CRITICAL POLICE INCIDENTS AND ORGANISATIONAL LEARNING:

DEVELOPING A CONCEPTUAL FRAMEWORK FOR ANALYSIS

A Thesis submitted by

Timothy P Mowle, GradDipMgt

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ABSTRACT

The greatest challenge the Queensland Police Service (QPS) faces is to maintain effective policing in a complex environment dictated by rising demand, finite resources, and increasing safety risks to the community and its workforce. Of concern is the increase in violent confrontations that result in police using lethal force. As these incidents continue to rise, there is a corresponding need for the QPS to develop an effective method to critically analyse the actions of officers and demonstrate continuous improvement as a contemporary learning organisation. Therefore, the primary aim of this research was to investigate the common themes that contribute to critical police incidents and the barriers and enablers of organisational learning, and provide evidence if there are benefits to the QPS in developing a Framework to analyse critical police incidents.

Literature relevant to the research was explored with a focus on organisational learning as the primary discipline. Such an approach it was proposed would provide insight into ‘barriers and enablers’ and ‘benefits and value’ and was used, in part, to inform the construct of the Framework.

The research adopted a mixed-methods approach that is largely qualitative in design, with two separate phases: a minor quantitative and qualitative phase, leading to a major qualitative phase. Quantitative analysis of QPS data describes the extent of critical police incidents within the QPS, including the geographical relationships of incidents and future trends. Qualitative analysis of six QPS shooting incidents was then combined with the literature review, plus the researcher’s inside knowledge of QPS systems and processes attained from working in the organisation over an extended period of time in numerous specialised roles, to develop the Framework. A case study analysis of five coronial inquests was subsequently conducted and applied to the Framework to test its efficacy. Various components of the Framework were shown to mirror the coronial process, while thematic analysis revealed the existence of similar primary and subordinate themes. A time comparison revealed an average wait time of three years two months for coronial findings

while the Framework would deliver interim findings within two months and final findings within ten months. The significance of these findings is that they show the Framework would result in similar outcomes to the coroner, however these would be delivered much sooner and thereby enable the QPS to identify lessons and effect change expeditiously.

It can therefore be argued that the research might contribute to the professional practice of policing in Queensland, and other potential jurisdictions, by emphasising the benefit in developing and implementing a novel and repeatable process to analyse critical police incidents, identifying lessons, and effecting change in line with the increasing demands of a contemporary police environment and community expectations.

CERTIFICATION OF THESIS

This Thesis is entirely the work of Timothy Patrick Mowle except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Principal Supervisor: Dr Lee Fergusson

Associate Supervisor: Dr Shayne Baker OAM

Student and supervisor signatures of endorsement are held at the University.

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ABBREVIATIONS

BAC – Blood alcohol concentration

BWC – Body worn camera

CCC - Crime and Corruption Commission

CCTV – Closed circuit television

CIRC – Critical Incident Review Committee

COA – Courses of action

CPIN – Critical Police Incident Notification

CPR – Cardio-pulmonary resuscitation

EEO – Emergency examination order

ESC – Ethical Standards Command

FBI – Federal Bureau of Investigation

GP – General Practitioner

IIG – Internal Investigation Group

KWIC – Key word in context

KM – Knowledge management

LFI – Learning from incidents

MPSR – Master of Professional Studies (Research)

NDICP – National Deaths in Custody Program

OAN – Operational Advisory Note

OC – Oleoresin capsicum (spray)

OIC – Officer in charge

ORU – Operational Review Unit

PCC – Police Communication Centre

PFCP – Police forward command post

QAS – Queensland Ambulance Service

QPCOUE - Queensland Police Commissioned Officers' Union of Employees

QPRIME – Queensland Police Records and Information Management Exchange

QPS - Queensland Police Service

QPUE - Queensland Police Union of Employees

RAIS – Research Analysis and Intelligence Section

SERT – Special Emergency Response Team

Sitrep – Situation report

SME – Subject matter expert

UOF – Use of force

USQ – University of Southern Queensland

CHAPTER 1. INTRODUCTION

The greatest challenge the Queensland Police Service (QPS) faces is to maintain effective policing in a complex environment dictated by rising demand, finite resources, and increasing safety risks to the community and its workforce. This includes the effective management of complex and dynamic community safety risks, sustaining the support and collaboration of the community, and future-proofing the workforce to maximise community safety (QPS 2019).

Current research by Graham and Livingston (2011) has identified a direct relationship between drug use, the consumption of alcohol, violent crimes, and health problems. QPS data support this research and indicate a continual increase in violent confrontations with police, precipitated by drug and alcohol fuelled violence and mental health issues. While every effort is made to de-escalate and peacefully resolve such confrontations, at times they result in police using lethal force and consequently the serious injury or death of the assailant. As these types of critical incidents continue to rise, there will be an increased demand on the QPS to demonstrate an effective and transparent method to critically analyse the actions of officers in line with policy, procedure, legislation, and community expectations. Similarly, there will be an increasing demand on the QPS to demonstrate a preparedness for continuous improvement as a contemporary learning organisation.

For this reason, the human capital of the QPS is integral to organisational learning from two perspectives: firstly, as an invaluable source of knowledge and experience, stimulating innovation and change, and secondly, as consumers of organisational change in the delivery of policing services to the community of Queensland. Frontline officers represent approximately 75% of the workforce, providing the QPS with a significant opportunity to leverage their experiences in the pursuit of continuous improvement. Kang, Rhee and Kang (2010) support this observation, asserting that knowledge is the most important strategic resource to a firm and has enormous effects on an organisation’s competitive advantage.

Lukic, Margaryan and Littlejohn (2013) provide further context and clarity, claiming that frontline workers are often best positioned to identify operational problems and their input is invaluable both in terms of identifying potential faults and solutions that need to be aligned to practice. Twenty years ago, Garvin (1993) argued that the importance of a multi-faceted approach to learning from past experiences, including reviewing successes and failures, identifying and recording lessons learned, looking outside one's own environment, and transferring new knowledge by sharing broadly throughout the organisation is fundamental to the learning organisation.

The QPS has made several attempts in the past to capture lessons learned from critical police incidents and drive continuous improvement. However, these attempts may have been impeded by various internal factors. Therefore, the present research study has been conducted to investigate this premise and to answer the following four research questions:

RQ1. How and to what extent will analysing critical police incidents benefit organisational learning within the QPS;

RQ2. What are the common themes and how do they contribute to critical police incidents within the QPS;

RQ3. What are the barriers and enablers of organisational learning, and how do they contribute to learning from critical police incidents within the QPS; and

RQ4. As a result of asking and answering research questions 1, 2 and 3, can a framework explaining the relationship between critical police incidents and organisational learning be developed which will aid QPS in achieving continuous improvement expeditiously.

Thus, the research includes investigating the underlying issues and building a conceptual framework (the Framework) as a repeatable business model to effectively analyse critical police incidents. Firstly, a comprehensive literature review will be undertaken to identify the primary enablers and barriers to organisational learning from incidents plus the benefits and value of learning from incidents. Secondly, quantitative analysis of QPS data will be conducted

to demonstrate the extent of critical police incidents within the QPS, including the geographical relationships of incidents and future trends. Thirdly, qualitative analysis of six QPS shooting incidents will be undertaken with the outcome combined with the literature review plus the researcher's intimate knowledge of QPS systems and processes to inform the structure of the Framework. Fourthly, five coronial inquests, representing five shooting deaths involving Queensland police officers will be analysed. Finally, the results of these case study analyses will be applied to the Framework and used to illuminate the efficacy of the Framework in analysing critical police incidents, identifying lessons learned, and applying those lessons in the workplace to drive continuous improvement.

1.1 Outcomes and Significance

Armsby (2000) offers several benefits of work-based research including capitalising on the breadth of knowledge in the work environment by drawing on the depth and diversity of learning and experience. This research project is work-based with a focus on critical police incidents and organisational learning within the QPS, drawing on the collective knowledge and experience of the researcher and fellow employees. A review of the available literature indicates that there is no current research in Queensland or elsewhere specific to this topic.

It is anticipated the research will culminate in the development of a conceptual critical incident analysis framework, embedded with several practitioner models, resulting from a human centred design approach. These include: 1) a QPS Incident Analysis workflow; 2) a Critical Police Incident analysis lifecycle; 3) an Incident Analysis District/Group level decision process map; 4) a cause-and-effect concept diagram; 5) a QPS Capability Matrix; and 6) a governance structure as the authorising environment for the transfer and consolidation of learnings into business-as-usual practices.

This area of research is integral to the professional practice of policing in Queensland, plus other jurisdictions, and as such has the potential to

contribute a range of beneficial outcomes to the QPS and the wider community. There is alignment between this study and numerous objectives detailed within the QPS Strategic Plan 2019-2022 (QPS 2019) and the QPS Operational Plan 2019-2020 (QPS 2019). The outcomes also have direct relevance to the strategic objective of 'Equipping our workforce for the future' by providing a mechanism to: continuously improve training, and operational practices and procedures and ultimately prepare our workforce to meet current and future challenges; and identify equipment, technology and resources necessary to support frontline activities.

This research also supports the strategic objective of 'Stopping crime' as lessons learned provide an opportunity to focus resources to identify and deliver effective, innovative and efficient services. It further supports the strategic objective of 'Strengthening Relationships with the community' as the analysis process encompasses significant events impacting the broader community and aids in preserving and enhancing the legitimacy of policing through demonstrated fair and equitable service delivery. This assertion is supported by comments made by Queensland State Coroner, Michael Barnes (2008):

> The community needs to be satisfied that the use of deadly force was necessary if it is to maintain its trust and confidence in the police service (p.5); …changes to practice or policy that may limit the risk of future deaths and contribute to a fairer and/or safer society (p.7); and It is appropriate that such incidents are subject to an inquest so that the families of the deceased and the public at large can be assured that those involved in the incident are held accountable and that any legislative or procedural changes that are warranted are recommended (p.137).

1.1.1 Statement of Prior Learning

The researcher is well positioned, and industry qualified to undertake this higher degree by research project with a focus on critical police incidents. I have considerable policing experience, amassed over 30 years,

encompassing many diverse roles. Of relevance is 15 years as a tactical police officer within the tactical police arena and an equivalent number within police training. I hold numerous academic, vocational, and in-service qualifications, including a Post Graduate Diploma of Management, Diploma of Training and Assessment, and Diploma of Public Safety Policing. I have derived many key learnings from these qualifications as a result of applying the acquired knowledge and skills within the workplace. These have been enabled through various management, supervisory and facilitator roles performed throughout my career. The following career placements and associated learnings are of note, demonstrating a comprehensive understanding of the police environment and providing a convincing argument toward my ability to undertake this research:

- As Acting Inspector, Strategy and Performance Officer, I provided professional administrative support for the Assistant Commissioner of Organisational Capability Command. During this experience I learnt to work under pressure, balance multiple tasks and provide accurate reports in tight timeframes.
- As Acting Inspector, Officer in Charge of Portfolio Engagement, I coordinated and managed the workflow of the business unit. During this experience I learnt to accept personal responsibility on behalf of a large team to meet work objectives and deliver on time.
- As Senior Sergeant, Operational Equipment, I established a new business unit and developed a large internal and external network of interrelated business units. During this experience I learnt; the importance of building sustainable and positive relationships to leverage from different perspectives and skill sets; that clear and effective communication is important; and the importance of a comprehensive evaluation process to support evidence-based decision making.
- As Senior Sergeant, Officer in Charge of Operational Skills Section, I was responsible for managing the business unit and overviewing the delivery of state-wide in-service training. During this experience I learnt; to overtly value staff and manage multiple personnel conflicts through active listening and a high degree of emotional intelligence; and that my knowledge and experience can contribute to the wellbeing of others.

