Zealand Police TASER use has not changed dramatically since routine TASER carriage began in 2015, but the rate of TASER discharges relative to presentations has gradually increased over time. Police anticipates that a similar use pattern might occur if routine arming of Police occurred.

There may be increased reliance on firearms by Police where the situation is assessed as likely to escalate to the threshold that justifies their use



- 14. Recent Police data shows that staff are more likely to respond with firearms than previously, even when subjects are not armed with firearms. This may reflect an escalation in the use of other weapons such as knives or machetes, and therefore the level of assessed risk by Police.
- 15. However, it is also possible that this increased use may, understandably, be the result of heightened sensitivity to risk among staff.

Despite evidence of increased reliance in situations assessed as likely to escalate, Police continues to rely on other tactical options to resolve events, even when the threshold for use of firearms is met

- 16. There is strong evidence that New Zealand Police continues to choose to use other tactical responses, even where the threshold for using firearms is met.
- 17. Further examination of these events will provide valuable insight as to whether and how staff were able to successfully de-escalate the situation without the need for firearms.
- 18. This information will be valuable for future tactical training, such as scenario and cognitive training, to better prepare Police to manage risk at incidents they attend. This would also address feedback from frontline about the need for more regular, scenario-based, and high-pressure training, and training in sections rather than individually.

There is no evidence that arming of Police increases the use of firearms by offenders

- 19. The presence of armed Police is not a reliable indicator of increased firearms use by offenders. Evidence suggests that increased gun ownership is the best indicator of increased gun violence, and shootings by Police and of Police.
- 20. There is some indication that the public, including offenders, already perceive Police as being routinely armed to some extent, given the presence of firearms in Police vehicles.
- 21. Gangs and organised crime groups are becoming increasingly armed, but this is likely due to the increase in gang violence more generally and the perceived need by gangs to protect themselves and their patch, rather than in response to Police arming. The introduction and increasing membership of gangs originating in Australia (the '501s') has increased the perceived need by gangs to arm themselves for protection.
- 22. There is no evidence to indicate that the arming decisions of those within the gang and/or organised crime environment is influenced by, or in response to, the tactical settings adopted by Police.
- 23. However, it is important to note that the propensity of individuals in gangs or organised crime groups to arm themselves is increasing the likelihood of Police encountering firearms in their day-to-day duty particularly during traffic stops.

The impacts of routine arming on Police wellbeing are not clear

- 24. While there is some evidence that routine arming of Police may be associated with increased wellbeing and feelings of self-efficacy, there is also international evidence that routine arming might be associated with Police engaging in high risk situations which could be potentially harmful.
- 25. There is evidence indicating that discharging a weapon and using deadly force are connected to adverse consequences, such as Post-Traumatic Stress Disorder (PTSD).
- 26. Routine arming has the potential to lead to an overconfidence in staff, which may not be warranted. Given that officers experience a diverse range of experiences and risks, many of them unanticipated, reliance on one key tactical response is not ideal.
- 27. Police wellbeing is reliant on a range of skills and tactical options that will allow Police to address the full range of risks they face on a daily basis with confidence, irrespective of whether firearms are involved or the availability of firearms for staff. A combination of these tactical options would provide additional confidence for staff when faced with high risk events, short of the need for routine arming.
- 28. There is also a significant opportunity to advance both the tactical capability and staff/public safety through a number of improvements including:
 - more support for sole operators (such as solo dog handlers and some rural Police officers)
 - increased training, such as more frequent and realistic situational scenario training that better reflects the operational environment, and additional cognitive conditional training



 improved accessibility, and upgrades to the current suite of tactical tools, such as less lethal options, including improvements to TASER.

There is potential for routine arming to negatively impact the relationship between Police and the community

- 29. New Zealand Police aspires to a model of policing that means working alongside, and with the broad support of, the community. Public perceptions of whether Police are fair, reasonable, and proportionate impact the public's willingness to engage and work with Police.
- 30. Both international and New Zealand studies suggest that the routine arming of Police could negatively impact the relationship between Police and some members of the community (especially certain cultural and ethnic groups), affecting how these groups perceive and interact with Police. Vulnerable communities, such as those with special needs, and those suffering mental health crisis and their family/whānau, could be similarly impacted.
- 31. Police's Prevention First operating model requires Police to proactively look for opportunities to prevent further crime and harm, rather than just responding to events. This requires a special relationship with communities and a high degree of trust.
- 32. There is also a risk that the combination of routine arming, the requirement to wear ballistic protective gear when on duty, the impact on public trust and confidence and a potential change in public attitudes toward the Police, could reduce the diversity of Police recruitment. Police needs to consider the broader impacts that routine arming may have for recruitment, including the potential for discouraging recruitment of individuals with a stronger community policing approach.

Some jurisdictions that do not have routine arming have established fulltime specialist firearm roles to enhance officer and public safety

- 33. Internationally, there are only 19 countries that currently do not deploy routinely armed Police, including New Zealand, Great Britain, Ireland, and Norway. All these jurisdictions have firearms stored in locked security safes within their vehicles and/or rely on specialist response teams who have been trained and have access to lethal and non-lethal tactical options.
- 34. Other jurisdictions have limited the use of firearms to specialist Police roles. In the United Kingdom for instance, Police use Authorised Firearms Officers (AFOs), with approximately 5% of all officers trained as AFOs.
- 35. Despite recorded increases in knife crime (20%), gun crime (23%) and violent crime (18%) the UK Police Federation continues to support more officers being trained as AFOs, rather than routine arming.
- 36. In the Republic of Ireland, Regional Support Units patrol the area daily operating as regular Police officers unless called upon to be deployed in tactical gear to a critical incident. They also have a full-time specialist firearms tactical unit for counter terrorism and high-risk missions.
- 37. Police services in the United Kingdom and the Republic of Ireland have specialist firearms officers operating 24/7 enabling them to respond to high risk events. In the UK, these officers are deployed in Armed Response Vehicles (ARVs) which are on routine patrol throughout metropolitan and rural areas. These ARVs operate in a robustly governed environment with a nationally adopted Approved Professional Practice (APP) on the carriage, deployment and use of police firearms.
- 38. In comparison, Police services in Australia are routinely armed, and thereby operate according to a different set of procedures. Nevertheless, several states use mobile armed units for rapid response. These units generally have more tactical options available to them and have advanced skills, knowledge, and experience in dealing with critical incidents.

There is no fulltime deployable specialist firearms response capability in New Zealand

- 39. All police officers in New Zealand undergo firearms training, and can use firearms when required, although concerns have been recently expressed that this training may be insufficient.
- 40. The training of a smaller number of Police to a much higher standard could provide a viable alternative to improve New Zealand's armed response capability.
- 41. While New Zealand Police has an on-call specialist Armed Offenders Squad, unlike the situation in the United Kingdom and Australia, this capability is not rostered as an on-shift full-time capability.



Further work has been identified to improve our understanding of the impacts of any change in firearms tactical settings

- 42. The review has identified some current gaps in our knowledge and understanding of the threat, harm, and risk around our operating environment relating to incidents or settings that require an armed policing response, presence, or readiness.
- 43. A number of opportunities have been identified to improve our understanding of the armed policing environment, including:
 - understanding staff perceptions of safety to obtain detailed information from the frontline to identify the contributing factors and help inform future decision making.
 - **improving data capture systems and processes** to develop a joint understanding, especially between Police and the Police Association, that will enable better safety and support for Police.
 - improving up-to-date tactical alerts and intelligence, particularly relating to vehicles. Vehicle turnovers and pursuits have accounted for 84% of all firearm presentations and discharges towards Police since 2019. While the large volume of vehicle turnovers and pursuits nationally means that the probability of encountering a firearm is very low, consideration should be given to the current training, processes, and policies in place to deal with these situations.
 - **improving the coordination of communications and decision making**. Communication between attending units and Command and Control/ Emergency Communications Centres is fundamental to staff safety, public safety, good decision making and evaluating incident management.



Key questions

Question 1: Does the available evidence suggest that criminals tend to respond like for like in terms of Police settings? i.e. Is there a risk of an arms race?

Key findings

- 44. Since Gun Safe reporting began in March 2019, there have been 21 events involving firearm discharges by subjects at Police. At least 12 of these involved discharges at Police Officers in vehicles; it is unlikely that subjects knew whether Police were carrying firearms on their person before discharging their own weapon. In addition to these discharges, there were 25 other firearms presentations at Police: in total, about 1.5 events each month. TASERs became routinely carried in 2015, and since then there has been a very gradual (1.9%) increase in TOR events where subjects had weapons. It is not possible to draw conclusions from these data.
- 45. Gangs and organised crime groups are likely becoming increasingly armed. There is no evidence to show that decisions, made in the gang and/or organised crime environment to use firearms, is influenced by Police tactical settings. Further, there is no evidence to suggest a mutual escalation of firearms use by either gangs or the general public would occur if Police were to routinely carry firearms.

New Zealand Police data

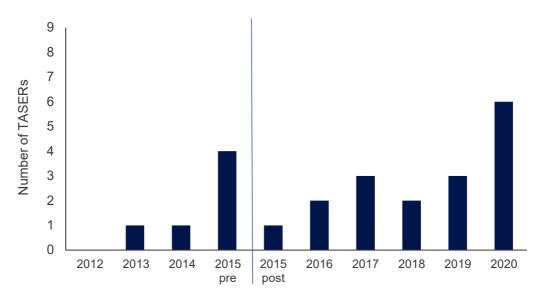
46. This question was approached in two ways. First, in a general sense. That is, if offenders generally know Police have certain tactical options available to them, are they more likely to try to obtain the same or better weapons and equipment? Secondly, in terms of weapon use—when offenders do have access to firearms, are they more likely to use them if they know the officers present are armed?

Do offenders attempt to match or better Police tactical equipment?

- 47. The first interpretation can be answered in part by examining implementation of existing tactical options. The most appropriate example to draw from in a New Zealand context is TASER. Similar to the current state of firearms, TASERs were not routinely carried by Police until 31 July 2015.
- 48. Reviewing the Tactical Options Report (TOR) database for the number of events which referred to offenders with their own TASER or other Conducted Electrical Weapons (CEWs) (see Figure 1), we found there were overall increases in the number and percentage of TOR events in which offenders had CEWs over time.
- 49. However, there are only a small number of instances overall and the increase may not necessarily be due to a "like-for-like" response—it might be that the increases were driven by technological advances and commercial availability of CEWs.
- 50. Another explanation for the pattern observed in Figure 1 is due to a general increase in subjects being armed during TOR events: this possibility was investigated. Figure 2 (see next page) shows the percentage of TOR events each year where subjects had a weapon, by weapon type.

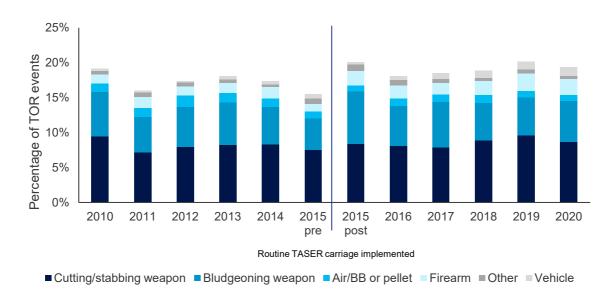


Figure 1. Number of individuals using their own TASERs and CEWs at TOR events before and after routine TASER carriage implemented, by year



Routine TASER carriage implemented

Figure 2. Percent of armed subjects at TOR events, by weapon type and year



51. As Figure 2 shows, there has been a very gradual (1.9%) increase from 2015 (when TASER became routinely carried; full year data) to 2020 in the percentage of TOR events in which subjects had weapons. Subjects with weapons increased from 858 in 2015 to 1,046 in 2020; TOR events also increased from 4914 TOR events in 2015 to 5395 TOR events in 2020. Statistical analyses confirmed that time was positively associated with the proportion of TOR events in which subjects had weapons ($R^2 = 0.71$, p < .01). In other words, the proportion of TOR events in which subjects had weapons has increased over time (2010 to 2021); this association is not limited to post-implementation of routine TASER carriage. Two percent of TORs involved subjects with a firearm. The average across 2015-2020 is also



- 2%. It is likely that the pattern observed in Figure 1 can at least be partly explained by a general increase in weapons encountered during TOR events, rather than a specific "like-for-like" response with offenders obtaining CEWs.
- 52. It is possible that the introduction of routine TASER carriage by Police prompted offenders to be more likely to obtain CEWs. However, it seems more likely that the increase observed in Figure 1 is due to general increases in subjects being armed (as shown in Figure 2) and the technological advances and commercial availability of CEWs. It is not possible to draw conclusions about the role of New Zealand Police's increasing tactical capacity in driving these increases.

Are subjects more likely to use weapons when officers are armed?

- 53. The second interpretation of the question can also be answered in part using New Zealand Police data. Operation Gun Safe was established in 2019 to record firearms incidents to measure the frequency and risk of firearms encountered by Police. Since nationwide reporting started in Gun Safe on 1 March 2019, and as at 29 July 2021, there have been 21 verified events involving discharges by offenders at Police, (including discharges at Police Officers, Police dogs, Police vehicles, and Police premises). Of these 21 events, three resulted in injuries to Police caused by firearms being discharged. The first event involved Constables Hunt and Goldfinch and the second was the event in Waikato on 9 July 2021 involving an officer being shot in the arm during a routine vehicle stop. The third event was the event in Northland on 1 December 2020 involving a Police dog being shot by an offender. One additional event of these 21 discharge events involved a Police injury. However, the injury was caused by an officer falling at the scene of the event, rather than from the firearm discharge. There were two events where firearms were discharged at buildings: one at a Police station, one at an officer's house. Both events occurred in Wairoa.
- 54. At least 12 of these 21 events (57%) involved discharges at Police Officers in Police vehicles, and at 10 of these events (48% of all discharge events) the written narratives suggest that Police staff had not exited their vehicle prior to the discharge(s) by subjects. In these events, it is unlikely that subjects knew if staff were or were not armed prior to discharging the firearm at Police. Therefore, although subjects are likely to know that Police generally have access to firearms, in almost half of discharge at Police events they were unlikely to have known whether those Police staff were armed before discharging their own firearms. Even in the other events where officers have exited their vehicles prior to discharge, it is difficult to speculate the number of subjects who would have been able to recognise if Police were armed. Furthermore, none of the written narratives of the 21 discharge events explicitly mentioned that subjects discharged a firearm in response to Police being armed. Taken together, it is unlikely that the discharges by offenders reported in Gun Safe were a result of the Police in attendance being armed.
- 55. In addition to these discharges, **25 verified firearms presentations at Police**, which did not lead to the subsequent discharge of the firearm, have been recorded in Gun Safe since 1 March 2019. **In total, this is 46 events, or about 1.5 events each month in which firearms were presented at Police.**
- 56. In 11 of these presentation events (44%) Police staff were not armed—or not known to be armed. In one event it is not clear from Gun Safe data whether Police were armed. Police response to the firearm in each of these events is shown in Figure 3. As the figure illustrates, in nine of these events Police either actively retreated or discontinued pursuing the subject. In two of these unarmed presentation events, Police successfully resolved the event using a TASER; and in another event, staff were able to disarm the subject.
- 57. In the remaining 13 presentation events (64%), Police were armed. Police response to these events are shown in Figure 4. Armed Police had varied responses to subjects presenting firearms at them. Notably, three events (25%) involved Police shooting the subject—in two of these cases the subject was attempting to harm themselves. In seven of these 13 events (54%), Police knew the offender was armed before attending, so the decision for subjects to arm themselves could not have been due to Police arming. Only one of these events involved Police presenting firearms before the offender did. In this event, it is plausible that the presentation of a firearm at Police could have been a response to Police presenting firearms at them. However, this one event represents a very small number of public interactions with armed Police. For example, since 1 March 2019, there have been 2,498 events recorded in Gun Safe that involved at least one firearm and Police being armed. In many of these events, subjects likely had the capability of presenting a firearm in response to police being armed, but the majority (99.5%) did not. Therefore, the presence of armed Police does not reliably predict subjects presenting firearms at Police.



Figure 3. Events reported in Gun Safe since 1 March 2019 involving firearms presentations at unarmed Police and Police response to the event

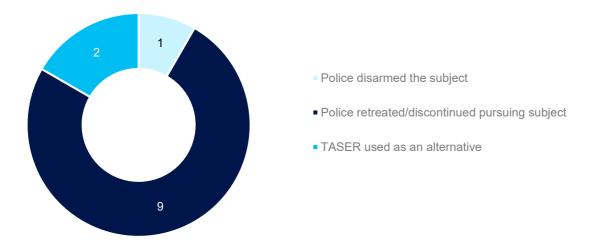
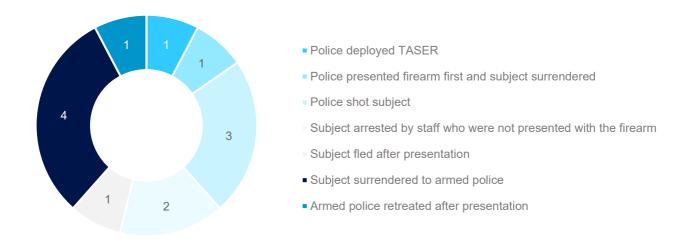


Figure 4. Events reported in Gun Safe since 1 March 2019 involving firearms presentations at armed Police and Police response to the event



Gang and organised crime firearms environment

- 58. Intelligence holdings currently indicate it is unlikely the decision for individuals within the gang and/or organised crime environment to equip themselves with firearms is influenced by the tactical settings adopted by Police.
- 59. Gangs and organised crime groups are likely becoming increasingly armed, with certain types of attacks (i.e. drive-by shootings, and targeted assassinations) possibly becoming more prevalent than in the past.¹¹ Police intelligence holdings indicate that individuals within the organised crime environment are acquiring firearms as a form of protection, perceiving a heightened threat of violence by rival gangs and/or organised crime groups,²³ as opposed to protecting themselves from Police.