- As Senior Sergeant, Officer in Charge of Operational Skills Section, I was responsible for reviewing several excessive use of force (UOF) incidents to determine the adequacy of decision making and compliance with training and policy. During this experience I learnt to challenge my own values and beliefs when comparing the actions of officers under review to my own actions in similar situations.
- As Senior Sergeant, Officer in Charge Firearms Training Section, I coordinated and managed the workflow of the business unit and overviewed the delivery of police recruit training. During this experience I learnt; that foundational learning is critical for the ongoing development of officer safety skills as recruits progress through their careers.
- As Sergeant, Team Leader Special Emergency Response Team (SERT), I managed police tactical teams in high risk taskings and planned and implemented the police response and tactical resolution to many high-risk situations (more than 600 tactical deployments). During this experience I learnt; to identify the strengths and weaknesses of my team and to use that to achieve optimal outcomes; and that proper planning, preparation and attention to detail leads to successful outcomes.
- As a tactical operator with SERT I performed specialist tactical police functions beyond the capability of normal police. During this experience I learnt personal growth, maturity and fortitude; realisation that individuals can only accomplish so much; and the sharing of information is critical to success.
- As SERT Training Manager I designed, developed, coordinated and evaluated specialist skills training. During this experience I learnt that research is key to ensure training is focused on contemporary skills that address current and emerging trends.

1.1.2 Professional Studies

This work-based research project is being undertaken as part of the Professional Studies program offered by the University of Southern Queensland. Work-based research is described by Fergusson, Allred and Dux (2018) as the systematic study of materials and phenomena, in often complex

work and organisational environments, to establish facts and reach new conclusions. Typically termed as ‘action research’, they assert that work-based research is conducted by working professionals, leveraging their intimate knowledge of workplace structures and culture, internal and external drivers, plus strategic imperatives to identify legitimate, mission-critical problems and provide timely and relevant solutions.

Fergusson et al. (2020) assert that work-based learning is operationalised through the Professional Studies program in two primary ways. The first is through a systematised approach to learning and research that combines workplace competencies and capabilities possessed by mid- to senior-career professionals with academic competencies and capabilities such as critical thinking, research methodology and academic writing. The result being an expansion in both the depth and breadth of capabilities plus enhanced professional identity whereby the practitioner is better positioned to lead their community of practice, influence strategic direction and potentially enhance organisational performance.

The second is through a shared ethos, generated by the reciprocal influence between professional researcher and academic faculty resulting in a cooperative and shared vision for research objectives and learning outcomes. Fergusson et al. (2019) emphasise the program is designed to deliver a triple dividend with contributions to professional practice, work domains and the self, the unique ethos and structure of the Professional Studies program incentivises students to self-design and self-direct personally and professionally relevant research that will result in solving a real-world problem and offer personal advanced standing as a scholarly professional.

To achieve research and learning outcomes, the USQ Professional Studies pedagogy is underpinned by reflective practice and establishing clear learning objectives. The practitioner is encouraged to reflect on their personal and professional experience to identify elements of prior learning, develop a learning profile and establish personal learning objectives. Conducted at the micro- (practitioner) and macro- (organisational-program) levels, Fergusson,

Shallies and Meijer (2019) claim this critical examination of experience, skills and aptitudes guides the practitioner in the development of a comprehensive work-based research plan that results in a higher degree qualification, addresses a work-based problem and contributes original research to enhance collective knowledge.

This research conforms to the tenets and pedagogy of work-based learning in several ways. Firstly, the micro-reflection conducted by the researcher identified elements of prior learning and established a baseline of both professional and academic capabilities and competencies which in turn informed the development of a learning profile and personal learning objectives. Secondly, the macro-reflection of the practice domain facilitated the critical analysis of the strategic work environment and provided insight into a work-based problem impacting the QPS.

This also provided the nexus between clearly defining the problem in the practice domain with developing a detailed research plan, in consultation with Professional Studies faculty, and conducting research in a manner that complies with academic standards and addresses the problem. The narrative throughout this thesis demonstrates the alignment of the research with work-based learning pedagogy by detailing the various activities including reflective practice, learning objectives and outcomes, literature review, research questions, research methodology and outcomes.

1.1.3 Learning Objectives

The completion of this research project will be undertaken with a view to: enhance my professional identity and career; develop myself as a scholarly professional; and expand my world view both inside and outside of my profession. The following personal learning objectives have been categorised in accordance with the Australian Qualification Framework, Masters-Degree qualification type descriptors (2013):

1. Cognitive, technical, and creative skills -
    - Provide innovative solutions that enable the analysis of critical police incidents in a contemporary police environment.

- Demonstrate the benefits of conducting analyses of critical police incidents in an expeditious manner, to develop strategies for knowledge management and organisational learning.

2. Cognitive and technical skills -
    - Critically analyse and assess current work methods and processes to identify optimal alternatives from a practitioner perspective.
    - Identify, analyse and evaluate internal and external data sources from an impartial perspective.
3. Communication and technical skills -
    - Embrace and articulate cultural differences and challenges that may influence research objectives and industry solutions.
    - Leverage my personal potential and capabilities to drive change regarding the knowledge management of critical police incidents.
    - Conduct rigorous research to combine academic and professional perspectives with a direct alignment to critical police incidents.
4. Technical and communication skills -
    - Demonstrate superior communication skills appropriate for advancing new industry knowledge through a written thesis and publication.

Doncaster and Thorne (2000) describe Work-Based Learning Study programs as a learning contract between the learner, the employer and the university. It is anticipated that this research-based work project will provide the following triple dividend to the learner, the workplace, and academia:

Learner (Self) –

- Achievement of the abovementioned personal learning objectives that will enhance my professional identity and career; develop myself as a scholarly professional; and expand my world view both inside and outside my profession.

Workplace (QPS) –

- Provide an analysis framework from a practitioner perspective i.e. how are poor practices and processes, policy and procedures identified? How are critical errors from core business activities identified, reported, analysed

and evaluated? How are the corresponding lessons learned and treatments communicated throughout the organisation?

- Provide a deeper insight into the analysis of critical police incidents and demonstrate why it should be an integral part of the QPS business model.
- Inform the practice of using lessons learned to drive change and build capability and capacity in an environment of accelerated change – why it is important to analyse critical incidents sooner rather than later.

Academia (USQ) –

- Contribute new knowledge by addressing gaps in the current literature.
- Expand on current research by detailing the benefits of developing and implementing an effective critical incident analysis process and feedback loop.
- Communicate findings by writing a thesis and publication on examining critical police incidents in Queensland within the context of organisational learning.

CHAPTER 2. LITERATURE REVIEW – CONCEPTUAL FOUNDATION

Literature relevant to the research topic has been explored and identified as applicable to the research questions. With reference to *Figure 1: Academic Literature Map*, the literature review has been structured using 'Organisational Learning' as the primary discipline. This has been divided into two focus areas, 'barriers and enablers' and 'benefits and value'. Under each focus area a series of sub-topics and sub-sub-topics have been mapped. To guide the research in identifying 'barriers and enablers' to learning from incidents the literature was focused toward the sub-topics of: Organisational Maturity; Incident Learning; and Knowledge Management. Regarding 'benefits and value' the literature was focused toward: Police Legitimacy; and Cost Benefit. The strength of the research was further derived from the corresponding sub-sub-topics as indicated in Figure 1. Concurrently, the literature review was used to explore and define 'critical police incident' within the context of the QPS, plus identify the typology of a critical police incident.

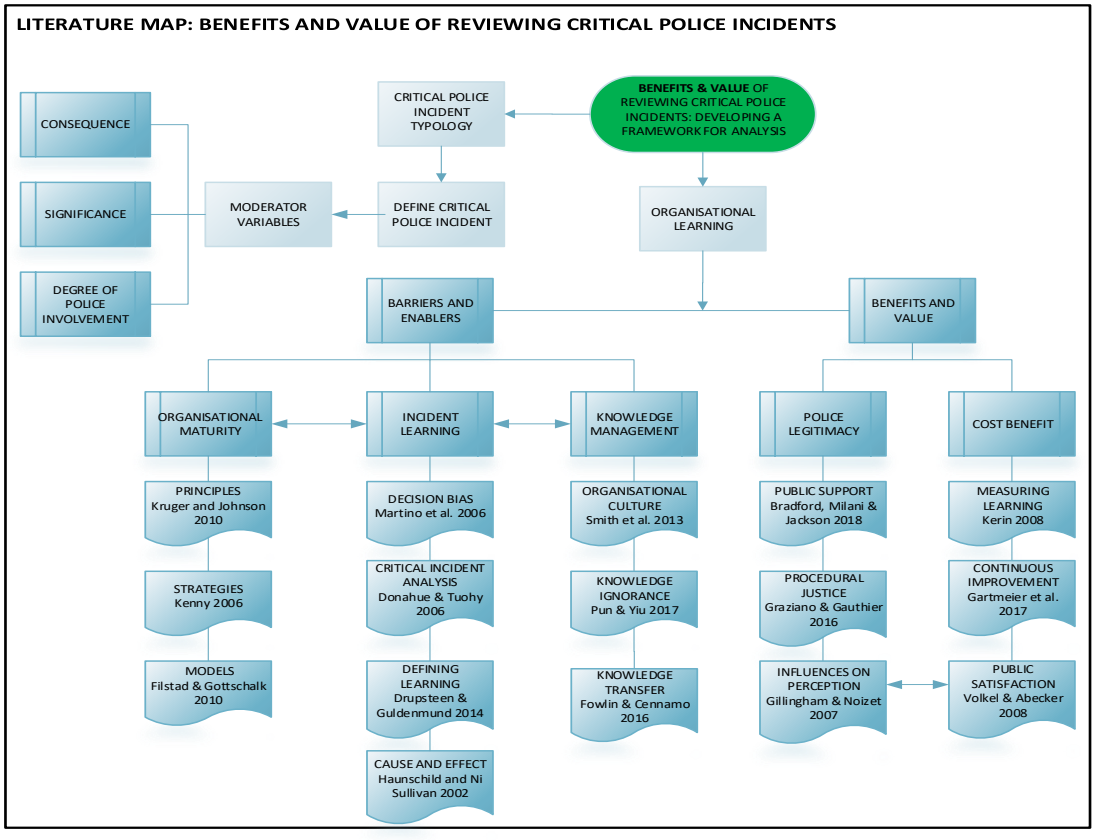

Figure 1: Academic Literature Map

Creswell (2014) emphasises the importance of a literature review as providing a framework to highlight the importance of the research relative to other studies. A literature review, using the nominated sub-topics as the search terms, has been conducted to identify the current state of the literature relevant to this research, including limitations. Numerous primary research databases were utilised including the; USQ online library; QPS online library; and Google scholar. The following is a precis of the review and provides the foundation for this research project:

Organisational Maturity

Kruger and Johnson (2010) conducted a study of 86 South African based organisations with a focus on examining the roles that knowledge management (KM) principles, policies and strategies play in the establishment of KM and to bridge the gap between theory and practice. They used a questionnaire containing descriptive questions with responses expressed on a four-point Likert scale. This provided an overall KM maturity score for each organisation. The findings suggest that organisations with established principles had a higher success rate in the implementation of KM. This was found to support the argument that enablers such as strategies, policy, content, process and technology strongly influence the success of KM in organisations. Of note was the lack of commitment from executives impacting negatively on the establishment of a knowledge sharing culture. Limitations of the study were identified as being focused on one country. The authors suggest further research in comparing the impact of the various enablers plus identifying the significance and impact of demographic and cultural differences.

Filstad and Gottschalk (2010) conducted a literature review of police oversight bodies to develop a conceptual stage model for maturity levels within police agencies. A key aspect of the research was the need for oversight bodies to transfer knowledge back to the front line, resulting from lessons learned. A four-stage model was presented in progressing from a traditional bureaucratic organisation to a knowledge organisation. The stages include: activity organisation; problem organisation; value organisation; and learning

organisation. The authors recognise that the limitation of this study was the focus on the stages of creating a learning organisation with a suggestion that further research should address the actual learning process.

In summary, several key aspects of these studies were considered relevant to this research. While Kruger and Johnson's study focused more on knowledge management than incident analysis, a nexus was observed as the transfer of knowledge supported by principles, policy and executive commitment. As an organisation the QPS operates under guiding principles and policy and within a hierarchical structure managed by an executive leadership team. The inclusion of these elements in the Framework would be a logical approach that leverages existing organisational practices.

Similarly, the conclusion from Filstad and Gottschalk's review was the transfer of knowledge back to frontline police, with an emphasis on the need for oversight bodies. The QPS has a formalised governance structure with several oversight committees that ensure the effective and efficient delivery of policing services. Including governance as a component of the Framework would leverage from this existing arrangement while ensuring a centrally coordinated approach to incident learning and knowledge transfer.

Incident Learning

Lukic, Littlejohn and Margaryan (2012) present a framework for learning from incidents in the workplace focused on five factors: participants of learning; types of incidents; learning process; type of knowledge; and learning context. Their qualitative study involved two large multinational companies in the energy sector. They developed an initial framework based on an earlier study and then tested the framework in the work setting. The framework was then refined and presented as a revised conceptual framework as depicted in Figure 2 below.

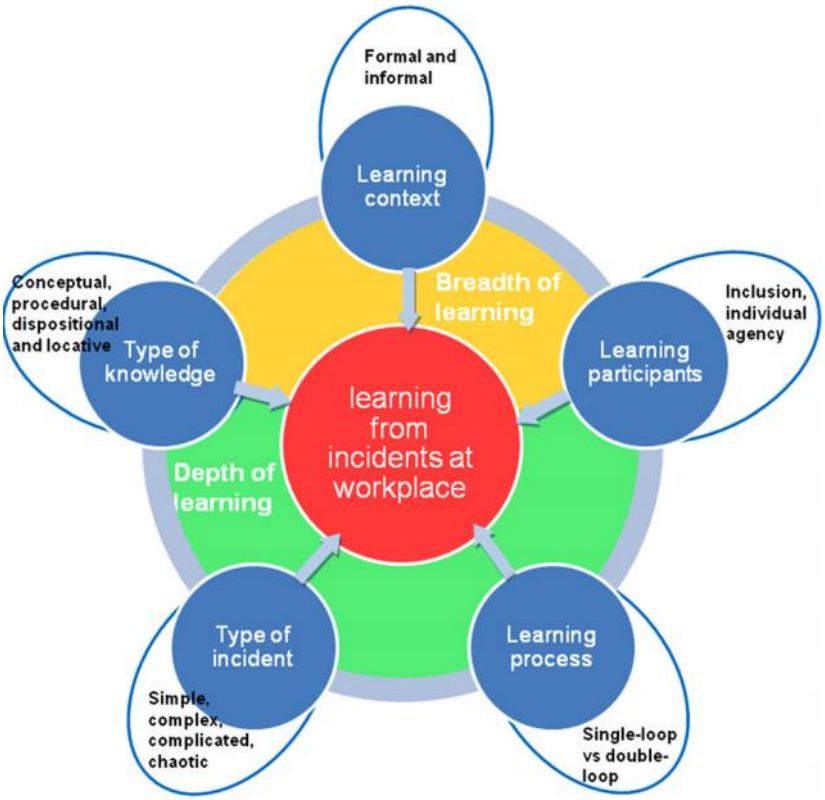

Figure 2: Revised conceptual framework (Lukic, Margaryan & Littlejohn, 2012)

The first factor of 'learning participants' defines the entity involved, individuals, teams, sector and whole organisation. The second factor 'type of incident' addresses the complexity of the incident through the domains of simple, complicated, complex and chaotic. The third factor 'type of knowledge' are reported as conceptual, procedural, dispositional and locative. The fourth factor 'learning process' is underpinned by single and double loop learning theories while the fifth factor 'learning context' is described as either formal or informal with both having benefits and limitations. The results of their study confirmed that the five factors are integral to learning from incidents.

Jacobsson, Ek and Akselsson (2012) proffer that minor workplace events, with few or no consequences, could reveal weakness in organisational processes that under other circumstances could be catastrophic. They developed and tested a method for assessing various phases of the learning cycle from reporting, analysis, decision, implementation and follow-up. The method was applied across six plants in the Swedish processing industry. The results showed that the developed method was effective and useful in practice and

was consistent across all six companies despite six different incident learning systems.

Cooke and Rohleder (2006) present a model of safety and incident learning based on an organisational response system where precursor incidents are used to combat complacency and avoid disasters. Coupled with normal accident theory and incident learning theory the incident learning system enables organisations to extract useful information from incidents and near misses and use this information to improve the organisation over time. Their model demonstrated that losses from incidents can be reduced dramatically by focusing on the learning cycle that reduces unsafe conditions and the severity of incidents. Further, by maintaining a data base of lessons learned, future accidents can be avoided.

Pettersson (2013) explores the benefits of finding the root cause of accidents and then using that information to make changes and avoid similar incidents. In doing so they re-designed an incident reporting form using interview and questionnaire research results, with a focus on vital information for root cause analysis. 40 members from the Swedish National Defence College participated in the study where they watched film sequences of incidents. The new form, containing more complete and accurate information, resulted in significantly improved results.

Donahue and Tuohy (2006) conducted a qualitative analysis of response organisations perspectives on lessons and learnings to better understand how to support behavioural change and improvement. They used three approaches in their analysis; interviews to confirm that lessons are repeatedly identified; review of documents to identify and classify repeated lessons; and a focus group retreat involving eleven expert incident managers to validate the classification of lessons and gain perspective on why lessons were repeated rather than learned. The analysis focused on five general areas of motivation for change, review and reporting process, learning and teaching, exercising, and resource constraints. The authors concluded that change from lessons

learned requires long term commitment with a corresponding need to address the structure, system and culture of an organisation.

In summary, these studies provided several insights and inclusions for the Framework. The framework developed by Lukic, Littlejohn and Margaryan delves into the complexity of incidents and learning theories which are considered beyond the scope of this research. However, their factor of 'participants of learning' that defines the learning entity has direct relevance to the QPS. This concept has been included in the research narrative to describe four levels of learning aligned to the four commonly accepted functional levels within the QPS of individual, tactical, operational and strategic. Jacobsson, Ek and Akselsson studied minor workplace events to develop and test an analysis method. While in contrast to the analysis of critical police incidents their approach and method was considered logical and equally applicable, regardless of the criticality of the incidents being examined. Their analysis cycle of reporting, analysis, decision, implementation and follow-up has been used to inform the process component of the Framework.

The inclusion of a structured process was further reinforced by Cooke and Rohleder's model of safety which demonstrated that a structured approach to incident learning reduced the severity of incidents and could avoid future accidents. Pettersson's research examined root cause analysis to inform change and avoid similar incidents in the future. While their focus was on redesigning an incident reporting form, the concept of root cause analysis for incident learning has been adopted as an integral part of the analysis activity of the Framework. Donahue and Tuohy's qualitative analysis of organisation perspectives to incident learning was considered outside the scope of this research. However, their conclusion of a long-term commitment and need to address the structure, system and culture of an organisation was considered quite relevant. This has been interpreted as a need to constantly evaluate and review all components of an incident learning system and has been integrated into the Framework.

Knowledge Management

Smith et al. (2013) conducted a root cause analysis on patient safety incidents in the UK. The focus of the study was to identify intervention points within processes that jeopardise patient safety. A total of 65 root-cause analyses were reviewed highlighting thematic factors and causes using a mixed method approach. The commonly occurring factors and causes were then used to direct interventions. Some limitations were identified including that some causes may not be applicable to all settings, indicating the specificity of the environment rather than the process is a key consideration. The result of the study demonstrated that common causes of incidents can be identified through the comprehensive investigation of incidents.

Haunschild and Ni Sullivan (2002) examined the variation in organisational learning against heterogeneous causes and homogenous causes. Heterogenous causes being the large number of multiple factors that interact in complex ways compared to homogenous factors described as small numbers of similar factors. The study involved the analysis of US commercial airline data of incidents from 1983 to 1997. The results of the study showed that focusing on heterogenous causes provides a greater depth and insight into underlying causal and contributing factors, that is, variance helps focus attention of latent causes and leads to a deeper analysis of the problem; variance forces a situational analysis rather than looking for a simple answer and focusing on the individual/s; and heterogeneity produces constructive conflict in groups resulting in differing perspectives and leading to better analysis and problem response.

Drupsteen and Guldenmund (2014) undertook a qualitative analysis of literature on learning from incidents (LFI) and compared their findings with the organisational learning theory of Argyris and Schon that promotes learning as a means to detect and respond to errors and unwanted situations. The review focused on three themes; learning lessons from incidents; learning processes; and factors that influence the LFI process. The comparison between single loop and double loop learning is also highlighted. With single loop focusing only on the specific situation or process whereas double loop extends beyond

the immediate situation and encompasses the values, assumptions and policies that led to the actions in the first place. The authors postulate that an aspect of LFI often overlooked is the successful implementation of lessons learned through practical recommendations and actions. They offer several process step models for LFI and a summary on the comparison of key aspects in the learning process. In conclusion the authors emphasise greater opportunities for double loop learning, sharing and storing lessons learned, and learning from incidents other than those that result in serious consequences.

Fowlin and Cennamo (2017) propose a methodological framework for knowledge management in the workplace. The authors undertook a review of the literature regarding organisational knowledge with a view to establish a natural flow of tacit to explicit information. They then applied the theoretical framework to a case study involving the Software Help Desk of a research university in the United States. The framework was presented in three phases. Phase one is understanding the system in question. Phase two is conducting a critical incident analysis. Phase three is data analysis and interpretation. The result of the study was a framework that provides practitioners and researchers with a model to analyse the knowledge flow within organisations and make informed decisions regarding KM solutions.

Pun and Yiu (2017) discuss the need for fostering knowledge management practices with ignorance management towards organisational learning. They describe knowledge in two dimensions, firstly where it exists; individual; group; or organisation. Secondly it is either tacit (residing innately in people) or explicit (codified and existing as recorded facts). They offer a knowledge value adding process consisting of eight components; identification; acquisition, codification, storage; dissemination; refinement, application; and creation. However, the research highlights that while KM is the management of the known it is the unknown that poses the greater risk, hence the need to focus on ignorance management and the prevention of organisational ignorance.

In summary, various aspects of these studies provided important insight for this research. The study conducted by Smith et al. was designed to identify intervention points within medical processes however also emphasised specificity of the environment as a key consideration. This has direct relevance to this research as critical police incidents typically occur in unique and challenging environments. The element of 'environment' has been included in the QPS capability matrix developed as a coding classification tool as part of this research. Haunschild and Ni Sullivan's study provide insight into the benefits of focusing on heterogenous causes of incidents. The QPS provides policing services via multiple systems, processes, and sub-processes and as such any critical police incident analysis will likely examine the interaction between multiple and complex activities to determine causal and contributing factors. This insight has been applied to the analysis activity within the 'process' component of the Framework. The bulk of the study conducted by Drupsteen and Guldenmund is focused on organisational learning theory and beyond the scope of this research.

However, their findings highlighted that successful implementation of lessons learned is often overlooked. Considered vital to closing the loop on incident analysis and organisational learning the concept of knowledge transfer has been included as an enabler of the Framework and included within the 'implementation' activity within the process component of the Framework. The studies conducted by Fowlin and Cennamo and Pun and Yiu were considered relevant to this research as both support a structured approach and process to knowledge management in the workplace and reinforce the benefits of developing the Framework as a repeatable process for critical police incident analysis.

Police Legitimacy

Gillingham and Noizet (2007) propose a four-element model for the management of public relations during a critical incident. The authors draw on five case studies and previous research to illustrate how the four elements combine for the successful management of real incidents and lead to major organisational benefits. The four-element model includes thinking of the public

and the media, acting fast, being forthright, and showing concern and compassion. The authors concluded that not only did the companies in the case studies benefit from the short-term improvement to management processes but also from long term positive effects on corporate reputations.

Bradford, Milani and Jackson (2017) conducted a study using cross-sectional data from a 2015 survey to examine the extent by which police legitimacy and social identity explain variations in public acceptance of police UOF. The survey was conducted using a sample of 1,004 adults in England and Wales. The findings evidenced that identifying with police and social groups associated with police is linked to greater acceptance of the UOF. This suggests that in ambiguous or uncertain circumstances people default to identity judgements, inferences and attribute causes according to group values and norms. The authors suggest there are likely important feedback loops that may impact on community perception which presented a major limitation of the study. They also suggested further research in this area in the future.

Graziano and Gauthier (2018) conducted a survey of 1,197 residents of California to test the hypotheses of media related effects on perceptions of police legitimacy. The findings indicated that television, rather than the internet, had the greatest positive impact on police legitimacy with negative media reports having independent effects by shaping attitudes and perceptions of consumers. However, procedural justice remained as the strongest predictor of police legitimacy for those that had recent interactions with the police. In instances where personal experiences were perceived as unjust, police were deemed to have less legitimacy. The authors suggest that further research into how media influences public perception and testing the impact of positive police coverage, particularly in a 24-hour news cycle, may provide valuable insight into the effects on police-community relations.