¹ National Organised Crime Group Intelligence Unit, Personal Communication, 2 July 2020.

² Ibid

³ Gang Intelligence Unit, Personal Communication, 1 July 2020.



- 60. While the subjects of these attacks are almost always gang or organised crime related,⁴ the increased propensity for these groups to use firearms for violent purposes almost certainly increases the likelihood Police staff will encounter firearms in the course of their duties. Experienced organised crime detectives also report that they now routinely arm themselves while executing warrants associated with organised crime investigations, in expectation of locating firearms at warrant locations.⁵
- 61. Of the 49 individuals who were involved in either a presentation or discharge of a firearm at Police since 1 Jan 2019, six have prior convictions in Australia, however only three (six percent of the 49 individuals) were subject to the 501 deportee policy.
- 62. The emergence of new gangs (driven by the 501 policy) and their competition for turf and illicit drug market share, since the deportee policy began, has arguably increased inter-gang tensions, resulting in a corresponding increase in shooting events especially in South Auckland, which has increased the risk for everyone public and police. However, in terms of background factors impacting on risk, there are other factors either equally or more prevalent than being a deportee. These include mental health/suicide and drug use as examples.⁶

International and New Zealand literature findings

Whilst the mutual escalation argument, in which Police carrying firearms will prompt offenders to believe they need to also carry additional firearms, is an important concern, there is no empirical evidence to suggest that a mutual escalation of firearms would occur in reality.

- 63. The evidence, so to speak, is opinion based and speculative. For example, Block (2017) speculates that routinely arming Police Officers in Republic of Ireland could spark an "arms race". However, the majority of offenders in the Republic of Ireland are unarmed or without a firearm, despite an increase in the use of firearms by offenders which appears largely associated with escalating levels of violence between organised crime gangs (Block, 2017; Campbell, 2010). Additionally, Mackenzie (2019) argues that routinely arming New Zealand officers will not dissuade offenders from using firearms and that mutual escalation may occur based on reported increases of police militarisation and gun crime in the United States. Conversely, officers in Oslo, Norway disagreed with the idea that arming police would increase firearm usage by offenders since they believed offenders were already armed (Hendy, 2020). Hendy (2012) concluded that there was no evidence to support the occurrence of mutual escalation.
- 64. Concerns of escalation in offender armament because of routine Police armament is based on the idea that offenders would view this as a new development. However, it is possible that this is not the case. The Armed Response Team trial generated a large amount of media attention, with several media articles written on not only the ARTs specifically, but also on what was seen as the wider issue of routine armament of New Zealand Police. A number of these media articles reported that the New Zealand Police were already 'routinely armed,' as they carried firearms in their vehicles.⁶
- 65. As such, it appears that information about current New Zealand Police practices regarding the carrying of firearms in officer vehicles is known to the public. Consequently, it is possible that offenders already see Police as 'armed' and may not see a change to the regular carrying of firearms as a new development in Police arming.

Potential consequences of mutual escalation

- 66. While there is no current evidence to indicate that routine Police armament may lead to a mutual escalation in offender armament, it is important to consider the potential impacts if this, or increased gun ownership in general within the community were to occur.
- 67. Several studies from the United States have examined the impact of levels of gun ownership on violent crime and shooting incidents. Studies have found that numbers of household gun ownerships are related to the number of firearm homicides (Siegel et al., 2013), the number of shooting incidents by Police (Hemenway et al., 2019), and the number of shooting incidents of Police (Swedler et al., 2015). As such, if the numbers of firearms were to increase due to mutual escalation, we may expect to see increases in gun violence and shooting incidents.
- 68. There has been an increase in gun crimes in United Kingdom since 2015, but they are rare and gun ownership is

⁴ Ibid.

⁵ National Organised Crime Intelligence Unit, Personal Communication, 2 July 2020.

⁶ National Intelligence Centre, Personal Communication, 23 August 2021.



- generally low (in 2019/20 only four percent of homicides in England and Wales were the result of shootings, compared with over 73 percent in the United States in 2019). Knives or other sharp instruments were involved in 46 percent of murders, making it the most common method of killing in England and Wales).
- 69. In contrast to the United States, Norway has relatively low levels of gun violence, despite having the 10th highest rate of gun ownership in the world, and Norwegian Police are generally unarmed (Hackenberry, 2019). As such, it is important to note that there may be other factors in addition to the number of firearms present in the community which may impact the levels of gun violence and shooting incidences. More generally there are no studies that explicitly show a relationship between levels of gun ownership and routine arming of Police.



Question 2: Given our workplace includes all the people in it, i.e. the public, is it a likelihood that more people (Police or non-police) would be shot if police were routinely armed?

Key findings

- 70. It is possible that if Police are routinely armed, more people, both Police and the public, would be shot. Reviewing past incidents where firearms were presented at Police, it is difficult if not impossible for Police Officers to determine if a subject has the intent to discharge a firearm, especially during a quickly unfolding event. Routine arming would give officers in these situations another tactical option to consider. However, Police can successfully de-escalate and resolve firearms incidents with less than lethal force in many cases, and it is expected this would continue under any routine arming.
- 71. In 2021 there has been a substantial increase in Police firearms use at high-risk events compared to previous years. There is a close association between Police use of firearms at high-risk events and subjects armed with firearms. But there is a widening gap between Police use of firearms compared to long-term averages and compared to the rate of subjects armed with firearms. This suggests Police are more likely to respond with firearms than previously, even when subjects are not armed with firearms.
- 72. Literature shows that fewer Police Officers and members of the public are injured and killed in countries where Police are not routinely armed, than in countries where they are. However, this difference is likely impacted by many factors such as context, policies, and training.

New Zealand Police data

How would routine arming affect the safety of Police?

- 73. Following a review of Gun Safe incidents where a firearm was presented at an unarmed officer, and considering how these incidents might have differed if Police were routinely armed, it is possible that more people (Police and non-Police) would have been shot, as outlined in the following paragraphs. However, since 2015, Policy, Practice and Procedure (PPP) reviews of critical incidents have not identified any events in which they assess carrying a firearm would have saved the lives of Police Officers or members of the public.⁷
- 74. Between 1 March 2019 and 29 July 2021, there were **25 recorded events on Gun Safe involving firearms being presented at Police** (but not subsequently discharged). In 11 of these events, Police were reported as not being armed, and there was likely an opportunity for the offender to shoot them (in one of the 25 events, we cannot determine if Police were armed based on the information available to us). However, in all 11 events, Police successfully retreated or used other tactics/equipment to resolve the event. In six of these 11 events, the offender's firearm was not loaded.
- 75. Therefore, in terms of risk, offenders in six events did not have the capability to discharge at Police (because the firearms were not loaded). In the other four events in which Police were not armed, offenders had both the opportunity and capability to shoot, but it appears—for whatever reason—they did not have the intent do so because Police successfully retreated or discontinued pursuing the subject.
- 76. It is difficult—if not impossible—for Police Officers to determine if an offender has the intent to discharge a firearm, especially during a quickly unfolding event. We do not know what armed Police would have done in these 11 events, or the consequences for their safety; in all these events, staff safety was dependent on the offender's capability and intent to shoot. Routine arming would give officers in these situations an additional tactical option to consider. It is worth noting that there is only one recorded event in the Gun Safe data in which armed Police retreated after an offender presented a firearm at them. In this event, Police resolved the incident shortly after using empty hand tactics.
- 77. Of the Gun Safe events where Police were armed and a subject presented a firearm at them, 23% (three out of 13) resulted in Police shooting the subject. In two of these cases, the subject was attempting suicide. It is unclear in these cases whether the intention of the subject was to be shot by Police deliberately (i.e., suicide by Police). Regardless,

⁷ Capability, Personal Communications, 2 August 2021.



it is plausible with general arming we will see more people attempting suicide with a firearm being shot by Police. The scope of mental health incident training may need to be reviewed to mitigate any such consequences.

Estimated differences in number of people shot by Police

- 78. In order to estimate changes to the number of people likely to be shot by Police under routine arming, TOR data from the last 11 years was examined, to identify the number of TOR events where firearms could have justifiably been used if Police had been routinely armed.
- 79. According to Police policy, firearms should only be presented or discharged when an officer's Perceived Cumulative Assessment (PCA) puts the subject's behaviour at (or expected to escalate to) being likely to cause grievous bodily harm (GBH) or death. In some TOR events that met this criterion, staff used firearms; the remaining events where the officer's PCA was at GBH/death and firearms were not used, highlight the potential opportunity for firearms usage to increase under routine arming.
- 80. It is important to note that **staff can successfully de-escalate and resolve such incidents with less than lethal force in many cases**, and it is expected that this would continue under routine arming with the movement of firearms from the car to an officer's person. Deeper analysis of these de-escalation events is complex but would provide valuable insights for frontline safety training. We recommend that this is undertaken.
- 81. The following analysis is intended to provide an estimate of what *could* have happened if firearms had been used every time they would have been legally justifiable, and does not take into account the many and varied situational, personal, cultural, and behavioural variables that affect each unique situation.

Table 1. TOR events based on PCA and firearm use

Year	Total TOR Events	TOR Events with PCA at GBH/death	Percent of all TOR events	TOR Events with PCA at GBH/death: Firearm used	Percent of all TOR events	TOR Events with PCA at GBH/death: Firearm not used	Percent of all TOR events
2010^	2,542	174	6.8%	51	2.0%	123	4.8%
2011	4,897	343	7.0%	108	2.2%	235	4.8%
2012	5,201	428	8.2%	134	2.6%	294	5.7%
2013	5,185	416	8.0%	147	2.8%	269	5.2%
2014	4,823	481	10.0%	201	4.2%	280	5.8%
2015	4,914	491	10.0%	198	4.0%	293	6.0%
2016	5,055	641	12.7%	302	6.0%	339	6.7%
2017	4,541	500	11.0%	181	4.0%	319	7.0%
2018	4,324	540	12.5%	214	4.9%	326	7.5%
2019	4,860	648	13.3%	272	5.6%	376	7.7%
2020	5,395	726	13.5%	289	5.4%	437	8.1%
2021^	1,982	343	17.3%	177	8.9%	166	8.4%
Total	53,719	5,731	10.7%	2,274	4.2%	3,457	6.4%

[^] Data for partial years only: 2010 data from 1 July 2010; 2021 data up to 7 July 2021. Percentages are rounded.

- 82. Table 1 displays the numbers of TOR events that met these criteria over the last 11 years, from 1 July 2010 until 7 July 2021. 2021 includes only those reports which have completed the review process as at 7 July.
- 83. Based on TOR data from 2019 and 2020 (see point 49 for a full explanation of why we used this data), 2.7% of firearms deployments by New Zealand Police at TOR events with PCA of GBH/death (15 out of 561) involved a discharge; the remaining deployments involved only a presentation. By applying this rate to the TOR events over the past 11 years where the PCA was at GBH/death and a firearm was not used, we can estimate that if a firearm was used at every



TOR event which met the PCA threshold, an additional 92 TOR events could have involved police shooting at a subject (2.67% of 3,457 TOR events; approximately equivalent to an additional eight TOR events with a firearm discharge per year).

- 84. Based on the outcomes of firearms discharges in these two years, we can further estimate that approximately 28 (31%) of these TOR events over the ten year period could have resulted in the subject sustaining a non-fatal gunshot wound, and 43 (46%) could have resulted in a subject fatality (with 43 additional Police staff potentially causing someone's death); the remaining 21 (23%) firearms discharges may have missed the subject.
- 85. The estimates regarding outcomes of firearm discharges are based on a very small amount of data, mostly from the Fatalities and Shooting Injuries database (15 instances). We relied on data from 2019 and 2020 for this estimate for several reasons. 2020 is the most recent year of complete data which should most closely parallel the current operating environment. 2021 data is not yet complete: although we know through NCCC notifications that Police have fatally shot two people in 2021 and injured another person non-fatally. One of these incidents is yet to be reported to the Fatalities and Shooting Injuries database. Additionally, based on the RORE team's previous experience, it is very likely that TOR reports for at least some firearms presentations that have occurred during 2021 have not yet completed the two-stage review process that is required in order to be included in the TOR dataset. As such, 2021 data does not provide an accurate picture of firearms use. Data from earlier years are either only partial, or present other complications which would be expected to skew the result.⁸
- 86. The RORE team also maintains a manual record of shootings by New Zealand Police, which captures incidents that occurred before the Fatalities and Shooting Injuries database was brought into operation. The 2019 and 2020 data used in the estimates above is broadly consistent with the pattern of outcomes from the manual record over a much longer period.
- 87. It is important to note that this data is at the incident level, not the TOR event level—TOR events relate to one officer's use of tactical options against one individual, whereas an incident can involve multiple officers and multiple individuals—so it is not ideal to directly combine the two sources.
- 88. Over the last 20 years (2001 2020), there have been 67 incidents where police have discharged a firearm at a person; 12 incidents (18%) resulted in a miss, 29 (43%) resulted in the subject sustaining non-fatal injuries, and 24 (36%) resulted in a subject fatality. Based on this data, we estimate that the subject fatality rate when police discharge a firearm at a subject lies between 24% and 47% (95% confidence interval). Assuming the 92 TOR events all occurred at separate incidents, the confidence interval analysis translates to between 22 and 43 additional people potentially sustaining fatal injuries over the last 11 years.
- 89. It is important to note that these numbers may either overestimate or underestimate the likely outcome of routine arming. The analysis assumes that the reason firearms were not used in these TOR events over the last 11 years was that firearms were not accessible, and that if accessible, a firearm would be used in every TOR event where the PCA was at GBH/death.
- 90. However, because officers can arm when the operating environment is such that a PCA of GBH/death is anticipated, or when the subject is believed to be armed, it may be that officers were actually armed at all of these TOR events, but were able to deescalate the situation without using a firearm, and/or chose to deploy other tactical options that were more appropriate for the circumstances.
- 91. Further investigation into high risk TOR events that were resolved without firearm deployment may be fruitful to inform and improve training, policy, and practice. If staff did have access to firearms during these TOR events, we might predict that routine arming would have very little effect on shooting injuries and fatalities because firearm access would not be the determining factor in current usage rates. Without a record of how often officers are armed, or deeper analysis of the high-risk TOR events where firearms were not used, it is not possible to draw a strong

into operation in July 2017 and relevant incidents prior to this date were not reported in a centralised database.

⁸ 2018 data was not suitable to include in calculating a discharge rate at TOR events due to several complicating factors. In 2018 there were three firearms discharges by police that were not aimed at people, such as warning shots into the ground, and shots fired at car tyres. In addition, there were two separate incidents that each involved two officers discharging firearms at one subject. In both cases the subject died, although in one case the cause of death remained unconfirmed by the coroner. At the level of TOR events, this data shows four TOR events, each with one officer discharging a firearm and the TOR event resulting in a subject fatality. In reality, two subjects died, but only one fatality was caused by Police. It is not easily apparent how to accurately represent this data to extrapolate the rate of firearms discharges at the TOR event level. Data from 2017 is only captured for part of the year: the Fatalities and Shooting Injuries database came



conclusion either way. The AOS/STG exemption from reporting firearm and TASER presentations adds a layer of complexity to developing robust inferences from the data.

92. On the other hand, restricting the analysis to only TOR events that reached the PCA threshold of GBH/death may mean the analysis underestimates the likely outcomes by excluding the events at lower levels of PCA where the officer thought it was likely the situation had the potential to escalate to within or beyond the GBH/death range.