Greene et al. (2016) present findings in relation to a study on how Boston police department uses data to measure the effects of police efforts against public perception and policing legitimacy. The focus of the study was on how police agencies can improve transparency and accountability as well as public

acceptance of police considering that police typically under-record and undervalue social support roles that could otherwise provide opportunities to enhance policing legitimacy. Preliminary findings suggest that police-public contact extends significantly beyond simply crime related matters. The public rely on police to protect the community from harm, and in doing so reducing and mitigating the essence of fear. This ultimately shapes the public's perception regarding trust and satisfaction and informs the level of legitimacy afforded to the police.

In summary, the findings from these studies reinforce the negative impact police incidents can have on public perception and police legitimacy plus the importance of learning from incidents. While a detailed examination of police legitimacy and corrective strategies is beyond the scope of this research a key objective is the development of an incident analysis framework that supports the QPS strategic objective of 'Strengthening Relationships with the community'. These studies were found to support the underpinning rationale for the development of the Framework, that is, a transparent and repeatable process whereby the QPS analyses incidents impacting the broader community, demonstrating a philosophy of continuous improvement and aiding in the preservation and enhancement of police legitimacy.

Cost Benefit

Kerin (2009) investigated the benefits of learning from other's mistakes to prevent similar incidents in the workplace. The proposition includes a stepped approach including locating relevant information, identifying root causes and then applying the learnings. Learnings are applied by directly linking the incident information and root cause to a possible scenario in the workplace. A gap analysis is then conducted to determine if suitable control measures are in place. Control measures include lead and lag indicators and effectiveness of learning is measured against a performance standard for each control.

Gartmeier et al. (2017) conducted a longitudinal survey study in a 435-bed hospital in Germany to investigate the effectiveness of informal workplace

learning amongst nurses, including a cost/benefit analysis. Cost/benefit focused on two factors; effort costs associated with reporting the incident; and damage to personal image and reputation of the person reporting. Two primary measurements were used, time and the implementation of a critical incident reporting system. The results of the study showed a positive cost benefit in that nurse perception changed from one of simply reporting errors to that of learning and reflection. The authors recommend further research to determine practical methods to use stored critical incident information in learning-oriented ways.

Volkel and Abecker (2008) present a cost-benefit analysis of personal knowledge management (PKM) where benefit comes from finding task specific and useful knowledge items, and costs come from search efforts plus externalisation and restructuring efforts for the knowledge base. The authors highlight that the value of knowledge does not exist as such but can be defined as ‘increment in the expected utility resulting from an improved choice’. In theory, they claim that the benefit can be measured in money, saved time, improved quality or better choices using the formula G=B-C, where G=gain, B=benefit, and C=cost.

In summary, elements of these studies were applied to this research from the aspect of measuring learning through changed behaviours in the workplace. Kerin, while focusing on a stepped approach to incident analysis, emphasises the importance of control measures and performance indicators for measuring the effectiveness of learning in the workplace. This has direct relevance to the research and has been embedded as a ‘monitor and review’ activity within the process component of the Framework to measure the uptake and effectiveness of operational changes that result from incident analyses.

The study conducted by Gartmeier et al. is focused on cost/benefit analysis from the perspectives of effort-cost and damage to personal reputation. Personal reputation is beyond the scope of this research however the positive effort-cost benefit associated with reflection has been applied to this research. Reflection, as a learning and prevention strategy, has been included in the

research narrative as an integral part of learning from all incidents at the individual level within the QPS. Volkel and Abecker's research is focused on cost benefit analysis and personal knowledge management that is mostly out of scope of this research.

However, they assert that the benefit of knowledge management can be measured through improved quality and better choices. These aspects are applicable to this research as improved quality aligns with the QPS philosophy of continuous improvement while the aspect of better choices is fundamental to organisational learning and preventing future critical police incidents.

Critical Incident analysis

Vachon and LeBlanc (2011) report on a collaborative study that was designed to compare the analysis of current critical incidents with that of past critical incidents to establish if the former is more conducive to reflective learning and change than the latter. The study involved eight occupational therapists who participated in 12 reflective learning meetings over 15 months. Three key phenomena were found to distinguish between learning from past and current incidents; attitudinal disposition; legitimacy of purpose; and opportunities for experimentation. Analysis of current events was determined to improve motivation to self-evaluate, increased self-efficacy and helped transfer learning into action and progressively self-regulate. The results of the research suggest that analysis of current or recent events promotes self-reflection and improves learning transfer. The study further identified that creating conditions conducive to its use will be a challenge for organisations.

Basu et al. (2009) report on the prevalence of feedback following adverse critical incident reporting in the medical fraternity and the effect on the learning environment. Of 50 trial responses 45 (90%) had experienced an adverse critical incident, of which 44 had submitted an incident notification. Feedback had only been provided to 23 of those involved. The results of the study demonstrated an awareness of incident reporting however indicated a sub-optimal rate of feedback following reporting, having a negative effect on

encouraging participation and the flow-on of impeding a conducive learning environment.

Davies and Dawson (2015) examine the crowd violence in relation to the 2011 Stanley Cup riot from a policing perspective to identify lessons that may be learnt from the incident. 460 police officers participated in the study which focused on key themes including crowd disorder, police response, police deployment and capacity, planning and preparation, training, safety, causes and future prevention. The study found that generally, police felt ill-prepared and unsafe during the riot. While the study provides important insights into the possible causes of riots and difficulties faced by police officers during these events, the value of the data is in the fact it is derived from frontline officers who actually experienced the riot.

Smith et al. (2013) conducted research to evaluate common themes leading or contributing to clinical incidents in a UK teaching hospital. A total of 65 root-cause analyses were reviewed with 202 factors and 69 categories being identified. 14 commonly occurring causes were evident and further examined as key-root or contributory causes. This resulted in an organisational safety checklist for use by clinicians to monitor practice. The study demonstrates that incident investigation can highlight common factors that can be addressed at a local level.

In summary, the study conducted by Vachon and LeBlanc focused on reflective learning which is a key aspect of this research and linked to levels of learning within the QPS. Their findings further support this research through the assertion that analysis of current or recent events promotes self-reflection and improves the transfer of learning into action. Basu et al. examined the relationship between feedback and the willingness of individuals to report incidents. While outside the scope of this research, the findings highlighted lack of feedback as an impediment to a conducive learning environment. As this research is focused on organisational learning this aspect has relevance to the Framework and has been embedded within the activity of ‘reporting and

communication', nominated as mechanisms to transfer information vertically and horizontally across the QPS.

The Davies and Dawson study was designed to identify lessons from the 2011 Stanley Cup riot. While very specific in nature and beyond the scope of this study, a key finding highlighted the value in data derived from frontline officers who experienced the incident. This aspect has been included in the 'data collection' activity of the Framework, nominating officers closest to the source of an incident as a rich source of information. Further, the study reinforces the nexus between officer competencies, officer actions and organisational enablers and supports the QPS capability matrix developed as a coding classification tool as part of this research.

Renshaw and Ottewill's research focused on identifying common themes leading to clinical incidents. While generally out of scope, a key finding did emphasise that incident analysis can address issues at a local level. This is applicable to this research and reinforces the narrative concerning levels of learning within the QPS, particularly at the individual and tactical levels.

Barriers to learning

Incident reporting for the purpose of critical incident analysis, while common practice in other high-risk industries such as aviation and medicine, appears to be embryonic within police organisations. Many business oversight and review mechanisms exist within the QPS, including supervisory workflows, however systemic organisational barriers to learning are common. These include: fear of punitive action and sanctions to individuals; risk exposure to the organisation; conflict with other investigations; limited understanding of how and why incidents are analysed; and ill-defined pathways and mechanisms to affect change and transfer knowledge. Mahajan (2010) identified similar barriers in the Anaesthesia and Intensive Care industry, reporting that fear of punitive action, reputation of a poor safety culture, and lack of understanding of what should be reported and how it would be analysed were primary issues.

Further barriers may also stem from the learning culture within an organisation. Gray and Williams (2011) highlight that the culture surrounding learning from incidents is often precipitated by adopting defence routines designed to pretend that learning has occurred when in fact there has been a cover-up of mistakes in order to avoid embarrassment or threat. Grieves, McMillan and Wilding (2006, p.97) furthers this assertion claiming that such routine defences become normalised over time and lead to a range of unintended consequences including the repetition of mistakes.

Summary

Throughout the literature review the following key concepts were investigated in depth: decision bias, critical incident analysis, cause and effect, organisational culture, knowledge ignorance, knowledge creation, knowledge transfer, public support, procedural justice, influences on perception, measuring learning, continuous improvement and public satisfaction. The outcome of the literature review has provided the following:

- theoretical insight into the common barriers and enablers to organisational learning;
- theoretical insight into the common benefits and value of organisational learning;
- informed the need to define ‘critical police incident’ in the context of the QPS;
- informed the direction for the subsequent quantitative analysis of QPS data;
- informed the direction for the subsequent qualitative analysis of QPS case studies; and
- informed the construct of the conceptual analysis framework.

CHAPTER 3. METHODOLOGY

3.1 Overview

Creswell (2014) suggests three integral components in an approach to research, namely philosophy, design, and methods. With reference to *Figure 3: Methodology Map*, this research will adopt a pragmatist paradigm with the research question being central and the design and methods reflecting those most likely to result in an understanding of the problem (Mackenzie & Knipe 2006, p.197).

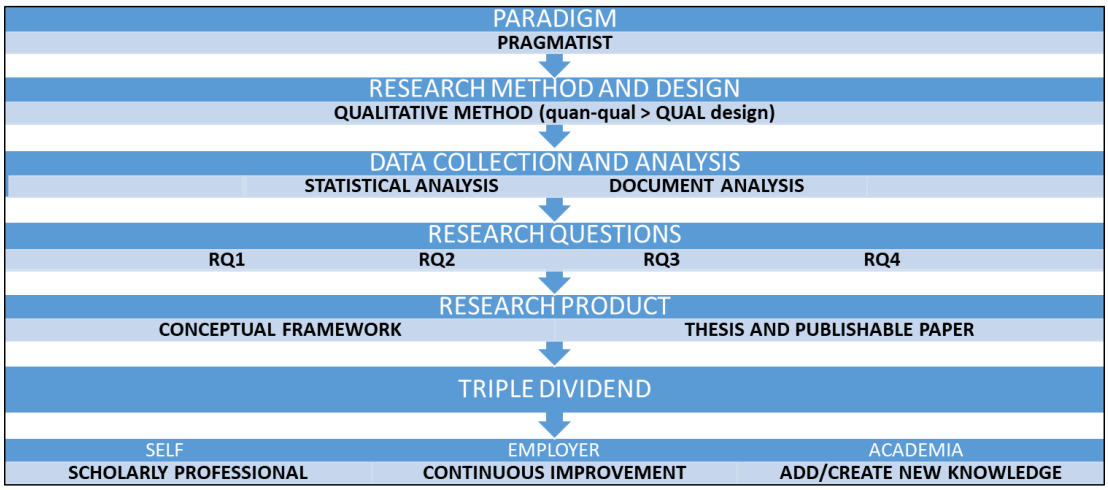

Figure 3: Methodology Map

The research design was largely qualitative, with two separate phases, a minor quantitative and qualitative phase, leading to a major qualitative phase (which can be notated as: quan-qual > QUAL). The explanation of qualitative methods offered by Creswell (2014) supports this design in that it relies primarily on text and image data. The first phase comprised the quantitative analysis of data sourced from QPS databases, which then led to a more substantial second phase consisting of the qualitative analysis of six QPS critical police incident case studies and five coronial case studies.

The research was emergent in design, with the analysis being inductive and deductive as categories and themes emerged, and the researcher acting as the key instrument (Creswell 2013, p.175). The strategy of enquiry adopted a case study approach focused on the police environment and culminated in the development of the Framework consisting of three components being: principles; enablers; and process. Firstly, data was arranged by type and

perused to determined credibility and worth. Quantitative analysis was conducted using data from two QPS databases to provide historical insight and highlight the extent of critical police incidents within the QPS. Detailed document analysis was then conducted of six QPS case studies with the information coded against operational descriptors to inform the typology of a critical police incident. This resulted in the identification of numerous parent themes and subordinate themes. The resultant themes were then used to develop the coding classification tools as an integral part of the process component of the Framework.

The researcher applied his intimate knowledge of QPS systems and processes and applied the outcomes from the literature review to further develop and narrate all three components of the Framework. Further thematic analysis was conducted of the five coronial case studies. The case studies were dissected to determine if similar themes could be identified to those of the QPS case studies. These themes were then applied to the Framework to determine its efficacy in analysing critical police incidents and arriving at similar recommendations to the Queensland State Coroner (the Coroner), expeditiously. Reliability was achieved by documenting each step of the research and maintaining consistency in the coding while validity was ensured by triangulating complementary data sources to build robust themes.

3.2 Data Sources

Data for this research was derived from internal and external sources. The primary internal data source included six QPS Internal Investigation Group (IIG) case files. The IIG is a business unit within the QPS Ethical Standards Command (ESC) and is responsible for investigating all officer involved shooting incidents, particularly those resulting in the death of a person. Such deaths are defined as 'reportable deaths' in the Queensland *Coroners Act 2003* (ss. 8(3)(g) and 8(3)(h)) with the IIG conducting the investigation on behalf of the Coroner. The secondary internal data source included the ESC Research Analysis and Intelligence Section (RAIS) report. As part of their function and obligation with records management and national reporting the

ESC maintains a data set of all ‘discharge of firearms’ incidents that occur. Additional internal data was obtained from the Queensland Police Records and Information Management Exchange (QPRIME). This data source was used to cross reference details obtained from the primary and secondary sources, that is, where further details were needed, or clarification of data was necessary. QPRIME data was also used to conduct statistical analysis of QPS firearm UOF reports for the 2014-2018 period.

The primary external data source included five Queensland State Coroner’s inquest findings, relating to five reportable deaths involving the use of lethal force by QPS officers. This data set was dissected with the outcomes of the inquests themed and used to validate the efficacy of the Framework.

3.3 Data Collection

Yin (2016) claims that data collection is crucial to any reliable investigation. To enhance the validity and credibility of this research multiple types of data were collected including documents, audio-visual materials, and database records. The various types of data were collected from the following areas:

Database records

- QPRIME data base: as the central repository for QPS activities QPRIME can provide statistical data of all UOF reports relating to the use of police firearms, including number of shooting incidents per year and per police district. Analysis of these statistical data provides a geographical and historical overview of QPS shooting incidents plus indicates current and future trends. This provides evidence of the extent of shooting incidents and informs the potential for organisational learning and value in developing a conceptual framework for analysis. QPRIME also provides text data relating to all police related incidents in the form of officer reports and associated workflow activities. This data was used in combination with the RAIS report and Audio-Visual material to triangulate and validate the content of the QPS case studies.

- RAIS report: this exists as an excel database and is a chronological record of all police shooting incidents dating back to 2000. The data base captures numerical counts plus free text information across 18 descriptors including date, location, weapon type, alcohol/drugs, injury type, and officer details. This data is useful in identifying commonalities across shooting incidents and was used, in part, to develop the coding matrix for the analysis of QPS case studies. The data was also used in combination with QPRIME records and Audio-Visual material to triangulate and validate the content of the QPS case studies.

Documents

- QPS case studies: these exist as electronic reports and evidentiary documents including witness statements; field notes; running logs; police communication transcripts; forensic statements; ballistic reports; and pathology reports. This was the primary data source used to identify themes across the six shooting incidents with the outcome used to develop the coding and diagnostic tools for the process component of the Framework.
- Inquest reports from the Office of the State Coroner, Queensland: these exist as official reports and are available as open-source documents from the Office of the State Coroner, Queensland website. Five individual reports were selected based on the similarities across all incidents, that is: the subject person was male; the subject person was suffering from mental illness; police used their service pistol resulting in the death of the subject person; and all five incidents occurred within a short time period, between August 2013 and November 2014 (three occurred in one week, 18 to 24 November 2014). Further, due to these similarities the QLD State Coroner delivered a combined report identifying issues *common to all deaths* and *issues not common to all deaths*. The Coroner's report was dissected to identify if the issues could be aligned to the themes arising from the QPS case studies and therefore used to test the efficacy of the Framework.

Audio-Visual Material

- The QPS case studies contain various types of audio and visual material including: police communication audio recordings; body worn camera footage; CCTV footage; subject member records of interview; and subject member walk-through video statements. This data was used in combination with QPRIME records and RAIS report to triangulate and validate the content of the QPS case studies.

3.4 Data Analysis

Guest, MacQueen and Namey (2014) assert that the inclusion of quantitative analytic procedures such as statistical and mathematical analysis of numeric data and well defined, small units of text can significantly enhance qualitative research outcomes. Therefore, statistical analysis of text sourced from the RAIS database was conducted to identify the number and geographical location of incidents where QPS officers discharged their firearm at a person during the period 2000 to 2018.

Statistical analysis of all UOF reports from the QPRIME data base was also conducted and used as a baseline to compare the actual number of incidents where police officers discharged their firearms to the number of violent confrontations where the discharge of a firearm could potentially occur. The results of both analyses are narrated in section 4.2 *Historical Data* and supported by graphical displays. These avenues of enquiry were designed to inform the extent of critical police incidents and as a foundation to discuss the value QPS could derive from developing and applying a framework for the expeditious analysis of critical police incidents.

Thematic analysis was conducted on six QPS case studies, including related audio-visual material, representing critical police incidents that occurred between August 2018 and July 2019. These six incidents were selected for the following four reasons. First, it was considered the unique and disparate nature of the incidents would provide a broad perspective and therefore deeper insight into the operational police environment. This would ensure a richness

of data to build robust themes, inform the construct of the Framework, plus the supporting narrative. Second, this period demonstrates contemporary alignment between QPS culture, policy and practice and community expectations. Third, the QPS Senior Executive commissioned the trial of an Operational Review Unit that analysed each of these incidents as they occurred. This culminated in an official end-project report with supporting documents completed by this researcher in December 2019. Fourth, five of the incidents resulted in the death of the subject person and are therefore reportable deaths to the Coroner. This provides alignment to testing the efficacy of the Framework against the five coronial case studies.

Hsieh and Shannon (2005) advocate qualitative content analysis as a method for interpreting data through the systematic classification process of coding and identifying themes or patterns. While the conventional approach is inductive and exploratory in nature and allows categories to flow from the data, they suggest that a deductive and confirmatory approach may also be adopted. Referred to as directed content analysis, pre-determined categories are developed, and data is coded accordingly. While arguing this approach is prone to strong bias, they also contend the benefits include that existing theory can be supported and extended, while outcomes are more likely to reflect reality rather than being influenced by naïve perspectives.

Therefore, a thematic analysis approach using directed content analysis was applied to the QPS case studies and commenced by designing a coding matrix. The vertical axis of the matrix denoted the incident number while the horizontal axis denoted a series of operational descriptors. The intersecting field on each line was then populated with the relevant information from the case study content. The coding matrix utilised twenty-six pre-determined operational descriptors. This was a combination of descriptors adopted from the QPS RAIS database and the FBI National Use-of-Force Data Collection model which commenced in 2017 to improve the way the USA collects, analyses and uses crime statistics relative to law enforcement's UOF (Criminal Justice Information Services, U.S. Department of Justice, 2020). This approach ensured that the outcome of the content analysis was more likely to

reflect reality while extending existing theory and practice. The terminology used for numerous descriptors was modified to ensure relevance and was based on the researcher's personal police experience and knowledge.

The operational descriptors included: subject person's gender, age, ethnicity, injury/outcome, weapon, mental health; initial call for service; additional calls; environment; weather/visibility; date including day of week; time of incident; time on ground – initial contact to police action; supervisor present; police UOF; threat to police or others; initial distance between subject and police; distance between subject and police at time of action; nature of threat; subject person's actions; police actions; camera footage; verbal commands; officer years of service; was officer identifiable; officer physical injuries.

The coding process resulted in a focused description of the key operational elements of each case study. Once completed, numerous parent themes and subordinate themes were generated. The parent themes appeared as incident phases, that is, pre-incident, incident and post-incident and have direct alignment to the QPS purpose statement of 'together we prevent, disrupt, respond and investigate' (QPS 2020). The application of the parent themes to the Framework is in deriving lessons and therefore improvements for *prevention* and *disruption* from the pre-incident phase, improvements for *response* from the incident phase and improvements for *investigation* from the post-incident phase.

The parent themes have been applied to the diagnostic tools depicted at Appendix F: Pre-incident phase cause and effect concept diagram, Appendix G: Incident phase cause and effect concept diagram, and Appendix H: Post-incident phase cause and effect concept diagram. The subordinate themes were identified as elements of capability that have a direct impact on the policing response and were divided into internal and external elements. The internal elements include communications, practice, policy, training, equipment, organisation, management and response. The external elements include person of interest, environment, time and other agencies. The subordinate themes have been used to develop multiple coding and diagnostic

tools including the cause-and-effect concept diagrams mentioned above plus the QPS Capability Matrix depicted at Appendix B. The coding and diagnostic tools are integral to the analysis activities in the *process* phase of the Framework.

The outcome of the QPS case study analyses, in combination with the literature review, illuminated the complexity of the research problem. This subsequently informed the decision to develop a conceptual framework as an approach to not only assist with understanding the problem but in offering a solution as an incident analysis process that can be operationalised in the QPS environment. Bordage (2009) emphasises that conceptual frameworks can clarify the nature of a problem and guide the development of possible solutions, citing numerous key points including: they can arise from theories, models or practices; can identify important variables and their relationships; are dynamic and benefit from being challenged and altered as needed; and allow scholars to build on each other's work thus advancing fields of research.

Jabareen (2009) provides further insight and a step-by-step approach to developing a conceptual framework including mapping data sources, categorising selected data, identifying and naming concepts, categorising concepts, integrating concepts, synthesising and making it make sense, validating the framework, and rethinking the framework. Based on Jabareen's (2009) guidance, the starting point for developing the Framework was determining the inclusion and exclusion criteria. Inclusion criteria included peer reviewed studies that provided models, frameworks and concepts relating to: incident analysis of serious incidents; and organisational learning in police, government or large organisations. Exclusion criteria included: little or no focus on incident analysis; little or no focus on organisational learning; and non-peer reviewed.

Once this was established, the identified research material was reviewed, and a list of key concepts considered applicable to the research problem and the QPS environment was recorded. These included principles, policy, governance, executive commitment, levels of learning, root cause analysis,

evaluation and review, data collection and analysis, reflection, and knowledge transfer. The conceptual framework was then built with the key concepts categorised and arranged into three components, that is principles, enablers, and process. This also allowed for similar concepts to be identified and integrated resulting in a manageable number of relevant concepts. The next step involved two parts. The first was to synthesise the concepts within each component into a logical model that made sense, addressed the research problem and was relevant to the QPS environment. The second was to synthesise the three components into a framework that made sense, addressed the research problem and was relevant to the QPS environment. The final step was to test the efficacy of the Framework which is detailed below.

Further thematic analysis was conducted on the five coronial case study. The purpose of this analysis was twofold. First, to determine if similar themes could be identified to those arising from analysis of the QPS case studies and secondly, to dissect the Coroners case studies into various elements that could test the efficacy of the Framework. Guest, MacQueen and Namey (2014) suggest the key-word-in-context (KWIC) method as a useful technique to identify all occurrences of a particular word or phrase within the body of textual data which then assists in the discovery of themes.

Textual analysis, using the KWIC method, was undertaken on the five coronial case studies based on the key words; pre-incident; incident; and post-incident. The identification of similar parent themes became readily apparent as the formatting of the coronial inquest reports used the sub-headings of Pre-incident: Events leading up to the death and Incident: Events leading up to the shooting. The same sub-headings have been used in the case study narrative at Chapter 6: Case Study – Coronial Reports.

Document analysis of the combined inquest report focused on those issues the Coroner determined as *common to all deaths* and *not common to all deaths*. Again, text analysis of the Coroner's narrative was undertaken using the key-word-in-context (KWIC) method. The key words being investigated

reflected the subordinate themes identified during the QPS case study analysis. There was no limitation placed on the number of words before or after the key word to include in the analysis. Due to the Coroner's *issues* narrative being succinct it was determined that as many of the surrounding context words as necessary would be considered to achieve the analytic aim.