Table 2. Number and percentage of TOR events with firearms use by highest level of PCA reached, and year

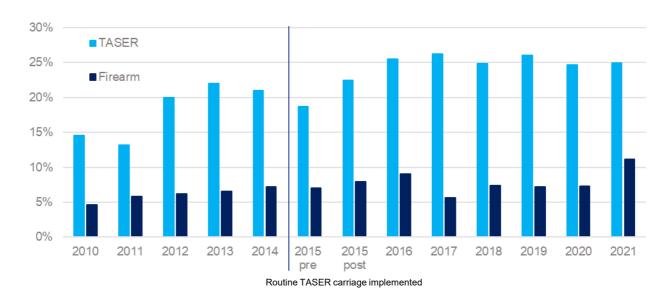
	Cooper	ative	Passive Re	sistant	Active R	esistant	Assa	ultive	GBH	/Death
Year	n	%	n	%	n	%	n	%	n	%
2010^	36	31%	12	10%	4	3%	15	13%	51	43%
2011	81	29%	55	19%	16	6%	23	8%	108	38%
2012	101	32%	29	9%	28	9%	28	9%	134	42%
2013	87	25%	66	19%	13	4%	29	8%	147	43%
2014	70	20%	30	9%	16	5%	32	9%	201	58%
2015	70	19%	42	12%	22	6%	32	9%	198	54%
2016	79	17%	36	8%	17	4%	23	5%	302	66%
2017	28	11%	14	6%	13	5%	18	7%	181	71%
2018	45	14%	26	8%	15	5%	20	6%	214	67%
2019	38	11%	14	4%	13	4%	14	4%	272	77%
2020	50	13%	28	7%	7	2%	21	5%	289	73%
2021^	29	13%	8	4%	4	2%	3	1%	177	80%
Total	714	19%	360	10%	168	4%	258	7%	2,274	60%

 $^{^{\}wedge}$ Data for partial years only: 2010 data from 1 July 2010; 2021 data up to 7 July 2021

- 93. As shown in Table 2 (see above), firearms use occurs at a substantial number of TOR events at these lower levels of PCA, accounting for 40% of all firearms use by New Zealand Police since 2010. Firearms use in these situations typically involves firearm presentations when approaching a subject (often in a car) who is either known or expected to be armed, and thus it could reasonably be expected that the situation could escalate to GBH/death.
- 94. Of all the tactical options currently available to non-specialist staff, the TASER is the most like a firearm: it is deployed from a distance to incapacitate assaultive subjects, but with reduced lethality. The TASER has also followed a similar trajectory to firearms, with routine carriage introduced 31 July 2015 after a period of five years with more limited access. Examining how TASER use has changed over this time may provide insights as to the likely progression of firearms deployment if arming became routine. Figure 5 (see below) shows the percentage of TOR events where TASER was deployed over time: there was a small increase in use following the introduction of routine carriage, but TASER usage has remained relatively stable since then.
- 95. Figure 5 also displays the percentage of TOR events where firearms were used before and after routine TASER carriage. It is important to note that data prior to July 2017 (when the Fatalities and Shooting Injuries database was brought into operation) does not capture any firearms discharges that resulted in a subject fatality or injury. It appears that following a period of adjustment, firearm usage dropped after routine TASER carriage was brought in, and the rate of usage remained stable until 2020. However, initial data suggests that the rate of firearm use by Police has increased substantially in 2021. This data is based on TORs completed up to 7 July 2021 and is examined further below (see Paragraph 58).

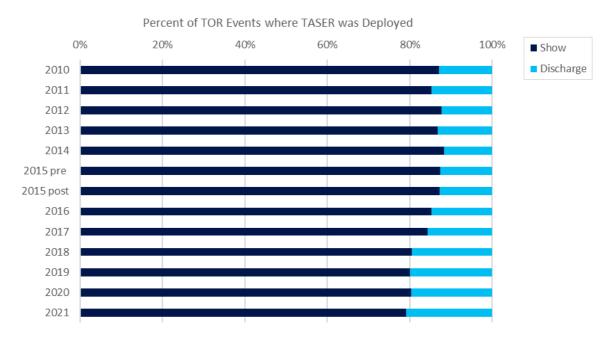


Figure 5. Percent of TOR events with TASER and firearms use, before and after routine TASER carriage implemented



- 96. Figure 6 (see below) illustrates the proportion of TASER discharges relative to shows, which steadily increased over time, before stabilising in 2019, with an average of four TOR events with a TASER presentation for one TOR event with a TASER discharge. The increase in discharges relative to shows might be explained by several factors as detailed below.
- 97. For instance, it may be that staff became more familiar and comfortable discharging the TASER, an outcome that may also occur for firearms because of routine carriage. Similarly, as legal outcomes that support the justification of discharges accumulate over time, staff may become more comfortable and feel more justified in discharging both TASERs and firearms in a broader range of circumstances, increasing discharges over time.
- 98. Alternatively, or in addition, it may be that TASER shows have become less effective in garnering subjects' cooperation over time, perhaps because subjects have become more aware of TASER's limitations such as for people with high body fat or wearing thick clothing. It is unlikely that this factor would be as influential in firearms presentations given the significantly more serious consequences of being on the receiving end of a firearms discharge compared to a TASER discharge.

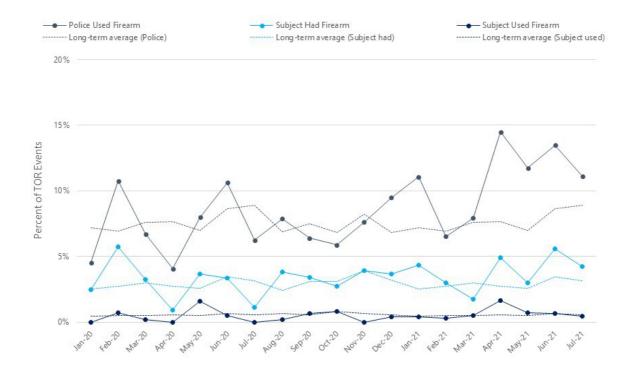
Figure 6. TASER TOR events by highest mode of deployment, before and after routine carriage implemented





- 99. As noted above, Figure 5 illustrates an increase in the rate of firearm use by Police in 2021, compared with the previous four years. The data depicted in the figure is based only on TOR reports that had completed the two-stage review process as of 7 July 2021. To ensure this rate increase was not due to reliance on partial data (e.g. if TORs with firearms usage are more likely to complete the review process sooner), we conducted additional analyses including data for 2021 TORs that had not yet completed the review process. Note that TOR reports that have not completed the review process are subject to change, and so typically do not form part of data for reporting purposes.
- 100. Based on this more comprehensive data, Police used firearms at 11% of 2021 TOR events (335 of 3,028) that had been reported as of 29 July 2021⁹ confirming the pattern observed in Figure 5. In other words, the data suggests that there has been a substantial increase in Police firearms use at TOR events compared to previous years. Figure 7 examines firearm usage rate by month back to January 2020, to identify whether there was a clear tipping point or any patterns underlying the difference. Figure 7 also shows the rate of subjects armed with firearms at TOR events (regardless of whether the weapon was used), as well as the rate of subjects who used firearms at TOR events, over the same period. Firearms include Air/BB/Pellet and imitation firearms. The figure also displays the long-term averages for each month, calculated using TOR data from 2013 to 2021. Earlier years were excluded because routine carriage of firearms in Police vehicles did not become standard until July 2012.
- 101. As Figure 7 illustrates, Police use of firearms at TOR events and subjects armed with firearms at TOR are closely associated ($R^2 = 0.74$, p < .01), showing a very similar pattern month-to-month. Of particular interest is the widening gap between Police use of firearms both compared to the long-term averages and compared to the rate of subjects armed with firearms during the same time-period, especially notable from April 2021. Taken together, these widening gaps suggest that Police are more likely to respond with firearms than previously, even when subjects are not armed with firearms.

Figure 7. Percent of TOR events where Police used firearms, and subject had or used firearms by month, January 2020-July 2021



102. One explanation for increased use of firearms by Police is that Police are encountering more behaviour that puts themselves or others at risk. To test this possibility, we examined the percentage of TOR events where the PCA reached GBH/death over the same period (January 2020 – July 2021). As Figure 8 illustrates, since January 2021 there has been a substantial departure from the long-term averages, with a larger proportion of TOR events reaching a PCA of GBH/death. In addition, the rates of Police firearm use at TOR events were closely associated with the rate of

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 $^{^{9}}$ Including 505 TOR reports that were yet to complete the review process.



TOR events reaching a PCA of GBH/death ($R^2 = 0.72$, p < .01). It is not possible to determine from this data whether the increase is due to a change in subjects' behaviours and an increasingly risky operating environment, or whether the increase might also be partly due to changing staff perceptions of behaviours and increased sensitivity to risk. We recommend further work be undertaken to explore this.

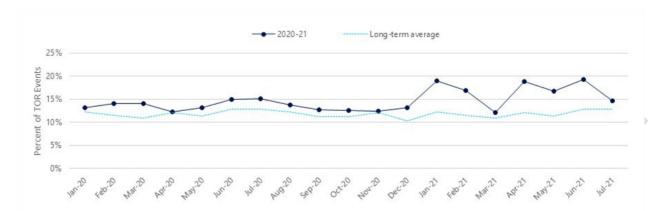


Figure 8. Percent of TOR Events where PCA reached GBH/death by Month, January 2020-July 2021

103. One difficulty in drawing any conclusions about the likely outcomes of routine arming is that we do not have good information about how often Police are currently armed with firearms, and therefore if Police are arming more frequently than in previous years. As described more fully in Paragraph 85, in late 2020, the RORE team conducted a survey (on behalf of the FSIP *Response Model* and *Engagement* streams) to capture and understand frontline Police Officer perspectives on safety. As part of this survey, staff reported how often they were armed with firearms. Most staff had carried a firearm at least once during the last 12 months (n = 312 of 324; 96%). Glock carriage was the most common: in total, more than half of the survey respondents reported that they carried a Glock at least monthly (n = 175; 54%), and for some staff this was as often as weekly (n = 75; 23%) or daily (n = 33; 10%). As expected, Police presentation/discharge of firearms was not common, with only 16% of respondents presenting/discharging a Glock, and 14% presenting/discharging an M4 in the last 12 months. However, several staff members reported presenting/discharging firearms either monthly or weekly. One opportunity to better examine likely consequences of routine arming would be to identify the subgroup of Police Officers who are armed on a daily basis (10% of Police Officers if the survey results generalise to the full workforce) and examine the outcomes for these staff members.

Periods of routine arming

- 104. Another source of information about how firearms usage might change under routine arming is data about firearms use during times of general arming. The trial of Armed Response Teams is one example: members of these teams were armed for a six-month period (between 28 October 2019 and 26 April 2020) in three Districts. All of the evaluation material and other publications in respect of the ART trial are available on the New Zealand Police website at: https://www.police.govt.nz/about-us/publication/armed-response-team-publications
- 105. Another example is the general arming that was put in place after the Christchurch Mosque attacks in March 2019. Frontline staff remained armed for a four-week period, 15 March-16 April 2019. Table 3 shows that Police firearm deployments during this period were similar to the same period in the previous year and in 2021. In contrast, the same period in 2020 appears to have a much lower rate of firearm presentations, however the national Covid-19 lockdown occurred during this period.
- 106. Examining only the TOR events prior to the lockdown (15 March–25 March 2020) gives a similar rate of firearm presentations as in the previous years, with 11 firearms presentations out of 146 TOR events (8%). Although TOR events continued to occur at a similar rate during the lockdown, firearms deployments appear to be reduced.
- 107. During the period of general arming following the Mosque attacks, New Zealand Police made substantial efforts to minimise the risk that members of the public would be upset or alarmed by the routine presence of firearms. The culture and expectations set by Police leadership may have contributed to the similar pattern of firearm use seen during this time. Routine arming may require similar directives to ensure public trust and confidence is maintained with increased visibility of firearms.



Table 3. TOR events and firearms use during national general arming (15 March – 16 April 2019) and equivalent comparison periods

Year	Arming	TOR events	Presentations (%)	Discharges (%)
2018	Standard operating environment	331	27 (8%)	2 (0.6%)
2019	General arming	405	28 (7%)	0 (0%)
2020	Standard operating environment [^]	480	17 (4%)	0 (0%)
2021~	Standard operating environment	376	34 (9%)	0 (0%)

[^] Note that for part of this period in 2020, NZ was in nationwide lockdown due to the global pandemic.

- 108. These two periods of temporary routine arming suggest that introducing permanent routine arming may not significantly increase Police presentation and discharge of firearms, or the number of people shot by Police.
- 109. Airport Police and members of the Diplomatic Protection Squad are also routinely armed. Since July 2010, there have been 14 TOR events in which Airport Police have presented firearms, but no events involving firearms discharges. There has been one firearm presentation by a member of the Diplomatic Protection Squad, but it appears that this event was outside the member's typical duties. However, DPS and Airport Police operate in significantly different environments than most frontline staff and comprise a very limited number of staff.

What are additional risks if Police were routinely armed?

Bystander injuries from firearms discharges

- 110. One potential risk of routine arming is the increased possibility of bystanders being shot by Police. To estimate the risk of bystander injuries, it is important to establish how frequently bystander injuries occur currently.
- 111. Records of Police shootings held by RORE include only one incident: in 2009 two bystanders were unintentionally shot by Police—one fatally and one non-fatally. The incident involved an extended pursuit of an armed offender in a vehicle who posed a significant risk to Police and members of the public. AOS confronted the offender on a busy motorway, where the two bystanders were accidentally shot. The IPCA concluded that Police were legally justified in firing at the offender, however noted that additional training could be required for AOS under these circumstances. ¹⁰ It is also likely that there are incidents in which bystanders had near-misses when police and/or offenders were discharging firearms. For example, in 2019 one Christchurch resident claimed that while Police were firing at an offender, he came out of his house and could see bullets hit his fence and house. He lay on top of his young daughter on his lawn until the shooting stopped. ¹¹
- 112. In summary, bystander injuries are rare under the current Police firearm policy. If the introduction of routine arming leads to increased firearm discharges, then **we might expect increases in bystander injuries**. Consideration should be given to training and equipment to reduce the chances of bystander injuries if routine arming is introduced in future.

Unintentional discharges

113. Another consequence of routine arming is the potential for increases in unintentional discharges by Police. According to the TOR Unintentional Discharges database and a list maintained by the RORE team, there have been two

^{~ 2021} data is based only on TOR reports that had completed the review process as of 7 July 2021.

¹⁰ https://www.ipca.govt.nz/includes/download.aspx?ID=120671

¹¹ https://www.stuff.co.nz/the-press/news/81342182/police-responding-to-serious-incident-in-christchurch



- operational unintentional discharges that have hit a subject. One of these incidents occurred in 1971 and the other occurred in 2013.
- 114. There is little information held about the first incident. The second incident involved an officer accidently discharging a Bushmaster rifle at an offender who was on the ground and in custody at the time. Both unintentional discharges were non-fatal. In a further two incidents, unintentional discharges resulted in injuries to the officer who discharged the firearm: one incident in 2015 occurred during operational activities and involved an unintentional discharge into the officer's foot; the other incident in 2019 occurred during training (non-operational) and involved an unintentional discharge into the officer's buttock.
- 115. Table 4 (see below) shows the number of operational and non-operational unintentional firearms discharges recorded since 2010. Non-operational unintentional discharges typically occur either during training or during preand post- operational checks. These findings show that unintentional discharges occur infrequently and very rarely hit subjects. However, non-operational unintentional discharges do not always occur safely into the bullet trap; for instance, one unintentional discharge went through the staff room wall into an interview room, another went through two walls before lodging in a third wall, and another pierced a fire extinguisher inside a patrol car.

Table 4. Unintentional firearms discharges by operational status and year

Year	Operational	Non-operational	Total
2010^		3	3
2011	1		1
2012	1	1	2
2013	1	2	3
2014		2	2
2015	2	4	6
2016	1	8	9
2017	1	3	4
2018		6	6
2019	2	5	7
2020	2	8	10
2021^	1	3	4
Total	12	45	57

[^] Data for partial years only: 2010 data from 1 July 2010; 2021 data up to 7 July 2021.

116. Current policy requires staff to conduct pre-operational checks whenever they take possession of a firearm operationally at the commencement of a shift or period of duty; as such, the opportunity for unintentional discharges to occur during these checks is likely to remain stable, as staff would still be expected to conduct checks when taking possession of a firearm, regardless of whether the firearm is then stored in the vehicle or carried on the officer's person. However, whether there will be an increase in unintentional discharges during training will depend on whether the amount of firearms training which Police Officers receive increases under routine arming. We might expect all other types of unintentional discharges to increase with routine arming.

Offenders taking Police tactical equipment

117. Another risk of routine arming is the possibility that offenders will take firearms from officers and use them against Police. There have been 42 incidents identified since July 2010 where an offender has used Police tactical equipment against the officer (as shown in Table 5 below). In 2021 alone, as at 28 July, there have been three such incidents with TASERs. It is possible this may be related to changes to the TASER holster position and fastening, with some staff now wearing this on their body armour carrier rather than their duty belt.



118. The three TASER events which have occurred to date in 2021 are described below:

- a. An offender successfully unholstered a TASER when struggling with an officer on the ground. The offender discharged the TASER, with both probes hitting the officer in the leg and causing local neuromuscular incapacitation (NMI).
- b. An offender managed to detach a TASER, still within the holster, from an officer during a foot pursuit through residential properties. The offender was arcing the TASER and attempting to discharge it while within the holster. A second officer used another TASER to subdue the offender before the offender could remove the TASER from the holster or discharge it.
- c. During a struggle to apply handcuffs, an offender unclipped the officer's TASER and removed it from the holster without the officer's awareness. The offender presented the TASER at a second officer but complied with instructions to drop it when the second officer presented her own TASER in return.

Table 5. TOR events where offenders obtained Police tactical equipment (1 July 2010–28 July 2021)

Police Equipment	Incident Count
Handcuffs	20
OC Spray	3
Radio	1
TASER	14
Torch	4
Total	42

- 119.A further near miss incident in 2018 was identified, in which an officer was wrestling with an offender over their Glock, with the offender attempting to point it at a second officer. If routine arming is introduced, there is a risk that offenders might get a hold of officers' firearms, however this risk could be mitigated through appropriate training.
- 120. Although rare, these events show that when Police and members of the public are in close physical proximity, offenders have demonstrated they can take TASERs both from officers' hands and from their holsters. One situation where Police are in very close proximity to an offender is when they use Empty Hand techniques. In 2020, Empty Hand techniques were used at 2,130 TOR events (39% of all TOR events). Empty Hand techniques require close physical contact with offenders, and under routine arming would provide increased opportunity for offenders to take firearms from Police. Alternately, awareness of this risk may discourage staff from utilising Empty Hand techniques in situations where they would otherwise be appropriate, restricting the tactical options available to them. This could potentially result in use of higher-level tactical options than necessary to resolve the situation. As there are many more physically close Police-public interactions that would not be captured by the TOR database, or that do not involve Empty Hand techniques, it is likely that this figure underestimates the opportunity for subjects to take firearms from routinely armed Police.
- 121. There have also been numerous incidents in the last few years in which offenders have stolen New Zealand Police vehicles (for example, this IPCA report covers one such incident). These incidents pose a potential risk to staff and public safety because police firearms are often stored in Police vehicles. Although under routine arming officers will carry firearms, it is also likely that firearms will continue to be stored securely in Police vehicles (for example, Bushmaster M4s would likely be stored in Police vehicles). To reduce offender access to Police firearms in these rare circumstances, current firearm policy states that firearm security keys are not to be left in unoccupied Police vehicles. Therefore, we should not expect any significant change in risk of offenders accessing Police firearms from vehicles if this policy is adhered to.
- 122. International data show that in countries with routine arming, Police firearms are stolen from officers and sometimes used to shoot Police. For example, in the United States between 2002 and 2011, 28 officers who had their firearms stolen by offenders were shot and killed by that firearm. However, this number should be considered with the fact there are approximately 700,000 full-time Police Officers and approximately 330,000,000 people living in the US both much higher than New Zealand Police Officer and population numbers.



Current firearms training New Zealand Police staff receive

- 123. New Zealand Police recruits go through a nine-day firearms programme. During the programme they are taught about how to use Glock and Bushmaster M4 firearms, and the theory behind Police response, survival strategies, searching, high risk arrests, family harm interactions, high risk vehicle stops, and shooting in reduced light conditions. Additionally, recruits take part in role playing, going through different realistic scenarios which include, among others, a burglary, and a family harm call for service.
- 124. These scenarios include different contexts e.g., a shop owner being agitated or the partner of the threatened informant being emotive in a burglary call for service and outcomes e.g., an offender being compliant or an offender being threatening. The three-day District Police Integrated Tactical Training (PITT) programme must be completed yearly by Level 1 responders and includes PITT certification, PITT tactics, and PITT live fire sessions. During this refresher programme, attendees also have to role play in realistic scenarios including, among others, high risk vehicle stops and burglary scenarios. During role-playing, instructors are directed to put cognitive pressure on trainees, such as including ongoing radio call signs as part of the scenario, so previous training is recalled more promptly.¹²
- 125. In late 2020, the RORE team conducted a survey (on behalf of the FSIP Response Model and Engagement streams) to capture and understand frontline Police Officer perspectives on safety. More than half of the respondents (192 of 363; 54%) reported that their current training did not meet the requirements of their BAU role. Higher proportions of respondents agreed that they were sufficiently trained to perform their role in the operating environment (n = 192; 63%), and to use force to protect themselves (n = 203; 67%) and to protect others (n = 204; 67%), yet a substantial proportion reported that they were not sufficiently trained for these tasks.
- 126. Staff reported that informal training in tactical options use (outside PITT) was more common for firearms (both Glock and M4 Rifle) than other tactical options, however, two out of every three respondents reported not receiving any informal training in firearm use over the previous 12 months.
- 127. Staff were asked to provide any general comments at the end of the survey; the most common words mentioned were "firearms" and "training." Many comments focussed on increasing the frequency of firearms training and more regular practice, as well as the need for scenario-based and high-pressure training. Respondents also suggested incorporating training into regular activities. One popular suggestion was to complete training as a section, so that staff who work together learn about each other's strengths and weaknesses and can better support one another.

International and New Zealand literature findings

The comparative studies reviewed in this section suggest that **fewer Police Officers and civilians/offenders are injured and killed in countries where Police Officers are not routinely armed than in countries where they are.** However, this difference is likely impacted by many factors such as context in which firearms are used, policies regarding use of firearms, time for decision-making and training provided to officers.

- 128. Most of the research literature on the effects of routine arming of Police includes comparative studies between countries (or regions) in which Police routinely carry firearms, and those countries (or regions) in which Police Officers do not routinely carry firearms. These studies generally include countries or regions considered to share sufficient historical, social, cultural, and economic background characteristics to make comparative analysis as robust as possible. However, such comparative studies are largely uncontrolled and country variations remain. Thus, conclusions should be considered with these limitations in mind.
- 129. Even across jurisdictions that have generally similar arming policies, there can be small differences that make comparison difficult. For instance, when comparing three generally unarmed Police forces, Hendy (2020) observed differences regarding the use of firearms: In Norway Police Officers are trained to carry firearms, firearms are secured in their vehicles, and officers can only use a firearm after seeking permission from a chief of Police; in New Zealand, Police Officers are trained to carry firearms, firearms are secured in their vehicles, and officers make a decision to use firearms based on their evaluation of the situation; in England only Police Officers from specialist teams who are trained to use firearms attend more serious offences in Armed Response Vehicles.

¹² The information presented on this paragraph is based on information and training material provided by the Response and Tactical Team within the Response & Tactical Training Group at NZ Police.



- 130. Considering the literature, most studies compare Sweden and Norway. These countries have a common cultural background and the only remarkable difference between them seems to be that Police are routinely armed in Sweden and not routinely armed in Norway.
- 131. Knutsson (2004) analysed the impact of single firearm incidents with major consequences (e.g., Police Officers being fatally shot by an offender) in Sweden and Norway between 1990 and 2002. During the study period, there were four civilian deaths and 10 civilian injuries in Norway as a result of Police threatening to use or discharging a firearm, compared to 13 civilian deaths and 91 civilian injuries in Sweden as a result of Police discharging a firearm; there was no Police death or injury in Norway which is in stark contrast to the 31 officer injuries or deaths associated to when Police Officers discharged their firearms in Sweden. Therefore, there were significantly more casualties, both civilian and officer, in the country with a routinely armed Police force. The article does not specify who is considered civilian in the study (i.e., offenders and victims or just victims), further it is not clear in the article (a translation into English not subject to subsequent editing) if the injuries and deaths reported were caused by Police or offender discharge.
- 132. Punch (2011) observed in his book that several factors interact in the leading to a firearm incident:
 - In brief, in assessing incidents involving police use of firearms a number of factors can be taken into account, including the individuals involved, the equipment and ammunition, levels of training and skill, 'programming' to fire in a certain manner, the specific context and the perceptions of the actors as the incident develops, but also organisational policies and societal values. (Punch, 2011, p.116).
- 133. Using the Sweden-Norway comparison, there are differences in the way Police report use of firearms. For example, Sweden reports incidents only when a gun is discharged by an officer, whereas Norway reports when a gun is discharged as well as every instance in which a weapon is drawn by an officer.
- 134. Knutsson and Strype (2003) also note that the different arming policies mean that Swedish officers are more likely to use a firearm going about their daily business (e.g., in sudden encounters), whereas Norwegian officers are more likely to use firearms in planned-armed actions or more controlled environments, with specialist response teams more likely to use firearms. These different contexts likely result in very different decision-making processes in the two jurisdictions. Sudden encounters involve split second decisions that may be more influenced by cognitive biases (Knutsson & Strype, 2003). Planned-armed actions allow for decisions to be made at every step through anticipation, entry contact, dialogue and information exchange, final decision and aftermath (Fyfe, 1993, as cited in Knutsson & Strype, 2003).
- 135. Knutsson and Strype (2003) also contend that as Swedish officers are armed, they may also feel there is an expectation to handle any situation themselves. In their study, more shots were discharged by Swedish (average per year of 31) than Norwegian (average per year of 3) Police, and this was associated with more Police and citizen injuries. Furthermore, when the data were corrected for population size, shots were discharged, and suspects were injured five times more often by Swedish than Norwegian Police. In Sweden, officers were more likely to fire when firearms were present, or they were assaulted by a suspect with a knife or other sharp object compared to when the suspect was assumed to be armed. It followed that suspects were more likely to be injured or be killed in Sweden if there was an assault with a knife or other sharp object compared to situations in which the suspect was assumed to be armed. Specific information about when Police were more likely to discharge a firearm in Norway was not provided in the article.
- 136. In a qualitative study including 25 criminologists and police practitioners comparing the Swedish to the Norwegian Police force, Hendy (2014) found that routinely arming the Police was not perceived by interviewees as a barrier between the Police and the public, or as significantly impacting the practice of policing by consent if the public did not perceive any increase in Police aggression. However, interviewees perceived that officers could end up using more force depending on how they perceived risk, and that more unlawful or accidental deaths could happen if officers were armed. Results also highlighted that being armed may lead Police Officers to engage in more dangerous situations, putting themselves at risk, and that there might be a higher frequency of injuries and deaths involving mentally ill people. It is important to consider that findings from this study are anecdotal as they were based on the perception of only 25 participants and not on statistics from the front line.
- 137. In a related study, Hendy (2020) evaluated how 16 Police Officers in Norway perceived routinely arming Police in response to a terrorist attack. The researcher found that Police Officers perceived being routinely armed as beneficialfor routine policing, and that carrying firearms improved their effectiveness and efficiency. Moreover, officers perceived that while being armed was initially a barrier in interacting with the public, this barrier reduced with time. The author also observed that Police Officers perceived that they changed their stance when routinely armed, resting



their hand on their firearm when they were in large crowds to avoid people taking their firearm. Police Officers were aware civilians would be uneasy with this behaviour but regarded it as necessary. In the same piece of research, the author discussed (based on previous research) that although there was an increase in unintentional firearm discharges in Norway while Police were routinely armed, there was no increase in death frequency.

- 138. Looking outside of the routinely compared Sweden-Norway contexts, Hawkins and Ward (1970) found in Australia, when comparing states where firearms were or were not routinely carried by Police (between 1948- 1968), that the frequency of injuries and deaths caused by Police was higher in states where Police Officers were routinely armed or guided by policy to be routinely armed. Likewise, injuries and deaths of officers were also more frequent in states where officers carried firearms more often than not.
- 139. In a more recent study, Farmer and Evans (2021) explored the relationship between routinely armed Police and safety across four jurisdictions: New Zealand and England/Wales (routinely unarmed) and Australia and Canada (routinely armed). Country level findings showed that from 2007 to 2017 more civilians were fatally shot by Police in Canada (n = 260) and Australia (n = 47) than in England/Wales (n = 22) and in New Zealand (n = 16). The frequency of fatal shootings in Canada was 16 times higher than in New Zealand and 12 times higher than in England/Wales. When these numbers are converted to rates of fatal shootings by relative sworn officers (per 100,000 of the population), Canada records the highest rate of 0.75, Australia 0.20, New Zealand 0.36, and England/Wales 0.04. The relative risk of being fatally shot by a Police Officer is clearly higher in Canada, and remarkably lower in the unarmed jurisdiction of England/Wales.
- 140. Farmer and Evans suggest these findings offer support to the *law of the instrument* in which the availability of a response increases the likelihood of its use even when a lesser form of force may be more appropriate (Horowitz, 1962). As the statistics used in this study are merely descriptive and the justification of Police shootings cannot be determined, more research is therefore needed to establish the validity of this claim.
- 141. According to the authors, the difference between Canada and England/Wales could not be explained by size of the population (as Canada's population is smaller than England/Wales' population) or risk of serious crime or harm (as the frequency of homicides and violence offences causing injury or death is similar for both Canada and England/Wales). Canada, however, did present a higher frequency of homicide by firearms than England/Wales from 2010 to 2016.
- 142. Of all officers killed in the line of duty between 1961 and 2009 across the three countries, 25%, 61% and 92% were killed by firearms in England/Wales, New Zealand, and Canada respectively. These findings show that Canada a country in which Police Officers routinely carry firearms presents both a higher frequency of civilians fatally shot by Police than England/Wales and New Zealand, and a higher percentage of officers killed in the line of duty by firearms. Furthermore, findings show that this difference cannot be explained by population size when considering the comparison between Canada and England/Wales.
- 143. Through their analysis, Farmer and Evans (2021, p. 139) found a "a clear and repeated absence of definitive evidence to support the contention that routinely arming Police Officers inevitably or invariably improves community or police safety". While Farmer and Evans have conducted the most recent analysis of routine arming impacts, their interpretation of community safety relied on crime rates and did not explore community or Police perception.

Shooting accuracy

The literature reviewed in this section suggests that shooting accuracy can be affected by several different factors such as preparedness of the officer and individual reaction to dangerous situations. A rapid analysis of IPCA reports since 2018 also supports findings from the literature. Furthermore, realistic training situations might foster higher shooting accuracy.

144. Regarding firearm incidents, Punch (2011) discusses that "firearms are inheritably dangerous and accidents with them are inevitable" (p. 119), but that legislation, policy and training can reduce this 'inevitability'. However, evidence from shooting accuracy data from the United States suggests that even with training and familiarity with carrying a firearm on patrol, firearms accuracy can still be low. In an examination of Police shooting incidents by Donner and Popovich (2019), officers in the Dallas Police Department were found to strike the intended suspect with at least one round in 54% of incidents. When examined at the individual shots fired hit rate, they found that only 35% of shots fired hit the intended target. Unfortunately, data on the outcomes of the inaccurate shots was not reported, and it is unclear as to whether, and how often, these may have resulted in adverse outcomes such as bystander injuries or fatalities. Similar accuracy rates have been observed across a range of studies within the United States, spanning jurisdictions, and time frames. Despite changes and advances in the types of weapons used and police training methods, shooting accuracy



rates have remained relatively unchanged.

- 145. There are several factors which can impact shooting accuracy during a critical incident, including distance to the target, a suspect's actions, and the preparedness of the officer (White, 2006). Studies have also regularly observed that increased levels of stress and anxiety, such as that experienced during a critical shooting incident, may have a deleterious impact on shooting accuracy (Donner & Popovich, 2019; Novy, 2012). As part of the natural adaptive physiological response to stressful or dangerous situation, a number of alterations in perception, thinking, and behaviour may occur including visual distortions (such as, tunnel vision), altered perceptions of time, and feeling dissociated from the event or being on 'auto-pilot' (Novy, 2012). Consequently, recommendations have been made that training includes more realistic scenarios that may more accurately mimic the stress experienced in real firearm situations (e.g., Donner and Popovich, 2019). However, it is unclear how closely a training situation may be able to induce the stress levels experienced in a genuine frontline firearms incident, and therefore exactly what type of training scenarios may be best for training decision-making and physical capacity for a firearms event.
- 146.A rapid analysis of IPCA reports released since January 2018 supports the findings noted above. Some of the reports indicate that the stress of a firearms situation may impact decision making. In situation involving firearms, a person's attention is usually focused on the source of the immediate threat and their ability to notice and perceive risk to other people or vehicles nearby may be impaired (19/10/2018; fatal). It can lead to distortions in thinking and memory. For example, one officer recorded in an IPCA report can recall firing about 10 shots, however, actually fired 19 shots (23/2/2019; non-fatal). It is not uncommon for shooters to have a distorted perception of the number of shots they have fired. Multiple researchers have pointed out that memory impairment is an inherent part of critical incidents. "The memory of a highly stressful event can often be fragmented, disorganized, out of order, or contain gaps where the person has no memory at all." In another incident, (31/3/2018, fatal) officers said in interviews that they were not aware other Police Officers were behind them. When one officer was asked if he knew there were other patrol cars directly behind him, he said:
 - "... I didn't know whether they were [Police] units or members of the public... none of us had our lights on because we weren't in pursuit. State Highway 1... has a lot of traffic... so I didn't know... whether they were Police cars to be honest because..."

However, a review of the communications transcript and Eagle footage shows that numerous Police Officers indicated their presence over the radio.

- 147. Within the New Zealand context, similar concerns regarding shooting accuracy were expressed by Coroner Matenga, following the 2009 Police shooting of Halatau Ki'anamanu Naitoko (IPCA, 2012), an innocent bystander. In addition, some of the Police staff members interviewed as part of the Armed Response Team Trial evaluation noted a lack of experience and training of frontline officers (EBPC, 2020):
 - a. "There is a clear lack of knowledge coming over the radio from frontline staff doing 3Ts high- risk who may have firearms and high on meth. These happen every shift, and our new cops shake with fear."
 - "A PST cop three weeks out of college, arrives to an armed incident not knowing whether to shoot or not... someone is likely to get shot without the capability such as A.R.T." – PSTLeader
- 148. In a study that examined scenario-based training of armed police encountering an armed suicidal suspect, it was highlighted that 86.2% of the time, officers allowed an armed suicidal suspect to approach them (Young, Pierpoint, & Perez, 2020). This was considered as concerning in respect of the officer's safety. Furthermore, the different responses and actions taken by officers during these scenarios combined with their questions as to how they should have proceeded highlights the lack of understanding as to what their appropriate response should be. While these findings are not generalisable, they highlight the importance of consistent training and the risks of having routinely arming officers who lack understanding of appropriate responses to armed suspects.