This analysis generated numerous and similar subordinate themes to those identified during the QPS case study analysis including, training; equipment; policy and legislation; processes and practice; communications; investigations; incident management; and other government agencies. These are documented in Chapter 6: Case Study – Coronial Reports and form the basis for the discussion in Chapter 7: Application and Discussion of Case Studies to the Framework.

3.5 Ethical Considerations

Ethics, values, and behaviours of right and wrong underpin societal norms and expectations and represent the fabric of an orderly existence (Daft 2007, p.374). Although this work-based project is determined low-risk and will not infringe any societal standards, the following ethical considerations have been addressed:

- The QPS Research Committee was established to ensure that decisions regarding the approval of QPS research requests are made in an appropriate and consistent manner. Access to QPS held data only commenced once the necessary approval was obtained from the QPS Research Committee.
- All research complied with the QPS 'Conditions of Approval to Conduct Research'.
- Access to QPS databases was limited to those approved by the QPS Research Committee. No other QPS sites were accessed.
- The research did not involve any surveys or interviews of subject participants. However, the QPS case studies contain personal details of individuals plus times, dates and locations. To protect the privacy of

individuals, all identifying and personal information plus references to culture, religion, gender or other sensitivities will remain confidential.

- Due to the exigent ethical and legal considerations of the QPS case studies, five are currently subject to ongoing coronial investigations and pending inquest, no detailed narrative will be provided in this thesis.
- The Coroner's case studies are open-source documents and already reside in the public domain with references to individuals, times, dates and locations. For this reason, similar references were used in the case study narrative in Chapter 6.
- The research was conducted from an objective standpoint. All findings, negative and positive, have been reported and offer a comprehensive perspective about the research topic.
- The integrity of the evidence, data, findings, and conclusions was maintained throughout the research. The final report is an accurate account of the information and is provided with the absence of suppression, falsity, or invention of fact.
- Recognition and credit have been given in all instances where work belongs to another person. This includes in-text referencing plus a corresponding inclusion in the reference list.
- The final submission has been written in a clear, straightforward and logical manner using appropriate language. It is presented without bias toward gender, sexual orientation, race or ethnicity, disability, age or any other sensitivity.
- Raw data and other research materials will be maintained for an acceptable period, should it be necessary to validate or defend any claim made in this submission.

3.6 Limitations

While there were comprehensive data available to inform this body of research, the data of interest were limited to police officer shootings that resulted in the death of an individual. The original intent was to obtain data relating to all deaths in police custody however it became apparent, that by definition provided by Gannoni and Bricknell (2019) in the 2016-17 National

Deaths in Custody Program (NDICP) report, the volume of data to be collected and interrogated would be insurmountable and add no more value than focusing on a smaller data set. It was determined that the research would focus on a subset of ‘deaths in police custody’, that is, shootings by police resulting in death. This subset was selected based on the immediate high-profile nature when police resort to the use of firearms and the effect this has on public perception and policing legitimacy.

The statistical data analyses were limited to critical police incidents for the period 2000 to 2018. This date range was imposed for four reasons. First, to obtain a sample size large enough to achieve the analysis objective of providing a historical overview. Second, the QPS introduced several additional UOF options into service at the commencement of this period including the semi-automatic Glock Pistol, the Taser and Oleoresin Capsicum (OC) Spray. Third, four shooting deaths occurred between 2003 and 2006 that led to the current QPS significant event review process and is the genesis for this body of research. Fourth, this period demonstrates contemporary alignment between theory and practice.

Further limitations were imposed on the number of QPS case studies that were examined in detail. Six case studies were selected for the period 2018 to 2019. This limitation was imposed to manage the sample size as suggested by Creswell (2014), while the unique and disparate nature of the incidents would provide a broad perspective and therefore deeper insight into the operational police environment. Five of the incidents resulted in the death of the subject person and are therefore reportable deaths to the Coroner. This provides alignment to testing the efficacy of the Framework against the five coronial case studies. The sixth incident resulted in the subject person being hospitalised which meets the definition of critical police incident. This case study was included to ensure the Framework would cater for all critical police incidents, not just those resulting in reportable deaths.

The data obtained from QPS databases for this research was limited to the content that was entered on the system at the time the initial entry was made.

Due to the individuality of officers, there is a large degree of subjectivity involved. Drop down menus in certain fields provide some consistency through standardised naming conventions and categories however individual perception of the incident and interpretation of the drop-down selections still play a part in creating less than accurate data. The strategy used to overcome this limitation includes cross referencing the various data types, and to a lesser degree interpretation based on the authors own policing experience.

CHAPTER 4. QUEENSLAND POLICE SERVICE CONTEXT

With reference to the research questions, it was considered important to:

a) define ‘critical police incident’;
b) consider historical QPS data to illuminate the extent of critical police incidents and therefore the potential benefits of adopting an analysis framework; and
c) investigate the construct of ‘lessons management’ to inform the benefits of organisational learning.

4.1 Definitions

4.1.1 Critical police incident

A critical incident is defined in the Queensland *Police Service Administration Act 1990* (s. 5A.2), as the following and for the purposes of this research will be taken to also mean critical police incident:

1. An incident in which it was necessary for an officer on duty to discharge a firearm in circumstances that caused or could have caused injury to a person; or
2. Death of a person in custody; or
3. Either of the following in which a person dies or because of which a person admitted
4. to hospital for treatment of injuries –
    i. A vehicle pursuit
    ii. A workplace incident at a police station or police establishment.

4.1.2 Death in police custody

The definition of a ‘death in police custody’ is based on a resolution of the Australasian Police Ministers’ Council in 1994 (Joudo 2006, p.4). Deaths in police custody are divided into two main categories:

Category 1

(a) Deaths in institutional settings (e.g. police stations or lockups, police vehicles, during transfer to or from such an institution, or in hospitals, following transfer from an institution).

(b) Other deaths in police operations where officers were in close contact with the deceased. This would include most raids and shootings by police. However, it would not include most sieges where a perimeter was established around a premise, but officers did not have such close contact with the person to be able to significantly influence or control the person's behaviour.

Category 2

Other deaths during custody-related police operations. This would cover situations where officers did not have such close contact with the person to be able to significantly influence or control the person's behaviour. It would include most sieges, as described above, and most cases where officers were attempting to detain a person—for example, a pursuit.

4.2 Historical Data

Figure 4: Discharge of Service Firearms at Persons below provides a yearly comparison of 'discharge of service firearms at persons' in Queensland from 1 January 2000 to 31 December 2018.

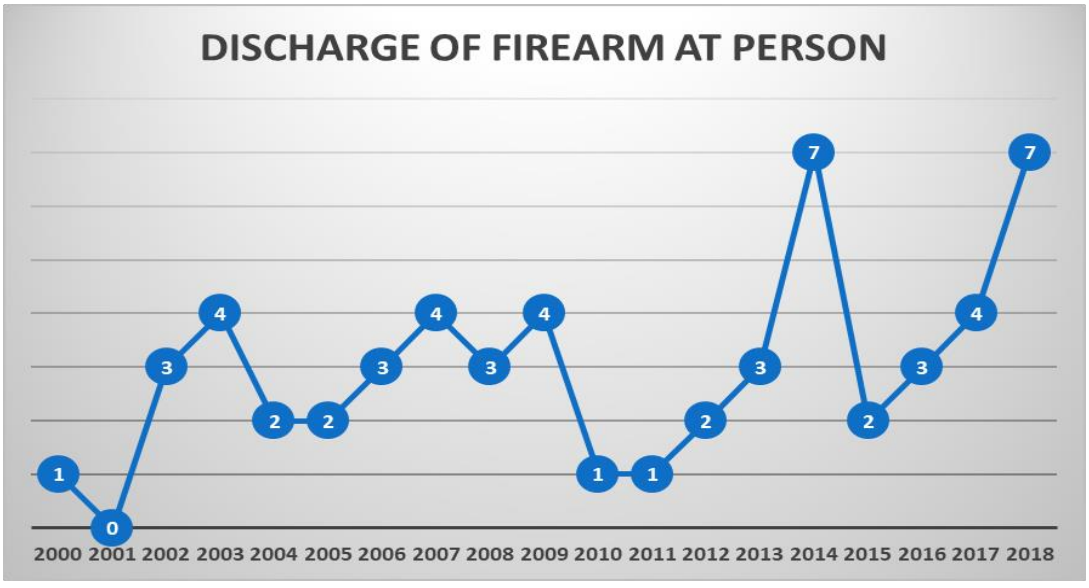

Figure 4: Discharge of Service Firearms at Persons

Data indicates a total of fifty-six incidents (N=56) over a nineteen-year period, an average of three incidents per year. A consistent number of incidents

occurred for the period 2000 to 2013 with a spike during 2014 (n=7) followed by a significant reduction during the following three years, 2015 (n=2), 2016 (n=3) and 2017 (n=4). Another spike can be seen during 2018 (n=7). There is no immediate information available to draw a nexus between the spike of 2014 and 2018. However, the trend of incidents during 2013-2014 triggered an internal UOF review and precipitated the Coroner to deliver a collective finding across five of the incidents which are the case studies being examined during this project. This historical overview of QPS shooting incidents provides evidence of the recurring nature of shooting incidents and informs the potential for organisational learning and value in developing a conceptual framework for analysis.

Figure 5 provides a breakdown of 'discharge of firearm at person' data by police district within Queensland.

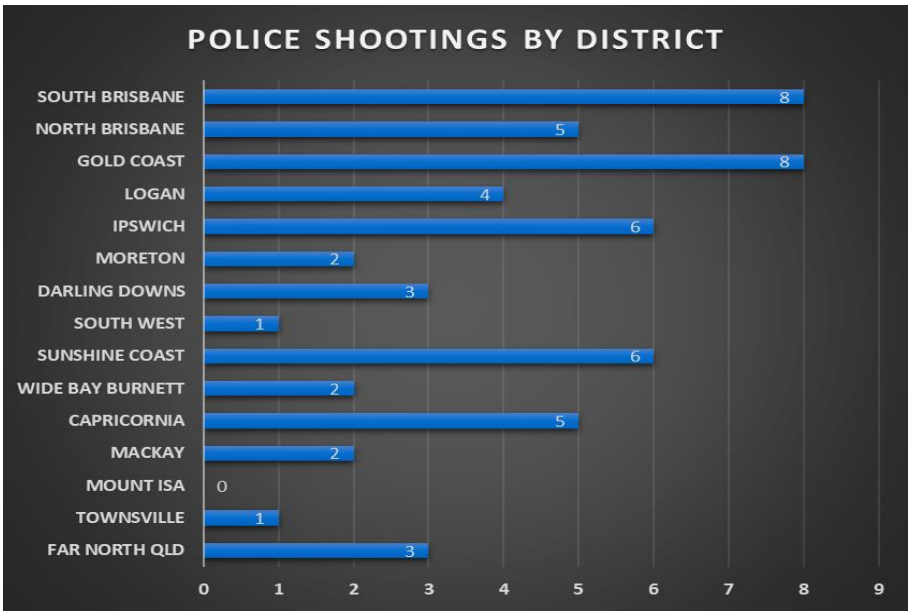

Figure 5: Police shootings by district

For the period 1 January 2000 to 31 December 2018 every district, excluding Mt Isa, was subject to one or more incidents where a QPS officer discharged their firearm at a person. By comparison, the more highly populated metropolitan areas recorded more incidents than the regional centres. This provides evidence that all areas of the QPS are susceptible to critical police incidents and as such the Framework has a whole-of-service benefit.

Table 1 is derived from QPRIME data and represents all UOF reports where an officer indicated the use of their firearm while responding to a violent confrontation for the period 1 January 2014 to 31 December 2018. The QPS defines use of a service firearm as: drawing the firearm out of the holster; pointing the firearm in the direction of a person without discharging; or discharging the firearm. As a result, UOF reporting categories include '*discharge'*, '*presentation'* and '*unholstered and not presented*'.