Changes in tactical options and behaviour

The limited available research reviewed in this section suggests that officers are more likely to use CS sprays and TASERS (instead of lower-harm tactical options) on their shifts if they have access to them. Additionally, the use of these alternative tactical options does not seem to lead to a decrease in assaults against officers, potentially instead leading to an increase in these assaults. Thus, new tactical options brought in with the intention of improving officer safety, and that may make Police Officers feel safer in their work, may have unintended consequences which could lead to an escalation in harm.

149. To help answer whether the introduction of routine arming to a previously routinely unarmed Police force would



increase the number of individuals shot (Police and non-Police), literature investigating the effects of the introduction of another new tactical option to a Police force on officer behaviour were examined. The brief literature search about the topic returned two articles — one focusing on the use of CS spray (i.e., pepper spray) and another on the use of TASER in the United Kingdom.

- 150. Tyler and King (2000) reviewed the evidence concerning the use of CS spray by Police Officers. Their review included literature evaluating trials in both England and Wales, and Scotland between 1996 and 1997. During the trial in England and Wales, CS spray was issued to around 4,000 officers in stations within the 25 designated trial zones. Different control areas within each authority were also established. These areas included over 3,000 officers. During the trial in Scotland, a total of 803 officers from Strathclyde and Tayside were issued CS spray. It is not clear if the trial in Scotland was randomised.
- 151. The introduction of CS spray in the three countries was envisioned as a self-defence tool to incapacitatean individual who was behaving threatening/aggressive towards an officer (Kock & Rix, as cited in Tyler & King, 2000). The trial phases and subsequent research indicated that about a quarter of officers in England used CS spray to arrest a non-resisting individual. Additionally, during the CS spray trial period, there was a subgroup of officers who stopped carrying their batons as they believed that the spray would replace the baton despite the fact that CS spray was not intended to replace any current equipment (Baskind, as cited in Tyler & King, 2000).
- 152. Importantly, evidence suggested that despite being considered the most suitable tactic for incapacitating an individual, there was no difference in the reduction of assaults on Police Officers between trial (18%) and non-trial areas (22%) over the same time period. Despite the conflicting evidence concerning its effectiveness, 91% of the officers involved in the Scottish trials favoured the use of CS spray as they felt that it significantly increased their safety (Kock & Rix, as cited in Tyler & King, 2000).
- 153. An interesting psychological phenomenon that can impact the use of a weapon is the weapon effect. Originally articulated in 1967 by Leonard Berkowitz and Anthony LePage, the weapon effect argues that merely observing a weapon or a firearm can increase an individual's level of aggression, and that being in possession of a weapon can increase the aggression of the wielder (Bushman, 2013). The weapon effect has been extensively replicated in the decades sincethis initial study. In amorerecent study, Ariel and colleagues (2019) conducted a randomised control trial within the City of London to test the effect of mass deployment of TASERs on policing. In the study, officers with training on how to use a TASER were assigned to the treatment condition (i.e., times of the day during which only Police Officers with training on how to use a TASER and who were issued a TASER patrolled the street). Officers who were not issued a TASER were assigned to the control condition (i.e., times of the day in which only Police Officers without a TASER patrolled streets). The authors found that officers who were issued a TASER and were assigned to the treatment condition generally used significantly more force than officers who were included in the control condition. Likewise, officers who were not trained on how to use a TASER and therefore did not carry a TASER, but were assigned erroneously to the treatment condition, also used significantly more force than their counterparts allocated to the controlcondition.
- 154. Additionally, there was a significant increase in physical assaults against officers equipped with TASERs. The authors argue that aggressive cues may have been interpreted from the TASER due to its status as a "less than lethal weapon" which stimulated aggressive thought patterns and behaviours in both the officers and those the officers interacted with. However, this does not mean that every individual who sees or possesses a TASER will be more aggressive than if a weapon was not present as individual differences are important: for example, some individuals may be deterred and therefore less likely to be aggressive in the presence of a TASER.
- 155. It is worth noting however that in many of ICPA firearms reports released since January 2018, where firearms were used by Police, other less lethal options were not available, or were unlikely to be effective (e.g., 19/10/2018 non-fatal, 20/4/2020 fatal; 19/12/2017 non-fatal, 31/3/2018 fatal; 17/10/2017 non-fatal; 25/11/2018, fatal). For example, one officer explained that tactical communication wasn't working, and he was too far away to effectively use his baton, pepper spray, or his Taser. He said: "there's always 'do nothing', but that's never an option when someone's got a firearm pointed at your colleague".



Question 3: Would there be any other benefits or dis-benefits from routine arming, particularly relating to officer and public safety?

Key findings

- 156. Routine arming would mean staff need to wear Hard Armour Plates (HAP) on duty, which poses its own health and safety risk as HAP are uncomfortable over long periods. However, routine arming would add a tactical option greater than TASERs: data show that 40% of TASER discharges at high-risk events where either insufficient or had the opposite effect than what was intended.
- 157. Literature shows that routine arming leads, on one hand, to Police Officers feeling better equipped to do their job. On the other hand, officers engage in more risky situations, which could harm them and are more likely to experience PTSD and other negative mental health outcomes.
- 158. Routine arming and the visibility of firearms might negatively impact how some people perceive and interact with Police, but there is little evidence about the long-term impacts of routine arming on public perception. Transparency and providing accurate information to the public may be important to support improved perceptions of Police.

New Zealand Police data

Ballistic protection

159. Current policy requires staff to wear ballistic plates or Hard Armour Plates (HAP) when carrying a firearm. Routine arming would either require a change to this policy or would require staff to wear HAP whenever on duty. Either approach poses a health and safety risk to staff: reducing ballistic protection may mean staff are not adequately protected in a firearms incident, but wearing HAP can be uncomfortable, especially over long periods of time. However, wearing HAP whenever on duty would ensure that staff have protection over vital organs if fired upon unexpectedly.

TASER efficacy and sufficiency

160. One benefit to routine arming is ensuring that staff are equipped and enabled to respond to any situation. TASERs have limitations, and are not always effective at gaining a subject's cooperation: when staff are faced with a situation involving the risk of GBH or death, and their TASER is not sufficient, it puts them, their colleagues, and members of the public at risk. In addition, staff who experience this situation may lose trust and confidence in Police. Table 4 shows how many TASER discharges occurred at TOR events where the PCA reached GBH/death, as well as the portion of those discharges where the officer rated the TASER tactic outcome as either [1] not sufficient, [2] having nil effect, or [3] having the opposite effect than was intended. It is important to note that these negative outcomes are not solely due to the mechanical efficacy of the TASER itself, but may be due to other factors (for example, the TASER probes might miss due to poor aim or a moving target). Overall, nearly 40% of TASER discharges at high risk TOR events were reported as being insufficient or worse: routine arming may better protect and enable staff caught in these high-risk situations. Alternatively, upgrading to the latest iteration of the TASER and improving TASER policy and accessibility would also realise some of these benefits without routine arming (see Q4 response for further details).



Table 6. Tactic sufficiency of TASER discharges at TOR events with PCA of GBH/death

Year	TASER discharges when PCA at GBH/Death	Number where tactic rated as not sufficient (or worse)	Percent where tactic rated as not sufficient (or worse)
2010^	20	9	45%
2011	22	4	18%
2012	32	13	41%
2013	39	12	31%
2014	33	9	27%
2015	41	12	29%
2016	57	17	30%
2017	61	30	49%
2018	64	25	39%
2019	86	38	44%
2020	84	36	43%
2021^	37	12	32%
Total	576	217	38%

 $^{^{\}wedge}$ Data for partial years only: 2010 data from 1 July 2010; 2021 data up to 7 July 2021.

International and New Zealand literature findings

Officer wellbeing

Carrying a firearm, and its use in the line of duty, can have a number of potential impacts and consequences on officer wellbeing. The findings reported in this section suggest that although routine arming of Police might be associated with increased wellbeing and feelings of self-efficacy, this might also be associated to officers engaging in more risky situations which could harm them. Additionally, research has shown that discharging a weapon and using deadly force are connected to adverse consequences, such as PTSD, in Police Officers. Current literature also suggests that one of the main preferred methods for officers who commit suicide is by firearm.

- 161. Officers in Norway are not routinely armed and require approval before removing their firearms from the locked security box inside their patrol vehicles. Following a period of temporary routine armament, Hendy (2020) found that officers in Norway reported they quickly became accustomed to carrying a firearm on their person, including those who described initially feeling reluctant about doing so. Officers reported additional benefits to their mental wellbeing, including reduced levels of stress and increased feelings of self-belief that they were properly equipped to do their job. Furthermore, some officers stated carrying a firearm reduced the cognitive strain they felt regardingthe decision-making process usually required when an officer requested to be armed. However, it is noted this viewis in contrast to previous comments made by Norwegian officers. Before the period of routine armament, a numberof officers commented that the time delay to seek authorisation to arm allowed them to mentally prepare for the incident, and enhanced tactical planning (Hendy, 2014). It is possible that following their actual experience of routine arming, officers changed their perspectives. Alternatively, it may also stress the variability of officers' views and opinions, particularly with the small number of officers interviewed in these studies (16 officers in Hendy, 2020).
- 162. However, there is also evidence to suggest increased feelings of self-efficacy can have a potential adverse effect on officer safety. Carrying a firearm and feelings of increased capabilities can possibly create an 'illusion of safety' which



may lead officers to take greater risks in dangerous situations. Compared with their non-routinely armed Norwegian counterparts, Swedish officers who are routinely armed have been found to engage with offenders more readily, with fewer officers or back-up present. 59% of shooting incidents involved first responder units, whereas specialist armed offender units were involved in only 20% of incidents (Hendy, 2014).

- 163. The discharge of a weapon is a rare occurrence, however, it is important to consider the psychological and physical consequences for those officers who do become involved in shooting incidents. While impacts may be expected as a consequence of a fatal shooting incident, there is evidence that adverse psychological consequences can occur in shootings which cause non-fatal serious injuries as well (Komarovskaya et al., 2011). Common short-term post-shooting effects include heightened tension and arousal, impaired sleep, and ruminations about the incident (Miller, 2015). Longer-term impacts vary but may include symptoms of post-traumatic stress disorder (PTSD), or even suicide. This can depend on several factors including the officer's personality traits, and social and organisational supports available. There are also co-morbid impacts on physical health; officers who have discharged a weapon were more likely to experience depression, request sick leave, and had lower levels of 'hardiness' (Klimley et al., 2018). Research has also pointed to varying levels of psychological impact on officers that are involved in firearm discharges (Henriksen & Kruke, 2020). Some officers expressed their fear of death when recounting the event and some experienced shivering immediately after the event. Other officers did not perceive any psychological impacts from the discharge event.
- 164. Routinely armed officers have immediate access to firearms, and therefore, a lethal means of self-harm. While a lack of reliability in suicide statistics and reporting has been identified, firearms have been found to be one of the main preferred methods of suicide for Police Officers (Barron, 2010; Schmidtke et al., 1999). In a study of Police suicide in New South Wales, Australia, Barron (2010) found that 43% of officers who committed suicide did so by firearm. It is unclear exactly how many of these officers used their own service weapon, however, Barron (2010) did explicitly note that at least two of the firearm suicides were by service weapons, and also found that approximately one-thirdof officers committed suicide at their place of work. In a study of Police Officer suicides in Germany, Schmidtke et al. (1999) found that 66-87% of all officer suicides were by service weapon in the three state police regions where suicide method was reported. Recent suicides by officers within their own workplaces has led to changes in Australian Federal Police policy on firearms, which included officers having to check out their weapons (Inman & Lowrey, 2019). In addition to the loss of an officer's life, suicide within organisations such as Police create a 'ripple' effect, with other members of the force experiencing grief, anxiety, and potential trauma (Barron, 2010). The discussed findings do not mean that arming a police force will inherently increase the suicide rate of Police Officers although it is important to acknowledge that routinely arming officers will provide officers with a method of taking one's life which they might not have previously had.

Impact on public trust and confidence

Literature and reports reviewed in this section highlight that **routine arming of Police**, and **visibility of firearms**, **might negatively impact how some members of the public perceive and interact with Police**. However, there is limited evidence about the long-term impacts of routine arming on public perception with Hendy (2014) noting the relationship between Police and the public would likely improve after some time if Police aggression did not increase. Transparency and the provision of accurate information to the public may be vital in supporting this view. Yesberg and Bradford (2019) found that when people are in a 'low information environment' regarding their knowledge of armed Police, they will base their views on their emotional response.

- 165. Policing by consent To have the trust and confidence of all is a core tenet of Our Business. As such, it is vital to consider the potential implications of routine Police armament on the trust and confidence of the New Zealand public. A key principle of policing by consent centres on use of force by Police Officers. This principle says Police Officers are 'to recognise always that the extent to which the co-operation of the public can be secured diminishes proportionately the necessity of the use of physical force and compulsion for achieving police objectives.¹³
- 166. The militarisation of Police as a concept has received significant authorship in the last few years and has typically been viewed as harmful to community-police relations (Scott, 2020). The concept within literature often relates to the use of military grade equipment to effect general policing activities. While routine arming in New Zealand does not fit typical ideas of Police militarisation overseas, some members of the New Zealand public may view this as comparative

¹³ Sir Robert Peel founded what is known today as the Metropolitan Police Service in 1829, this principle is one of the 9 key founding principles of this ethically correct service.



militarisation or a step towards such. Police militarisation (or comparative militarisation) may have subsequent impacts police legitimacy (Roziere & Walby, 2020). Impacts on Police legitimacy are likely to be differ across various social and cultural communities who may already hold strong views on police legitimacy (Lockwood, Doyle, & Comiskey, 2018; Meeks, 2006).

- 167.A survey on the New Zealand Police Armed Response Team (ART) trial was recently undertaken by 574 participants. ¹⁴ Results showed that trust and confidence in Police was not significantly impacted, with only 10% of participants reporting a decrease in trust and confidence. 38% of participants reported they felt increased trust and confidence in New Zealand Police due to ARTs, while 52% reported their trust and confidence in New Zealand Police remained the same as before (EBPC, 2020). However, international studies have shown that trust and confidence in Police can be diminished by officers carrying firearms. A study on the public reaction to the presence of armed Police in Great Britain found that individuals were less likely to rate armed officers as approachable and trustworthy, and more likely to rate them as aggressive (Yesberg et al., 2020). Mummolo (2018) found that images of militarised Police in the media were associated with a reduced desire for the public to see patrols in their own neighbourhoods. It is possible the arming of Police staff makes officers less relatable and in turn reduces trust and confidence as the public struggle to identify with them (Yesberg et al., 2020).
- 168. The public's reaction when shootings by Police occur may also impact trust and confidence. Hendy (2014) noted it only took one case of an accidental or unlawful death for the relationship and trust between Police and the public to become damaged. However, it may not just be accidental or unlawful shootings which impact the police-public relationship. Miller (2015) commented that general public perception indicates any use of deadly force is viewed as excessive force, and there is confusion and a lack of public understanding regarding what constitutes a proportionate response. Media coverage can also play a large part in this, with key information about shooting incidents often omitted, resulting in increased negative perceptions of Police (Mullis, 2009). For the public to understand a Police response as proportionate, it is important to ensure that Police have a sound communication strategy in place for any shooting incidents.
- 169. If Police were to become routinely armed, there is likely to be an initial period of public 'discomfort' (Hendy, 2014). This appears to be supported in New Zealand by public and political reaction to the ART Trial. Media coverage, rallies, petitions, open letters and a Treaty of Waitangi claim all presented views which were negative towards both the ART trial and the arming of New Zealand Police more generally. However, Hendy (2014) commented that following an initial transitional period, the 'discomfort' felt by the public would decrease, providing there was not an increase in police aggression. Countries such as Sweden, Denmark and Finland have all retained high levels of public trust, despite being routinely armed. Kyprianides et al. (2021) found that within jurisdictions that Police traditionally operate unarmed such as Britain, members of the public react more negatively to scenarios where this norm is transgressed through any form of militarisation or application of force. However, use of force did not appear to result in negative attitudes or an overall loss in the trust and legitimacy of Police. It is possible given the New Zealand ART trial was only in place for six months, negative public opinion could be attributed to this transition phase. Additionally, it is important to note that that media coverage may not have reflected the full range and scope of public opinion (Mullis, 2009).
- 170. 'Policing by consent' is an approach used by New Zealand, United Kingdom, Canadian and Australian Police services. The approach sees Police Officers as citizens in uniform who police community through the power invested in them by community itself (UK Home Office, 2012). In this sense, policing is legitimate and supported by the public due to the belief that Police actions are based on transparency, integrity, and accountability.
- 171. In a survey including data from 2,422 UK participants, Jackson and colleagues (2012) found that trust in Police fairness and effectiveness was intrinsically related to the idea of accepting and entrusting Police with policing (in the shape of obeying Police and feeling morally aligned to Police) and resulting impacts on public behaviour In this sense, it is extremely important to understand how routinely arming Police could impact trust and confidence in Police and how

¹⁴ Although the sample was national representative, the overall size of the sample was small (n-574). Accordingly, the resolution of the data was low which has necessarily precluded reliable comparisons being made between different groups and limited the ability to generate deeper insights in respect of some communities. In addition, survey data was collected using an online panel and survey tool which means only those who have access to a computer and are regularly connected to the internet could participate. Critically, the true impact of the trial on sentiment across all communities is difficult owing to the absence of a baseline survey conducted before the trial got underway, and the lack of insights available from specific groups that arguably felt most impacted by the trial. Ideally, gauging perceptions and levels of trust and confidence would have been measured 'before and after'. Instead, changes in trust and confidence were elicited on a retrospective basis and should be treated with some caution.



legitimate Police actions are perceived to be.