Table 1: Use of Force 'firearm' reports

Category	2014	2015	2016	2017	2018	Total
Discharge	7	3	0	3	15	28
Presentation	593	599	**598**	**703**	**741**	3234
Unholstered and not presented	50	68	115	92	140	465
Total	650	670	713	798	896	3727

For the nominated period there were a total of 3727 firearm UOF reports relating to violent confrontations, an average of 745 each year. For the same period there were twenty-eight occasions where the firearm was discharged, or an average of 5.6 each year. This indicates, on average, an additional 739 violent confrontations per year where there is potential for the discharge of a police firearm with the resultant classification of a critical police incident. The data also indicates both an upward trend in the volume of violent confrontations and the presentation of firearms since 2016. All aspects provide evidence of a possible future increase in critical police incidents and highlights the value for the QPS in having a mechanism to analyse these incidents, identify lessons and drive continuous improvement.

4.3 Lessons Management and organisational learning

Lessons management is described by Jackson (2016, p.20) as 'the management of a continuous learning cycle where capturing, analysing and implementing lessons, occurs without barriers and results in measurable behaviour modification'. The Australian Institute for Disaster Resilience (2013, p.85) describes lessons management as an overarching term that refers to 'collecting and analysing information and data to develop, implement, validate and share changes intended to improve efficiency and/or effectiveness'.

Filstad and Gottschalk (2010) further affirm that a consistent approach to the management of lessons is an essential ingredient of a learning organisation, underpinned by a strong culture where knowledge sharing is a continuous and ongoing activity. Therefore, organisations are seen to be learning when their structures, systems and cultures can evolve based on past experiences.

Integral to lessons management is the levels of learning within the organisational context. Saadat and Saadat (2016) suggest that organisational learning is a multifaceted process with synergies across all levels within an organisation. At the individual level learning is a combination of new information, interpretation of the information relative to the environment and adjusting behaviours. At the group level, individual learning is shared to achieve collective interpretation via effective communication. While organisational learning is the culmination of individual and group learning and cannot take place in their absence.

The development of a critical police incident analysis framework can be considered as a potent enabler of organisational learning within the QPS and will help achieve operational objectives, improve accountability and decision-making, and ultimately contribute to the success of the delivery of services to the community of Queensland. Integral to this success is the identification of the levels of learning within the QPS. Accordingly, *Appendix A: QPS Incident Analysis workflow*, was developed by the author and recognises four levels of learning including, the individual, the tactical, the operational and the strategic.

At the individual level, incident analysis creates an environment of self-reflection to continually measure performance and identify areas for personal improvement and development. It ensures that individual officers regularly monitor policy, procedures and emerging trends to maintain relevance in the delivery of policing services that meet community expectations and adjust their behaviour as required.

At the tactical level, incident analysis provides a mechanism for tactical observations to be collected, analysed, and lessons communicated

expeditiously within the team or group environment. Supervisors and managers play a key role in the identification of lessons from incidents at the tactical level. Observations of tactical importance are recorded and where authorised, changes to processes, practices and behaviours are made consistent with the Service's continuous improvement philosophy.

At the operational level, incident analysis assists local management teams to analyse and assess data for local trends and lessons that can be communicated to the local group. This ensures that efforts are aligned with local policies, practices and procedures and outcomes are based on intimate knowledge of the local police environment. Accordingly, observations, insights and lessons can be identified, and actions authorised at the district level, while providing a pathway to escalate local lessons that may have a state-wide application.

At the strategic level, incident analysis enables the identification of state-wide trends and lessons. Collective observations and insights from the individual, tactical and operational levels are leveraged for the purpose of; identifying areas for whole-of-service improvement in process and practice; communicating relevant information to the police community; and actioning changes concerning resources, training, policy and procedure.

CHAPTER 5. CONCEPTUAL FRAMEWORK

Stanton, Margaryan and Littlejohn (2017) affirm that the application of a systematic analysis framework will support the understanding of the complexity of multi-causality in incidents, the relationship between humans and the environment and in recognising that most causes of incidents are related to organisational and technical factors rather than 'human error'. By adopting the approach as described by Stanton, Margaryan and Littlejohn (2017) the QPS will ensure that lessons identified from the analysis of critical police incidents encompass the experiences and intuition of the workforce, the unique and challenging police environment plus QPS elements of capability. Further, it will ensure that lessons are effectively reported, managed, escalated and used as a basis for decision making at all levels to drive continuous improvement and organisational learning.

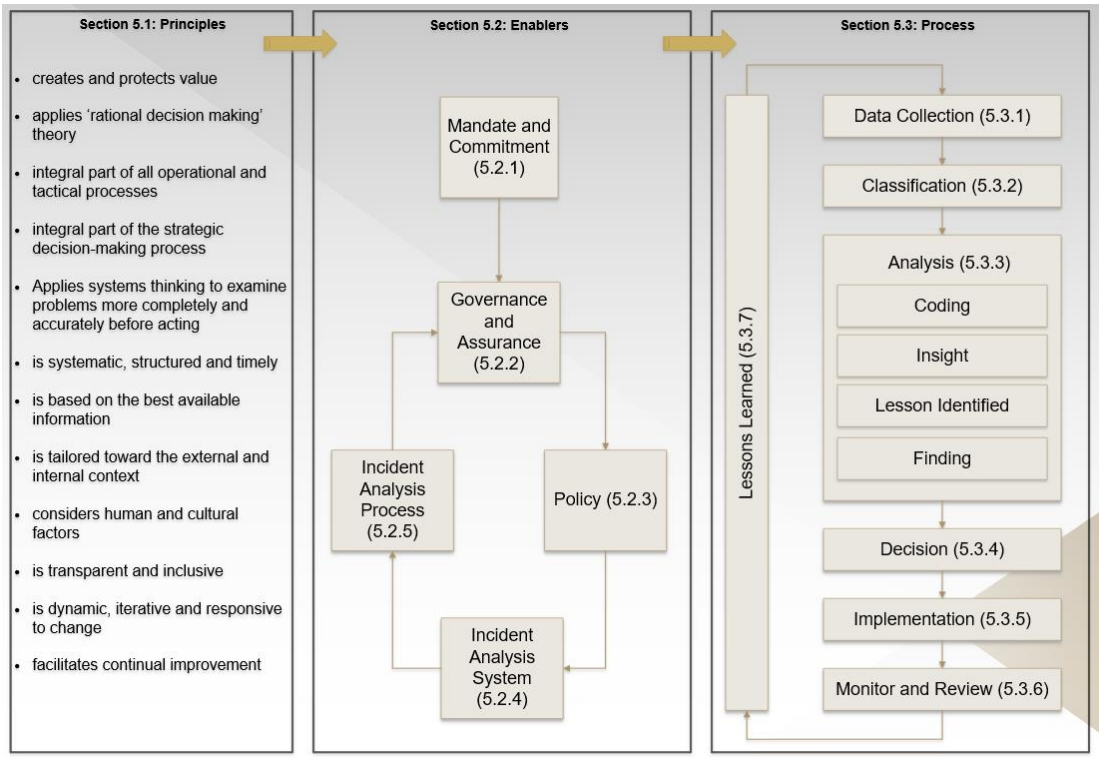

Figure 6: Conceptual Framework - relationship between Principles, Enablers and Process

The conceptual Framework, Figure 6, was developed by the author and forms the basis for learning from critical police incidents and consists of three major components including *principles*, *enablers*, and *process*. The *principles* provide guidance as to the reasons for conducting analyses and ensures effort remains focused. The *enablers* provide structure, ensuring analysis activities

remain aligned to the QPS' purpose, strategic objectives, values and government priorities. While the *process* provides an account of the activities necessary to conduct an analysis. Each component will be discussed in further detail in the following sections.

5.1 Conceptual Framework - Principles

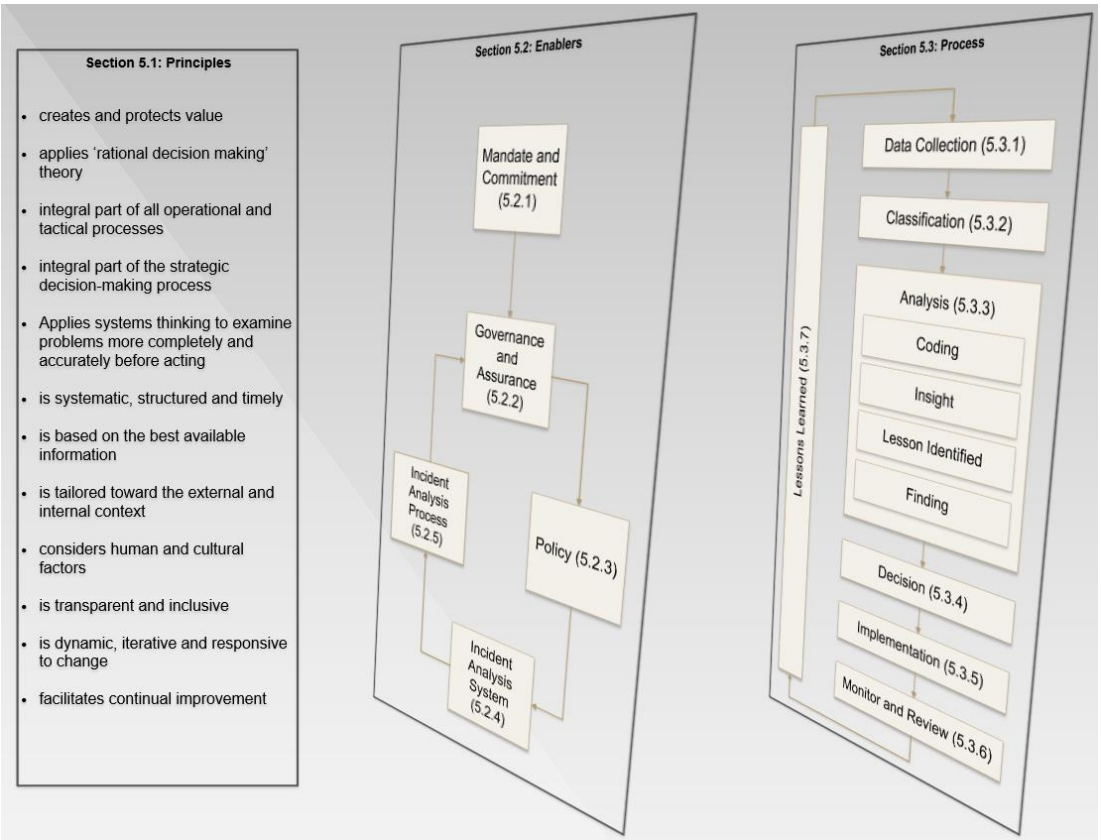

Figure 7: Conceptual Framework - Principles

In their study of knowledge management within 86 South African based organisations, Kruger and Johnson (2010) highlight the importance of a principles-based approach for organisational learning citing that organisations with established principles had a higher success rate. This is further supported by Breedt and Van Rensburg (2015) with the assertion that in order to understand knowledge management and the potential value-add to activities undertaken by an organization, certain principles focused toward employees as the learning community, the organisation as a source of tacit and explicit knowledge, and the creation of a shared culture of learning, must be supported. Accordingly, the statements listed below are considered specific to the QPS environment and have been adopted as the guiding principles, as depicted in Figure 7, for the development of the Framework:

- creates and protects value by identifying best practice;
- ensures optimal solutions based on holistic and rational decision making;
- is integrated with other governance processes, such as strategic planning, operational planning and executive management functions;
- is based on a strong organisational philosophy of continuous improvement, promoting a learning capable organisation and culture of self-reflection at all levels;
- is systematic, structured and timely such that lessons are identified from all activities and communicated expeditiously;
- promotes optimal solutions based on the best available information through robust analysis, research and use of internal and external networks;
- recognises internal and external influences and promotes the delivery of safe and effective services consistent with community expectations;
- is transparent, inclusive and considers human and cultural factors including; diverse perspectives, knowledge, skills, experiences, backgrounds and other sensitivities; and
- is dynamic, iterative and responsive to change creating multiple pathways for the identification of lessons and exchange of information.