Relationship with certain cultural and societal groups

The evidence suggests that the relationship between Police and certain cultural and societal groups might be impacted negatively if New Zealand Police is routinely armed, and this in turn might affect how they perceive and interact with Police

- 172. Te Ara, the encyclopaedia of New Zealand, details that routinely arming Police has been connected historically to colonial practices, describing that Police in the beginning of the colonial era were heavily armed (Hill, 2019, March 29). This changed in the 1880s when Police was separated from the military and remained mostly unarmed.
- 173. Although Police Officers in New Zealand are not currently routinely armed, different cultural and societal groups are still concerned how they would be treated by Police Officers carrying firearms (Morrison, 2009). This was a common theme expressed by individuals in the media during the ART trial (EBPC, 2020), with analysis showing that 63 (62%) of the 102 articles examined between October 2019 and May 2020 highlighted significant concern for the impact of the ART Trial on minority groups.
- 174. Concerns for Māori and Pasifika revolved around bias and racism from Police; the risk of Māori and Pasifika facing adverse effects of the trial to a larger degree than non-Māori/Pasifika, (including more likely to be shot or have force used against them); already having a negative relationship with Police and the Crown; and a negative reaction from Māori and Pasifika towards Police carrying firearms. Other groups depicted in media who showed concern for ARTs included neuro-diverse, those battling addiction and mental health issues, those living in poverty, gang communities, and young people.
- 175. Likewise, also as part of the ART Trial evaluation, interviews with Police staff members showed that Māori might be impacted more negatively by the ART Trial due to how Police has interacted with them in the past. In 2013, the IPCA found that Police had "unnecessarily frightened and intimidated" people during the 2007 raid connected to alleged weapons-training camps in New Zealand and also to the Tūhoe activist Tame Iti (New Zealand History, 2020).
- 176. The ART Trial evaluation showed that when compared to all other grouped ethnicities, Māori were more likely to: not support the initiative, disagree they felt safer, feel less trust and confidence in Police, and to be more concerned about vulnerable groups being unfairly targeted (Evidence Based Policing Centre, 2020).
- 177. While the ART Trial evaluation and literature identify potential adverse effects of increased armament on specific ethnic communities, other literature has highlighted the risks to those experiencing mental distress (O'Brien et al., 2021). O'Brien et al., conducted analysis into 258 IPCA reports. They found that 18% of these cases were classified as mental health-related events and 40.4% of the mental-health related cases involved a police firearm compared to only 14.8% of events involving a firearm which were not identified as mental health-related. While all the shootings were viewed as justified by the IPCA, the research showcases the propensity for events involving Police firearms to be mental health related. Adverse or unintentional effects on those with mental health issues should therefore be front of mind when considering increased armament.
- 178. International evidence has shown that cultural and societal groups such as the BAME (Black, Asian, and Minority Ethnic groups, with exception of the Indian ethnicity) have been the least positive towards armed Police in London (Yesberg & Bradford, 2019). In the same study, LGTBQI (Lesbian, Gay, Bisexual, Transgender, Questioning and Intersex) participants had more negative affect towards armed Police than heterosexual participants. Historically, LGBTQI individuals have a long history of discrimination in the United States by Police, resulting in under-policing when they have been victimised, and over-policing to the point of harassment (Dario, Fradella, Verhagen, Parry & Parry, 2019). Within New Zealand, there has also been a fraught relationship between Police and LGBTQI communities since the 1960s including anecdotal evidence of police assaulting LGBTQI individuals or refusing to assist victims which has almost certainly created a feeling of fear towards Police Officers (Matheson, 2018). New Zealand Police has been actively trying to rectify this feeling including introducing the Diversity Liaison Officers to provide a point of contact between Police and LGBTQI communities (New Zealand Police, n.d.) however it is possible members of this community will still experience increased feelings of anxiety towards officers carrying firearms.

Recruitment

179.A UK Police Federation survey of over 32,000 officers examined the question of routine arming among federated officers in England, Scotland and Wales (van Mechelen, 2017). Among other findings, the organisation found that those who were male, younger, have less years' service, and work in inner city or urban areas were more likely to



support routine arming.

- 180. In a similar study including 513 Norwegian Police students, Fekjær and Strype (2015) found that those who planned to have a career in patrol work and had an autonomous and non-legalistic perception of the Police role were more likely to support arming the Police.
- 181. In a survey including 287 Police Officers in England and Wales, Simon (2019) found that males were more likely to support armed policing and consider taking an Authorised Firearms Officer (AFO) role than females. In the same study, females were more likely than males to perceive the role of AFO as being a 'macho' role.
- 182. The results of these surveys suggest that in routinely arming New Zealand Police Officers, we risk lacking diversity in those we recruit. Some members of the population might be more inclined to apply for a role within New Zealand Police, while others may be deterred if officers are armed more often than not. In addition, those officers who are not in support of routine arming may reconsider their role inpolicing.



Question 4: What other tactical capacity do other 'generally unarmed' international jurisdictions have to enhance officer and public safety?

Key findings

- 183. While no tactical equipment provides a complete safety panacea, there are intermediary tactical options available that could provide a range of benefits including upgrades to TASERs.
- 184. In the few OECD countries where Police are not routinely armed, specialist and armed response units are increasingly normalised. There is some evidence that in routinely armed jurisdictions TASER usage, as well as firearms usage, is greater than non-routinely armed jurisdictions.

New Zealand Police data

- 185. New Zealand Police continuously follow technological advances in tactical equipment and have a broad suite of tactical appointments in use. Advances in Police tactical capability can be realised without introducing new tools, through improvements to policy, training, accessibility, and upgrades to the current suite of tactical tools. There is no tactical equipment that can provide a panacea for keeping staff and the public safe; the benefits of each tactical tool are dependent on enabling staff—through policy, training, and equipment accessibility—to use the equipment effectively, safely, and in the appropriate circumstances.
- 186. There is a significant opportunity to advance both tactical capability and staff/public safety through improvements to TASER, including implementing upgraded technology, as well as updating TASER policy and accessibility.

TASER Replacement Project

- 187. The TASER Replacement Project (TRP) was established in 2021 as part of the Frontline Safety Improvement Programme. TRP is responsible for recommending and implementing an approved tactical option (energy system), which takes into consideration the current operational environment and ensures the right responders are in the right place at the right time using the right tactical option. Police are partnering with Axon to evaluate the next generation TASER technology and associated systems. Information relating to the next generation TASER is subject to commercial confidentiality agreements between Axon and Police.
- 188.A comprehensive review of body-worn camera (BWC) research conducted in early 2019 by RORE demonstrates the potential for BWCs to reduce doubt about what happened at an incident, improve frontline efficiency and effectiveness, and build public trust and confidence through increased transparency. BWCs may also have a deterrent or de-escalatory effect on some offenders, and footage may be beneficial in informing training and enabling continuous improvement in engagement and de-escalation with uncooperative subjects. Upcoming work to be delivered by EBPC will update these findings with the latest literature. At the least, addressing the limitations of the current TASER X2 will increase the chances of achieving neuromuscular incapacitation (NMI) when TASER is discharged, improving tactical capability, and police/public safety as well as lifting Police confidence in this tactical option. Staff who are equipped with a TASER that has a higher chance of incapacitating offenders may also be less likely to rely on firearms as a tactical option, reducing current firearm usage and avoiding the need for routine arming.
- 189. In addition to adopting the latest technology, TASER tactical capability may also be improved through other steps. Of all tactical options, TASER has the lowest rate of subject injury, and by far the lowest rate of complaints received. While jurisdictions do not tend to consider tactical options within a strict hierarchy of force (College of Policing, 2013), there is some evidence to suggest that the use of a baton is seen by the public as a greater display of force than TASER (TNS, 2015). Within this study, police officers also rated the TASER below the baton in a theoretical hierarchy of force. Many jurisdictions tend to group TASER and the use of a baton as intermediate levels of force, and below the use of firearms. However, it is not immediately clear whether jurisdictions propose any distinction between the differences in force between the TASER and other intermediate levels of force such as the baton. In addition to resulting in low rates of subject injury, TASER ensures staff safety by enabling deployment from a distance, avoiding the risks associated with getting close to offenders. Policy currently restricts TASER discharges to situations with a PCA of assaultive or above. Consideration could be given to updating the policy to allow TASER use at lower levels of PCA to better enable staff to keep themselves, each other, and the public safe.



Other tactical equipment

190. Table 7 identifies and summarises other tactical equipment that is available (note that use of this equipment is not limited to unarmed jurisdictions).

to unarmed jurisdictions).				
Tactical equipment	Description/function	Current situation		
TASER 7	Advanced technology with increased chance of achieving NMI (compared to current NZP model, TASER X2).	Currently in operation in overseas jurisdictions. NZP have a current stock of 100; stalled operational trial plans have been replaced by the partnering arrangement with Axon.		
Chemical munitions (such as OC Spray)	Can be used over greater distances and/or cause more pain (i.e. through hotter formulation) than current OC Spray. May increase chance of crosscontamination.	Police currently have individual issue small canister OC Spray.		
Less-lethal munitions - Baton rounds (37mm) - Sponge rounds (40mm) - Bean bag rounds (12mm/40mm; stabilised and nonstabilised) - Simunition: Pepper and/or gas balls (discharged via air gun) - Rubber coated bullets - Water cannons	Lower penetration reduces risk of harm to target relative to standard ammunition but may still cause significant injury. Reduces risk of harm caused by unintentional discharges and risk of harm to bystanders. Weapons for 12mm rounds risk accidental use of actual bullet. Baton rounds (used in UK) can be deployed at increased distances and have improved incapacitation relative to sponge rounds. Pepper/gas balls cause brief pain without penetrating skin and deliver substances (such as an equivalent of OC Spray, or CS/tear gas) via pellet gun, like paintball airguns. This option is less effective when a subject is wearing heavy clothing. Risk of eye injury. Water cannons used for crowd control.	Sponge rounds currently available to specialist tactical teams in NZP. Deployment of 40mm rounds requires at least two officers working together.		
Long Range Acoustic Devices (LRADs); noise/light laser devices; heat/water	LRADs send messages and warning tones over longer distances and/or at higher volume than normal loudspeakers. Used for long-range communications including as a means of non-lethal, non-kinetic crowd control. Other noise/light devices designed to distract and confuse through direct effect on senses: cause disorientation or nausea, cut-off senses (e.g. sight/hearing), or deliver unpleasant stimuli to deter/disperse subjects (e.g. loud or high pitch noises). Heat/water causes physical discomfort and disperses subjects	NZ Police Negotiation Team have access to LRAD devices. Typical use in military applications as not portable. Not yet able to import and trial in NZ. UK has some reported use of ultrasonic sound devices to deter/disperse young people from problem areas, although this has been criticised as contravening human rights.		
BolaWrap	Restraint applied from distance. May be especially applicable in 1X situations to prevent self-harm by subjects armed with cutting/stabbing weapons.	Initial demonstration to NZP Capability Team. Product undergoing improvements to functionality.		
Sasumata; Catchpole	Polearm fitted with a U-shaped prong. Designed to restrain a person at a distance by either pinning or encircling their body.	Not currently under consideration. Limited application due to size, as they could not be carried full time.		



Tactical equipment	Description/function	Current situation
		Unsuitable for use on subjects with a firearm.
Body-Worn Cameras	Capture footage of use of force events, protecting officers by providing objective evidence of situation. Potentially increase public trust and confidence through increased transparency. Informs about situations where force is used and approaches/tactics that are most effective, which can inform training and enable continuous improvement in engagement and de-escalation with uncooperative subjects. Although BWCs may have deterrent/de-escalatory effect on some subjects, there is no compelling evidence that BWCs cause broad behavioural improvements.	

International and New Zealand literature findings

In the six OECD countries where Police are not routinely armed, training and tactical options vary. However, common elements include normalisation of specialist armed response units. These units have been trained in, and have access to, lethal and non-lethal tactical options.

- 191. Only 19 countries currently do not deploy routinely armed Police (University of Sydney). Prominent among these are Great Britain, New Zealand, Ireland, Iceland, Norway, Botswana, Malawi and a number of small Pacific Islands nations including Samoa, Nauru, Tonga and Fiji (Farmer & Evans, 2021). Officers in the OECD countries of England, Wales, Scotland, the Republic of Ireland, Norway, and New Zealand have firearms stored in locked security safes within their vehicles or rely on specialised teams who have been trained, and have access to, lethal and non-lethal tactical options.
- 192. Even in these routinely unarmed jurisdictions, specialist armed response units are increasingly normalised. In the one year for which comparative data is available, 2014, the number of TASER incidents per 100,000 population was 17.58 in England/Wales, 22.48 in New Zealand, and 40.36 in Queensland (Farmer & Evans, 2021). The rate in Queensland was nearly twice that of New Zealand and over double the rate in England/Wales. This shows that, in addition to higher rates of firearms use, TASER usage is also notably higher in routinely armed Queensland than in the non- routinely armed jurisdictions of England/Wales and New Zealand (Farmer & Evans, 2021).
- 193. The decision to arm frontline officers has been the subject of ongoing debate and remains a controversial issue (Anonymous, 2019a, 2019b; Barry, 2019; Cook & Russell, 2019). Though similar debates have occurred throughout the United Kingdom and Norway, the discourse in New Zealand has predominantly been couched as a matter of Police health and safety (Hendy, 2012).
- 194. Due to the many confounding factors which are outside of the control of Police such as personal firearms laws and volume of firearms ownership, it is challenging to find an appropriate international jurisdiction to compare with New Zealand. The historical and current cultural makeup of New Zealand is different to the reviewed jurisdictions therefore it is unlikely that the aspects of response models in other jurisdictions will be able to be translated to a New Zealand context without additional testing and contextual adaptation.
- 195. The tactical capabilities of the United Kingdom, the Republic of Ireland, and Norway will be summarised below. Additionally, whilst police services in Australia are routinely armed, and thereby operate according to a different set of procedures, several states utilise mobile armed units for rapid responding. Therefore, it was considered informative to consider how these units are deployed.

United Kingdom

196. Police services throughout England, Wales and Scotland do not receive any firearms training and therefore frontline officers are not armed with a firearm. Instead, officers may apply to become an Authorised Firearms Officer (AFO) who receive specialist training and carry firearms. An AFO role is volunteer based and requires candidates to undergo a series of examinations including psychological testing before training commences. Once authorised, AFOs are



required to undertake regular refreshercourses.

- 197. The vast majority of AFOs are deployed in Armed Response Vehicles (ARVs) which are designed to provide a rapid armed response to critical incidents. The vehicles are usually crewed with 2-3 full-time AFOs, however, this may vary based on operational demands (Hampshire Constabulary, 2018; West Yorkshire Police, n.d.). ARVs can also be adapted to accommodate specialist equipment including projectile launchers, baton rounds, bulletproof riot shields, battering rams, and crowbars. Vehicles may further be equipped with collision equipment such as signs, cones, and enhanced first aid equipment (blood and airway management, an automatic external defibrillator, and oxygen tanks). For major metropolitan areas, ARVs routinely patrol on a full-time basis (i.e., 24 hours a day, seven days a week; Hendy, 2012) but the number of available vehicles is moderated according to the size of the police force. In comparison, more provincial forces typically have fewer ARVs coupled with larger regions to patrol; as a result, careful resource allocation is required to ensure immediate availability for deployments. For example, London have approximately 20ARVs (crewed with three officers) on full time patrol whereas West Yorkshire Police only operate five double crewedARVs on a full-time basis (West Yorkshire Police, n.d.).
- 198. While the deployment of ARVs will vary by force across the UK, there is clear governance and standard operating procedures to guide ARV responses. Chiefly, the College of Policing developed the Authorised Professional Practice (APP) to assist in guiding officers' actions. The APP for Armed Policing:
 - a. Provides guidance for the appropriate issue and use of firearms and less lethal options,
 - b. Oversees the training for AFOs relating to use of firearms at a strategic, tactical, and operational level, and
 - c. Governs the command structures, tactical options, and any operational issues associated with the deployments of AFOs (College of Policing, 2013).

The APP for Armed Policing should be used in conjunction with the Code of Practice on Armed Policing and Police Use of Less Lethal Weapons. The Code outlines the responsibilities and procedures that Police Officers should adhere to when using firearms, specialist munitions, and less than lethal weapons. The purpose of the centralised code of practice is to provide a procedure of weapons usage across Police services in England and Wales, and to uphold the rigorous high standards of armed policing (College of Policing, n.d.).

199. Throughout England and Wales, ARVs proactively patrol on tasked deployments (e.g., pre-planned operations) although may also assist with road policing, community/educational engagement, force operations and proactive targeting of hotspots, and firearms licensing (Hampshire Constabulary, 2018). Scotland Police did not deploy ARVs to routine policing matters, and only deployed ARVs to firearms related incidents (HMICS, 2014a): however, this decision was overturned in May 2018 which led to armed officers attending routine incidents (Foote & Cook, 2019). While the deployment of ARVs will vary by force across the UK, there are standard operating procedures to guide ARV responses. ARVs attend most firearms related incidents: in the financial year ending March 2019, ARVs were deployed to 88% (17,742 incidents) of firearm related operations (UK Home Office, 2019). Of these deployments, 13 instances involved police firearms being discharged which resulted in three fatal shootings by police (Statista, 2019). It is important to note that no context for these statistics was able to be ascertained: therefore, these should be interpreted with caution.

Training

- 200. All Police Officers in New Zealand undergo firearms training. This contrasts sharply with the United Kingdom. As of 2019 approximately 5% of all officers are trained as AFOs across England and Wales (UK Home Office, 2019). The numbers are slightly higher in the London Metropolitan area, with approximately 8% of the force being firearms trained. Police Scotland similarly train only a small number of AFOs, with approximately 3% of the Scottish force trained as AFOs (Anonymous, 2016).
- 201. In addition, the training of AFOs remains a strong focus within the United Kingdom. For example, despite recorded increases in knife crime (20%), gun crime (23%), and violent crime (18%), the Police Federation continue to push for more officers to be trained specifically as AFOs, rather than routinely arming all frontline officers (UK Police Federation, 2019). As of 2017, just over a third (34%) of UK Police Federation members favour the routine arming of Police Officers (compared to 23% in 2006). The greatest support (42.5%) was for officers to receive more training in the use of firearms and be issued with them as and when is needed (UK Police Federation, 2019).
- 202. While reasonable comparisons may be made between the training of British AFOs and members of the AOS, firearms training for New Zealand frontline officers is comparatively poorer and has drawn recent criticism (Newman, 2019).



The selection and training of a smaller number of officers – but to a much higher standard - could provide a viable alternative to improve New Zealand's armed response capability.

Republic of Ireland

- 203. Officers in the Republic of Ireland are routinely unarmed with two main armed units: the Regional Support Units and the Emergency Response Units.
- 204. The Regional Support Units (RSU) aim to provide a dedicated resource to support other Police units engaged in critical incidents. The first RSU was deployed in September 2008 in the Southern region, and RSUs were slowly rolled out to the other districts with RSUs deployed in all regions by March 2012 (Garda Síochána, 2012, May). RSU officers undergo training over a thirteen-week period which includes critical incident responsetraining, tactical deployment and driving, conflict resolution/negotiation techniques, entry methods, first aid, and the use of less than lethal options and firearms. RSUs patrol as regular officers performing normal business as usual functions on a daily basis: if the RSU are to be deployed to a critical incident, they change into tactical gear including different signage/lighting on their vehicle to clearly distinguish themselves from regular officers (Garda Síochána, 2012, May).
- 205. The Emergency Response Unit (ERU) are the highest tier of specialist armed tactical unit of the Garda Síochána specialising in weapons tactics, counter terrorism, execution ofhigh-riskmissions, crisis negotiation, and hostage rescue amongst other responsibilities (Garda Síochána, n.d.). Applicants must have at least three years of service and undergo an extremely rigorous two-week selection process: those successful then undergo an additional specialist six-week induction course including firearms, driving and tactical training. Upon successfully completing induction, members are further assessed over a six-month period and are on probation for 18 months. ERU members must undergo refresher training three times a year and must maintain proficiency with five different firearms (Barr Tribunal, 2002). No statistics or evaluations concerning the deployment of the RSU or ERU, their effectiveness, or firearms usage by the units was able to be sourced.

Norway

206. In a similar manner to New Zealand, Norwegian officers are trained in the use of firearms and do not routinely carry firearms on their person. Instead, their patrol vehicles have a locked security box where firearms are kept. If an officer believes that it will be necessary to respond to an incident with a firearm, permission to arm can be requested, and requires a confirmation from the local Commander. In effect, Norwegian officers are both armed and unarmed as they can transfer from one state to the other depending on the incident (Hendy, 2020).

Australia

- 207. Officers in Australia are routinely armed, although do employ the use of mobile armed units to attend critical or life-threatening incidents. The following provides examples of some of the specialised teams used in Australia.
- 208. The Critical Incidents Response Team (CIRT) are a specialist unit of the Victorian Police that assist frontline officers to resolve high risk incidents using specialist tactics. The CIRT concept was based upon the ARV model used in the United Kingdom and patrol on a full-time basis within the Melbourne metropolitan area. CIRT were created to relieve a growing demand for the Special Operations Group (SOG) the elite tactical group within the Victorian Police who were attending several incidents that did not explicitly meet their call out criteria. CIRT provide a rapid response to high risk incidents such as armed offenders, siege and hostage situations, and high risk, life-threatening incidents although are also deployed to undertake pre-planned operations, high-risk searches, and arrests. Additionally, some high-risk situations may require CIRT to cordon and contain before the SOG arrive on scene. CIRT provide a similar operational function as the Armed Offender Squad in New Zealand, can be called upon at any point in time, and are equipped with firearms in addition to less lethal tactical options: specialised Oleoresin capsicum (OC) foam delivery systems, tasers, beanbag rounds, and riot shields (Victoria Police Association, 2006) which mitigate the risk of police shooting from frontline officers. Notably, a large proportion of incidents attended by CIRT involve individuals with mental health issues, so the availability of non-lethal options has been viewed favourably.
- 209. The Special Emergency Response Team (SERT) is a specialist unit that allows the Queensland Police Service (QPS) to rapidly respond to high risk situations. Bases are located in Brisbane and Cairns and are intended to provide support to police throughout Queensland. SERT operate in a similar capacity to the AOS though on a full-time basis and include among their capabilities, negotiation teams and dog squads. They are typically deployed in counter terrorism operations, armed offenders, and siege/hostage situations: undertaking searches of high-risk premises, and the arrest of armed offenders, among other highly specialised tactical responses (e.g., water and airborne operations). While SERT have a small number of armed response vehicles in operation, their operating procedures do not align with the



ARV model used in the United Kingdom.

210. The Queensland Public Safety Response Team (PRST) also trialled a Mobile Response Capability (MRC) between July 2015 and January 2016 that was modelled on the Critical Incident Response Team (CIRT) used in Melbourne, Victoria. The primary role of the MRC was to provide rapid assistance to frontline officers at high risk situations, and, depending upon the severity of the incident, may cordon and contain until SERT arrive on scene. Like all frontline staff, MRC officers have a standing authority for the carriages of firearms although they also have less lethal tactical options available to them including pepperball guns which fire capsicum powder from a distance, riot shields, and OC spray (Yahoo News Australia, 2015, August). A review followingthetrialperiod concluded that the MRC enhanced operational responsiveness and has accordingly been retained (Queensland Police, 2018).



Gap Analysis

211. This section reviews existing material to identify current gaps in our knowledge and understanding of the threat, harm, and risk around our operating environment relating to incidents or settings that require an armed policing response, presence, or readiness. It identifies further opportunities to better understand the environment relating to armed policing.

Key findings

- 212. We identified three key opportunities for understanding of the environment in relation to armed Police:
 - a. Understanding staff feelings of safety and what influences those feelings.
 - b. Understanding the gap between Police data of firearms incidents and the anecdotal experiences of frontline Police Officers, including any barriers to reporting.
 - c. Understanding the extent of any operational gaps between frontline units and Emergency Communications Centres (ECCs).

People

- 213. Staff are reporting feeling unsafe, ¹⁵ with surveys and anecdotal information highlighting the amount of firearms presentations and discharges are increasing. To improve staff feelings of safety we need to understand where these perceptions arise from. Obtaining detailed information from the frontline will identify the contributing factors and will help inform future decision making.
- 214. Continuous media reporting of Police incidents may induce staff and public anxiety given the view some news articles portray. 16 Research into Cultivation Theory 17 has indicated that a negative news bias can distort public perceptions on safety and crime. A knowledge gap remains around how Police staff are impacted by media and how strategic communication could support a balanced view of the operating environment. Furthermore, the airing of Police staff safety concerns in the media may lead offenders to exploit officers' fears around firearms to avoid arrest. A review of offender behaviour following changes in fleeing driver pursuit practices, and coverage of this in the media, may provide a proxy for assessing this risk. 18

Information

- 215. There is a significant information gap between information presented by groups such as the Police Association ¹⁹, and data collected internally by Police, on the volume of firearms encountered by our people on the front line. At present we do not understand the detail of this gap, and there is a clear opportunity to work closely with the Association to understand how to narrow the differences in our respective understandings, including possible barriers to reporting. The purpose of this would be to develop a joint understanding that will enable better safety and support for Police Officers.
- 216. To support robust risk assessments for the frontline, and evaluation capability for decision-makers, more robust data capture systems and processes are required.

¹⁵ Frontline Safety Survey 1: Responses – 10th December 2020.

¹⁶ https://www.tvnz.co.nz/one-news/new-zealand/nz-police-officers-numb-shootings-continue-soar - News article 15 July 202

¹⁷ Cultivation theory is a sociological and communications framework; it suggests that people who are regularly exposed to media for long periods of time are more likely to perceive the world's social realities as they are presented by the media they consume, which in turn affects their attitudes and behaviours. https://www.sciencedirect.com/topics/social-sciences/cultivation-theory

¹⁸ Concerns were raised that the revised fleeing driver policy would lead to more fleeing driver incidents, and that [drivers] would be "emboldened to flee" once the public found out police would no longer be likely to give chase. https://www.stuff.co.nz/national/crime/124508074/one-in-three-fleeing-drivers-never-caught-before-police-changed-pursuit-policy?rm=a and https://www.stuff.co.nz/national/123751755/speeding-drivers-now-more-likely-to-get-police-pursuit-reprieve?rm=a [Accessed 3/08/2021]

¹⁹ https://www.newshub.co.nz/home/new-zealand/2021/08/support-for-arming-police-at-highest-level-in-a-decade-police-association-survey- shows.html



- 217. Assessing the impact of routine arming on event trajectories (escalation or de-escalation) requires consistent and reliable reporting on when, how often, and under what circumstances officers currently use their discretion and opt to carry firearms.²⁰ The lack of this information also means Police are unable to evaluate the impact of routinely arming an officer risk assessments (TENR) and the hierarchy in which the tactical options are likely to be used.
- 218. Vehicle turnovers (3Ts) and pursuits have accounted for 84% of all presentations and discharges at Police since 2019. While the large volume of 3Ts and pursuits nationally means that the probability of encountering a firearm is very low, 22 consideration should be given to the current training, processes and policies in place to deal with these situations. Up-to-date tactical alerts and intelligence, particularly relating to vehicles, is needed. While linking vehicles to high risk offenders is difficult, any improvement in this area is beneficial. Automatic alerts on persons notified for 'use of force' already exist through Tactical Options Reporting, but this functionality is not currently available for the vehicles involved. RORE has undertaken analysis of offender and event characteristics where there were presentations and discharges against Police. This work has informed the Staff Safety POI model/dashboard and deeper analysis is ongoing. ²⁴
- 219. While the Gun Safe system has led to greater visibility of firearms in the community, ²⁵ information gaps on firearms-related events remain. ²⁶ Police Association survey data from 2017 indicate that over a third of staff who were threatened with a firearm (by an offender) did not report this to Police. ²⁷ Confidence is high around the capture of serious firearms events in Gun Safe, such as shootings, but lower for less serious events. Consideration should be given to the impact of variations in definitions, such as what is meant by 'threatened' and 'presentation', and the use of multiple databases for recording events. ^{28,29} Ongoing work in the firearms data collection space could potentially assist by providing clearer instruction and prompts to staff when reporting incidents. ³⁰ There is an opportunity to more holistically capture firearms and TASER presentation data by revisiting the AOS/STG exemption of reporting.

Communication

220. The communication between attending units and Command and Control/Emergency Communications Centres (ECCs) is fundamental to staff safety, public safety, good decision making and evaluating incident management.

²⁰ As opposed to presenting or discharging a firearm which is captured in the TOR database.

²¹ Behaviour matrix excel spreadsheet (National Intelligence Centre, Personal Communication, 28 July 2021)

²² In the 12 months from March 2019 to February 2020, there were 731,160 turnovers (3Ts) recorded nationally. During this period 237 Gun Safe records relate to vehicle and traffic events (3T, 1U, 4211, (1V, pursuits). Gun Safe data show that a loaded firearm was found in one out of every 21,505 turnovers. (National Intelligence Centre, personal communication, 3 August 2021)

²³ However, this functionality could be used to create alerts on vehicles, people, and locations from other reports being migrated to the BPM platform. This opportunity will become unavailable should the planned migration of additional reports to BPM (AOS, STG, PNT, and Dog deployments) be diverted to RIOD instead. This is currently under discussion with ICT due to the need for migration to be completed before Internet Explorer (which supports their current platforms) is withdrawn in June 2022. (Response and Operations Research and Evaluation, Personal Communication, 4 August 2021)

²⁴ Events captured in the analysis date from 1 January 2019. (National Intelligence Centre, Personal Communication, 28 July 2021).

²⁵ https://tenone.police.govt.nz/news/clearer-picture-firearms

²⁶ Reporting in the Gun Safe database has declined overtime. The cause of this is unknown and raises the question of how accurately Gun Safe data reflects the frequency with which officers encounter firearms during vehicle stops. (National Intelligence Centre, Personal Communication, 3 August 2021)

²⁷ Evidence Based Policing Centre (2019), Rapid Evidence Scan: A Trial of Armed Response Teams in New Zealand

²⁸ (National Intelligence Centre/Response and Operations Research and Evaluation, personal communications, 2 August 2021). The different databases also have different reporting criteria (Response and Operations Research and Evaluation, Personal Communication, 2 August 2021).

²⁹ Understanding the context of firearms presentations at police often requires reviewing narratives across multiple sources to build an accurate picture of what occurred. Officers reliably report their firearms activities but are less consistent when reporting the activity of offenders. (Response and Operations Research and Evaluation, Personal Communication, 28 July 2021). The most common offence used is "Uses Firearm against Law enforcement" which covers both presentations and discharges (National Intelligence Centre, Personal Communication, 28 July 2021).

³⁰ National Intelligence Centre, Personal Communication, 28 July 2021



- 221. As a safety measure, attending units inform the ECC when 'arming up' or attending an incident where they believe firearms are necessary. Consequently, when fatalities result, the end-to-end process comes under scrutiny, as highlighted by the IPCA's findings on two occasions where the breakdown in communications, command and control was identified as an area for improvement.^{31 32}
- 222. Currently, IPCA recommendations are assigned to the responsible business owners for management and actioning.

"Officers E and F chose to immediately approach and challenge Mr Cerven. In terms of their TENR assessment, their focus was on the risk Mr Cerven posed to the unarmed officers at the scene and not on a complete assessment of the situation. In making their decision, they did not give sufficient weight to the risk members of the public in the park and in the nearby buildings were exposed to or whether it was necessary to immediately engage Mr Cerven. There were other options that Officers E and F should have considered and their actions precipitated Mr Cerven's response."

Fatal Police Shooting of David Cerven, IPCA, September 2016

However, a knowledge gap remains on tracking the progress in implementing them. For example, the IPCA investigation into the Police shooting of Halatau Naitoko (April 2012) recommended access to AOS radio communications by ECCs, but ECCs have not yet been granted access to AOS radio communications.³³

- 223. TENR assessments have the potential to have fatal consequences. Staff have indicated confidence in applying TENR,³⁴ a process which emphasises officer safety and coordination.³⁵ However, currently there is no requirement to record or relay a TENR assessment to ECC in real-time.³⁶ Relaying or recording TENR assessments provides an opportunity for the ECC (via command and control) to critically assess the broader risks to other Police units, the public and surrounding properties. It also supports post-incident insights of the factors that drive attending units to respond in a particular way, e.g. risk appetite and information gaps.
- 224. How Districts perceive ECC as incident controller is another key knowledge gap. ECCs are sometimes overlooked by Districts during the post incident debrief process. Following Police shooting incidents, ECCs do conduct reviews, however they relate to the ECC specific component part of the Police, Practice and Procedure (PPP) process.^{37 38} Addressing this knowledge gap will provide opportunities to evaluate and make improvements on incident control and attending unit safety. Not communicating with ECCs impacts command and control in terms of a limited ability to consider attending unit(s) course of action, the consequences of the selected course of action and risk to other attending units and public.³⁹

³¹ Police Shooting of Halatau Naikoto, 03 April 2012

³²The IPCA investigation into the Fatal Police Shooting of David Cerven found two officers attending the scene did not provide ECC information about: their movements in Myers Park; that both officers were talking to the subject; and were not armed with TASERs or firearms. (Fatal Police Shooting of David Cerven, September 2016)

³³ National Operations Manager, Emergency Communications Centres, Personal Communication, 2 August 2021.

³⁴ FSIP Frontline Safety Survey Responses

³⁵ https://tenone.police.govt.nz/page/case-studies

³⁶ It is noted that the TENR process, and factors considered by the responding officer, are documented when submitting use of force reports or fleeing driver notifications. (Frontline Capability, Personal Communication, 2 August 2021; Response and Operations Research and Evaluation, Personal Communication, 2 August 2021).

³⁷ National Operations Manager, Emergency Communications Centres, Personal Communication, 2 August 2021.

³⁸ Currently, Police, Practice and Procedure (PPP) considers ECC reviews into a firearms event (Frontline Capability, Personal Communication, 2 August 2021).

³⁹ Dispatch Best Practice, Communications Centres



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Disclaimer

The interpretations and conclusions drawn in this report are made on the balance of probability on information available at the time of preparation. The information contained herein is not evidence and is intended to provide a basis for further investigation only.

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References

- Anonymous. (2019a, March 4). Danger means arming police is where we're heading Police Association. *Radio New Zealand*. Retrieved from https://www.rnz.co.nz/.
- Anonymous. (2019b, March 1). Arming frontline staff will not be routine Commissioner. *Radio New Zealand*. Retrieved from https://www.rnz.co.nz/.
- Ariel, B., Lawes, D., Weinborn, C., Henry, R., Chen, K., & Sabo, H. B. (2019). The "less than lethal Weapons Effect"

 Introducing Tasers to routine police operations in England and Wales: A Randomized Controlled Trial. *Criminal Justice and Behaviour, 46*(2), 280-300. doi: 10.1177/0093854818812918
- Barr Tribunal. (2002). Rank and Structure in the Garda Síochána and the Role of the Emergency Response Unit.

 Retrieved from http://www.mulley.net/BarrTribunalReport/BarrTribunalReportChapter10.html



- Barron, S. (2010). Police officer suicide within the New South Wales Police Force from 1999 to 2008. *Police Practice and Research: An International Journal*, *11*, 371-382. doi: 10.1080/15614263.2010.496568
- Barry, S. (2019, March 6). Routinely arming police. Otago Daily Times. Retrieved from https://www.odt.co.nz/.
- Block, R. (2017, March). Arming the front line. Garda review. Republic of Ireland
- Bushman, B. (2013). The Weapons Effect. *Journal of American Medical Association Paediatric, 167*(12), 1094-1095. doi:10.1001/jamapediatrics.2013.3824
- Campbell, L. (2010). Responding to gun crime in Ireland. British Journal of Criminology, 50, 414-434. doi:10.1093/bjc/azq006
- College of Policing, 2013. Armed Policing: Use of force, firearms and less lethal weapons.
- Cook, H. & Russell, M. (2019, March 5). Arming police will not make police and the public safer. *Stuff*. Retrieved from https://www.stuff.co.nz.
- Dario, L., Fradella, H., Verhagen, M., Parry, M.S., & Parry, M. (2019). Assessing LGBT People's Perceptions of Police Legitimancy. *Journal of Homosexuality*, 67(7), 885-915. Doi: 10.1080/00918369.2018.1560127
- Donner, C. M., & Popovich, N. (2019). Hitting (or missing) the mark: An examination of police shooting accuracy in officer-involved shooting incidents. *Policing: An International Journal of Police Strategies and Management, 42(3),* 474- 489. doi: 10.1108/PIJPSM-05-2018-0060
- EBPC (2020). Armed Response Team Trial evaluation report.
- Evans, R., & Farmer, C. (2021). Do Police Need Guns?. In Do Police Need Guns? (pp. 135-141). Springer, Singapore.
- Farmer, C., & Evans, R. (2020). Primed and ready: Does arming Police increase safety? Preliminary Findings. *Violence and Gender, 7*(2), 47-56. doi: 10.1089/vio.2019.0020
- Fekjær, S.B., Strype, J. (2015). Norwegian police students' attitudes towards armament. *International journal of police science & management, 17*(3): 182-188. https://doi.org/10.1177%2F1461355715596476
- Foote, C. & Cook, J. (2019, May 7). Armed police sent to 5,000 routine incidents. *BBC Scotland's The Nine*. Retrieved from https://www.bbc.com/news/uk-scotland.
- Garda Síochána. (2012, May). National Rollout of Regional Support Units Complete May 9th 2012 Southern Region Unit Launched. Retrieved from https://www.garda.ie/en/About-Us/Our-Departments/Office-of-Corporate-Communications/Press-Releases/2012/May/National-Rollout-of-Regional-Support-Units-Complete-May-9th-2012-South-Eastern-Region-Unit-Launched.html
- Garda Síochána. (n.d.). Garda Síochána Career Progression. Retrieved from https://careerservices.ie/an-garda-siochana/career-progression
- Hackenberry, B. (2019). Case study: Norway's gun violence correlation. Susquehanna University Political Review, 10, 2.
- Hampshire Constabulary. (2018). Tactical Firearms Management, Command and Deployment of Armed Officers.

 Retrieved from https://www.hampshire.police.uk/SysSiteAssets/ foi-media/hampshire-constabulary/policies/33302_v2.pdf
- Hawkins, G., & Ward, P. (1970). Armed and disarmed Police: Police firearms policy and levels of violence. *Journal of Research in Crime and Delinquency, 7*(2), 188-197. https://doi.org/10.1177/002242787000700206
- Hemenway, D., Azrael, D., Conner, A., & Miller, M. (2019). Variation in rates of fatal police shootings across US states: The role of firearm availability. *Journal of Urban Health*, *96*, 63-73. doi: 10.1007/s11524-018-0313- z
- Hendy, R. (2020). Effectiveness and efficiency: Oslo police officers' perspectives of the necessity and utility of temporarily routinely arming in response to a terrorist threat. *Policing and Society*. https://doi.org/10.1080/10439463.2020.1761806
- Hendy, R. (2014). Routinely armed and unarmed police: What can the Scandinavian experience teach us? *Policing*, 8(2), 183-192. doi:10.1093/police/pau012
- Hendy, R. (2012). The strategic impact of routine arming the New Zealand Police (Master's thesis, Victoria University of Wellington, Wellington, New Zealand).



- Henriksen, S.V., Kruke, B.I. (2020) Norwegian Police Use of Firearms: Critical Decision-Making in Dynamic and Stressful Situations. *Nordic Journal of Studies in Policing*, 7(2), pp. 99-120
- HMICS. (2014a). Review of Standing Firearms Authority for Armed Response Vehicles Crews within Police in Scotland. Retrieved from https://www.hmics.scot/publications.
- Horowitz, M. J. (1962). Trends in education: report on the annual meeting of the American Educational Research Association (AERA)held 19–21 Feb 1962, *Journal of Medical Education*, 37 (June): 634.
- Hill, R. S. (2019, March 29). 'Police', *Te Ara the Encyclopedia of New Zealand*. Retrieved from https://teara.govt.nz/en/police
- Inman, M., & Lowrey, T (2019, January). Suicides of Australian Federal Police officers inside their workplaces prompts tighter gun rules. *ABC News*. Retrieved from: https://www.abc.net.au/news/2019-01-15/suicide-of-afp-officers-prompts-gun-rules-changes/10714804
- IPCA (2012). Police shooting of Halatau Ki'anamanu Naitoko. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjb0-3x3rfqAhUYzDgGHVGWBkIQFjABegQIAhAB&url=https%3A%2F%2Fwww.ipca.govt.nz%2Fincludes%2Fdownload.aspx%3FID%3D120671&usg=AOvVaw1KAhlBxGxD7ogKNLc8YeZu
- Jackson, J., Hough, M., Bradford, B., Hohl, K., & Kuha, J. (2012). Policing by consent: understanding the dynamics of police power and legitimacy. ESS country specific topline results series, 1. European Commission.

 Retrieved from http://eprints.lse.ac.uk/47220/1/Policing%20by%20consent(lsero).pdf
- Klimley, K. E., Van Hasselt, V. B., & Stripling, A. M. (2018). Posttraumatic stress disorder in police, firefighters, and emergency dispatchers. *Aggression and Violent Behaviour*, *43*, 33-44. doi: 10.1016/j.avb.2018.08.005
- Knutsson, J. (2004). Police use of firearms a constant? A Swedish and Norwegian experience. In G. Mesko, M. Pagon, & B. Dobovsek (Eds.). *Policing in Central and Eastern Europe: Dilemmas of contemporary criminal justice* (pp. 1-10). Slovenia: Faculty of Criminal Justice, University of Maribor.
- Knutsson, J., Strype, J. (2003). Police use of firearms in Norway and Sweden: the significance of gun availability. *Policing & society, 13*(4): 429-439. doi: 10.1080/1043946032000105381
- Komarovskaya, I., Maguen, S., McCaslin, S. E., Metzler, T. J., Madan, A., Brown, A. D., Galatzer-Levy, I. R., Henn-Haase, C., & Marmar, C. R. (2011). The impact of killing and injuring others on mental health symptoms among police officers. *Journal of Psychiatric Research*, *45*(10), 1332-1336. doi: 10.1016/j.jpsychires.2011.05.004
- Kurtz, B. (2018, June). Gun ownership in Norway. Retrieved from: https://www.lifeinnorway.net/gun-ownership-in-norway/
- Lockwood, B., Doyle, M., and Comiskey, J., 2018. Armed, but Too Dangerous? Factors associated with Citizen support for the militarization of the police. *Criminal justice studies*, 31 (2), 113–127.
- MacKenzie, S., Bradley, T., & Lindsay, A. (2019, October 25). Police with guns will make us less safe. Victoria University of Wellington. Retrieved from https://www.wgtn.ac.nz/news/2019/10/police-with-guns-will-make-us-less-safe
- Matheson, L. (2018, February 18). *Pride and the Police*. The Spinoff. Retrieved from https://thespinoff.co.nz/society/18-02-2018/pride-and-the-police/
- Meeks, D., 2006. Police militarization in urban areas: the obscure war against the underclass. The black scholar, 35 (4), 33–41.
- Miller, L. (2006). Officer-involved shooting: Reaction patterns, response protocols, and psychological intervention strategies. *International Journal of Emergency Mental Health, 8*(4), 239-254.
- Miller, L. (2015). Why cops kill: The psychology of police deadly force encounters. *Aggression and Violent Behaviour*, *22*, 97-111. doi: 10.1016/j.avb.2015.04.007
- Morrison, B. (2009). *Identifying and Responding to Bias in the Criminal Justice System: A Review of International andNew Zealand Research.* Ministry of Justice, Wellington. Retrieved from



- https://www.justice.govt.nz/assets/Documents/Publications/Identifying-and-responding-to-bias-in- the-criminal-justice-system.pdf
- Mullis, J. (2009). The impact of the media on public opinion of the police. (Master's thesis, California State University, Department of Criminal Justice, Long Beach, USA). Retrieved from: https://search.proquest.com/openview/d00e6fb464c246ee3cf6ae09f0901c4e/1?pq-origsite=gscholar&cbl=18750&diss=y
- Mummolo, J. (2018). Militarisation fails to enhance police safety or reduce crime but may harm police reputation. *PNAS*, *115*(37), 9181-9186. https://doi.org/10.1073/pnas.1805161115
- Newman, T. (2019, May 25). Police firearms training questioned after Christchurch mosque attacks. Stuff. Retrieved from https://www.stuff.co.nz.
- New Zealand History (2020, July 06). 'Anti-terror' raids in Urewera: 15 October 2007. Retrieved from https://nzhistory.govt.nz/page/anti-terror-raids-urewera
- New Zealand Police. (n.d.). *Diversity Liaison Officers*. Retrieved from https://www.police.govt.nz/contact-us/local-contacts/diversity-liaison-officers
- Novy, M. (2012). Cognitive distortions during law enforcement shooting. Activitas Nervosa Superior, 54(1-2), 60-66.
- O'Brien, A.J., Thom, K., Gordon, S., McKenna, B., Kidd, J., Quince, K. & Exeter, D.J. (2021). The nature of police shootings in New Zealand: A comparison of mental health and non-mental health events. *International Journal of Law and Psychology*, 74. 101648.
- Punch, M. (2011). Shoot to kill: Police, firearms and fatal force. Bristol, England: The Policy Press.
- Queensland Police. (2018). Violent Confrontations review.
- Rivard, J. M., Dietz, P., Martell, D., & Widawski, M. (2002). Acute dissociative responses in law enforcement officers involved in critical shooting incidents: The clinical and forensic implications. *Journal of Forensic Sciences*, *47*(5),1093-1100.
- Roziere, B., & Walby, K. (2020). Special weapons and tactics teams in Canadian policing: legal, institutional, and economic dimensions. *Policing and society*, 30(6), 704-719.
- Schmidtke, A., Fricke, S., & Lester, D. (1999). Suicide among German federal and state police officers. *Psychological Reports, 84*, 157-166. doi: 10.2466/pr0.1999.84.1.157
- Siegel, M., Ross, C. S., & King, C. (2013). The relationship between gun ownership and firearm homicide rates in the United States, 1981-2010. *American Journal of Public Health, 103,* 2098-2105. doi: 10.2105/AJPH.2013.301409
- Simon, J. (2019). Perceptions of armed policing: Barriers and motivations to becoming an eAuthorised Firearms Officer (Master's thesis, Canterbury Christ Church University of Law, Criminal Justice and Policing, Canterbury, England). Retrieved from https://repository.canterbury.ac.uk/download/4859c85fec22e8b8ae43f35104fed81c6e04479705a02fbe 86eb0227b7d0d043/4833005/Perceptions%20of%20Armed%20Policing%20%28FINAL%29%20-%20Joe%20Simon.pdf
- Statista. (2019). Number of fatal shootings by police in England and Wales from 2004/05 to 2018/19. Retrieved from https://www.statista.com/statistics/319246/police-fatal-shootings-england-wales/
- Statista. (2021). Number of gun crimes in London 2010-2020. Retrieved from https://www.statista.com/statistics/865565/gun-crime-in-london/
- Swedler, D. I., Simmons, M. M., Dominici, F., & Hemenway (2015). Firearm prevalence and homicide of law enforcement officers in the United States. *American Journal of Public Health*, 105, 2042-2048. doi: 10.2105/AJPH.2015.302749
- TNS BMRB, 2015. Police use of force. Prepared for IPCC.
- Tyler, L., & King, L. (2000) Arming a traditionally disarmed police: an examination of police use of CS gas in the UK. *Policing: An International Journal of Police Strategies & Management, 23*(3), 390-400. https://doi.org/10.1108/13639510010343065
- UK Home Office (2019). Police use of firearms statistics. England and Wales: April 2018 to Match 2019.

 Retrieved from https://www.gov.uk/government/statistics/police-use-of-firearms-statistics-england- and-
- UK Home Office (2012). *Definition of policing by consent*. Retrieved from <a href="https://www.gov.uk/government/publications/policing-by-consent/definition-of-policing-by-con



- UK Police Federation. (2019). Firearms. Retrieved from https://www.polfed.org/our-work/firearms/.
- van Mechelen, D. (2017). Routine Arming Survey 2017: Headline Report 14 September 2017. England and Wales: Police Federation.
- Victoria Police Association. (2006, June). Critical Incident Response Team: The New Look FRU. Victoria Police Association Journal. Retrieved from https://web.archive.org/web/20160303193000/http://www.tpav.org.au/_documents/Journals/2006/June/34e7e4ed-9bb3-4189-b6cc-17c758e2326b/page18_19.pdf
- West Yorkshire Police. (n.d.). Police use of firearms. Retrieved from https://www.westyorkshire.police.uk.
- White. M. D. (2006). Hitting the target (or not): Comparing characteristics of fatal, injurious, and noninjurious police shootings. *Police Quarterly*, *9*(3), 303-330. doi: 10.1177/1098611105277199
- Yahoo News Australia. (2015, August 25). *Exclusive: On the road with Qld's crack new police squad*. Retrieved from https://au.news.yahoo.com/exclusive-on-the-road-with-qlds-crack-new-police-squad- 29347296.html
- Yesberg, J. A., Bradford, B., & Dawson, P. (2020). An experimental study of responses to armed police in Great Britain. *Journal of Experimental Criminology*. doi: 10.1007/s11292-019-09408-8
- Yesberg, J.A., & Bradford, B. (2019). Affect and trust as predictors of public support for armed police: Evidence from London. *Policing & Society, 29*(9), 1058-1076. https://doi.org/10.1080/10439463.2018.1488847
- Young, A.T., Pierpoint, B. & Perez, C. (2020). Police Response to the Armed and Suicidal. J Police Crim Psych. https://doi.org/10.1007/s11896-020-09384-0