An advantage of adopting a principles-based approach to the development and implementation of the Framework is the benefits and value that are likely to occur. This makes the Framework appealing to the senior executive when garnering support and improves marketability when engaging with end users. Numerous benefits have been identified as:

- Provides a mechanism to action operational shortfalls;
- Demonstrates a proactive approach to reviewing high profile issues;
- Provides state-wide linkage between strategic, operational and tactical imperatives;
- Demonstrates a commitment to the QPS philosophy of continuous improvement;
- Demonstrates growth and maturity as a learning organisation;
- Creates an evidence basis for higher level requests;

- Maintains public confidence in the delivery of policing services;
- Maintains conformance with best practice and standards;
- Enables data analysis to identify trends and support evidence-based change; and
- Enables publication of vital information to enhance officer safety and delivery of services.

5.2 Conceptual Framework - Enablers

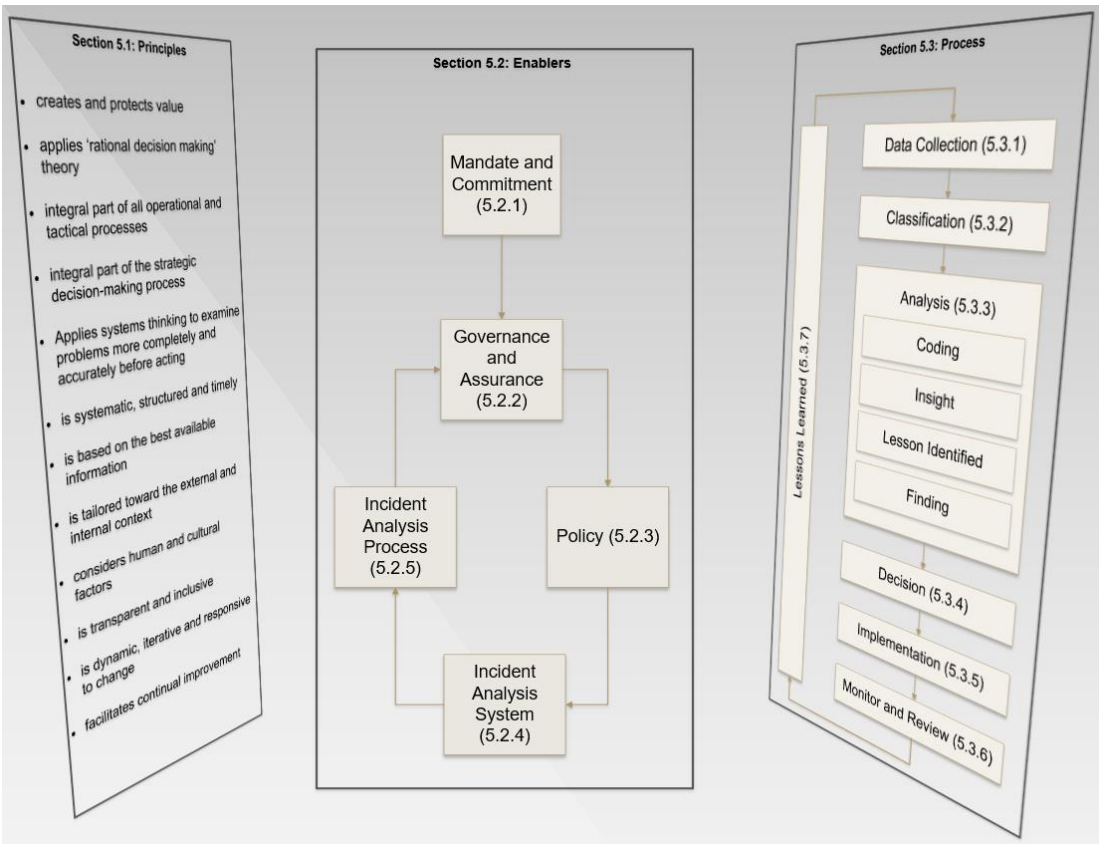

Figure 8: Conceptual Framework - Enablers

The *enablers* of the Framework, Figure 8, are underpinned by the QPS' philosophy of continuous improvement and assist in managing incident analyses effectively and within the context of business unit and organisational objectives. The 'enablers' provide the foundational arrangements that will embed critical police incident analysis throughout the QPS at all levels and include; setting the mandate and commitment; governance and assurance; policy; incident analysis system; and the incident analysis process. Each of the five elements are described in the following section.

5.2.1 Mandate and commitment

The mandate and commitment from senior management is a critical success factor to organisational learning and cannot be over emphasised. Pinedo-Cuenca, Olalla and Setijono (2012) offer a framework of critical success factors for organisational change, citing top management commitment and leadership as a key component. Whilst supporting the Commissioner of Police in the efficient and proper administration, management and functioning of the QPS in accordance with law, the QPS senior management also foster and promote continuous improvement underpinned by the QPS purpose statement of 'together we prevent, disrupt, respond and investigate' (QPS 2020). Their mandate and commitment to learning from critical police incidents can be demonstrated through the following:

- A defined and endorsed incident analysis policy;
- Alignment of QPS culture with a philosophy of continuous improvement;
- Alignment of incident analysis objectives with QPS objectives, strategies and government priorities;
- Assigning accountabilities and responsibilities at appropriate levels;
- Providing the necessary resources for effective incident analysis at all levels;
- Communicating the benefits of incident analysis to all stakeholders; and
- Ensuring the incident analysis framework is continually reviewed and remains relevant.

5.2.2 Governance and assurance

Graham, Amos and Plumptre (2003) suggest that governance is a mechanism by which organisations make important decisions and determine who is involved in the decision-making process. They offer five principles of good governance including *legitimacy and voice* through equal and constructive participation by all, *direction* with a focus on strategic visioning, *performance* aligned with responsiveness to all stakeholders and efficiencies that produce results, *accountability* to all stakeholders underpinned by transparency of process, and *fairness* through equal opportunity and consideration of the human rights of individuals. The Framework has its limitations and will not

make decisions for the QPS however it will help inform decisions. Each critical police incident is subject to different variables and any subsequent analysis is being conducted with the benefit of hindsight and in a hypothetical environment.

It is impossible to identify all contributing and causal factors of an incident and the resultant findings and recommendations will not be all-inclusive. Subsequently, the findings from an analysis do not guarantee that a similar incident will not occur in the future. It is therefore essential that a robust governance and assurance structure is established to create an authorising environment with membership reflective of a decision-making body that has the appropriate level of accountability, authority and competence for managing analysis outcomes on behalf of the QPS.

Governance

This component aligns with the existing QPS governance framework (QPS 2019) enabling outcomes from critical police incident analyses to better inform decision-making at the strategic level. Figure 9, developed by the author, illustrates the proposed governance arrangement depicting the relationship between; the Officer in Charge/Manager at the tactical level; the District/Group incident analysis plus the District/Group Business Management meetings at the operational level; the Operational Review Unit (ORU) as the central coordinating body; the Critical Incident Review Committee (CIRC) as the authorising environment at the strategic level; and the executive sponsor.

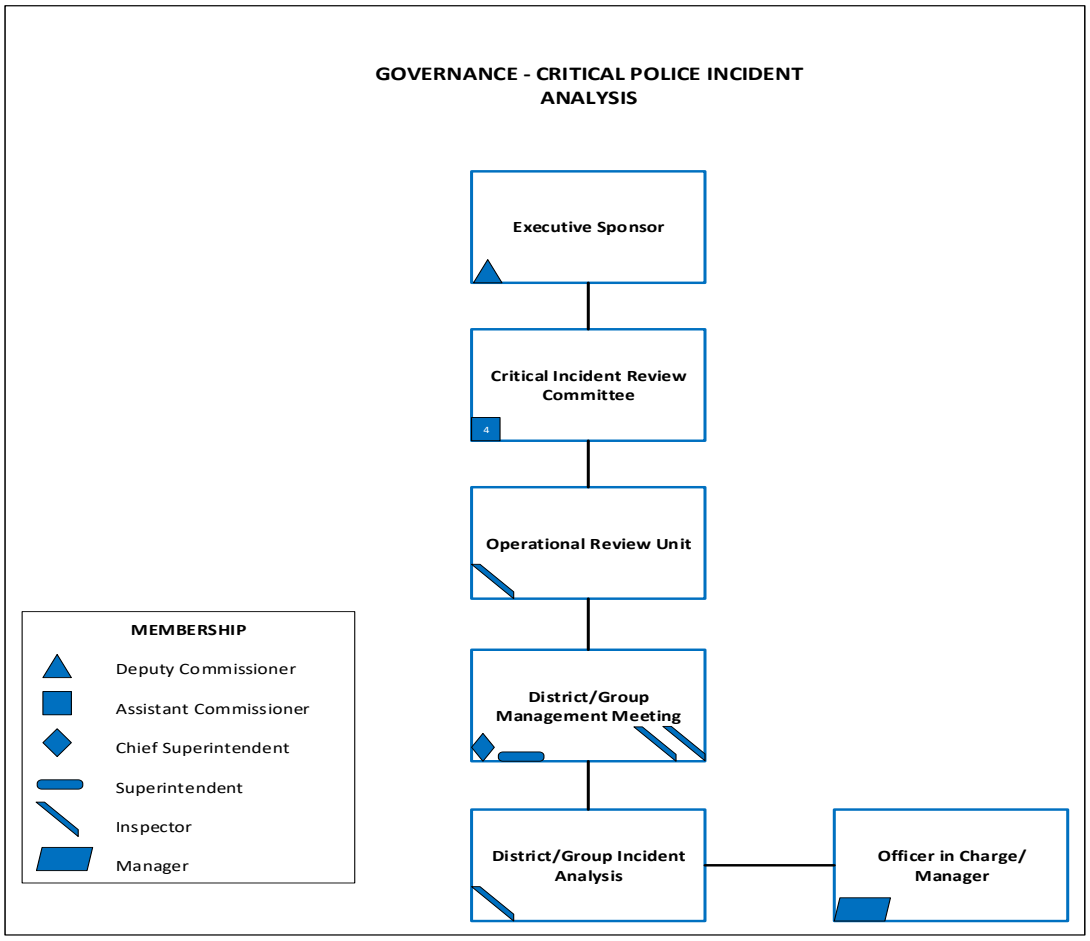

Figure 9: Governance - Critical Police Incident Analysis

The proposed governance model illustrates the reporting channel and flow of information, from the Officer in Charge/Manager level through the various levels of the organisation to the CIRC. The Officer in Charge/Manager, at the tactical level, commences the process by providing information concerning a critical police incident to the District/Group Incident analysis team. This includes any immediate lessons that have been identified at the individual and tactical levels. The District/Group Incident analysis team conducts a local analysis and submits their findings and recommendations to the District/Group Management Meeting. This includes any lessons that have been identified at the individual, tactical and operational levels. The District/Group Management Meeting is the authorising environment at the operational level. The Chair of the meeting makes decisions and offers guidance for incident learning relative to their business areas purpose, objectives and operational requirements.

Key learnings and state-wide issues are then reported to the Operational Review Unit. The Operational Review Unit is responsible for conducting a

detailed analysis on behalf of the QPS with review findings and recommendations of a strategic nature forwarded to the CIRC for consideration. The ORU also performs the role of secretariat for the CIRC. The CIRC, as the nominated authorising environment for strategic decision-making, considers the ORU findings and recommendations and endorses necessary changes consistent with the Service's continual improvement philosophy. The governance model also nominates an executive sponsor at Deputy Commissioner level. This is included as an escalation pathway for executive decision-making in the event the CIRC cannot reach a consensus on an issue.

Table 2 below reinforces the above narrative and highlights the relationship between the proposed governance model and the four levels of organisational learning. The individual, tactical, operational and strategic levels of learning are depicted in column one under the heading 'level of learning'. In column two, under the heading 'characteristic', are the corresponding characteristics including who is responsible for learning at each level. For example: at the individual level, individuals are responsible; at the tactical level, Officers in Charge of business units are responsible; at the operational level, Officers in Charge of Districts or Groups are responsible; and at the strategic level, the CIRC is responsible.

Table 2: Characteristics of the four levels of organisational learning

Level of Learning	Characteristics
Strategic level	• Owned and managed by the Critical Incident Review Committee. • Consistent with the QPS' continual improvement philosophy. • Linked to the QPS Strategic plan and Operational plan and identified through analysis of critical police incidents and significant events. • Promotes good practice and a culture of continual improvement on a Service-wide basis.

Operational level	• Owned by Officers in Charge of Districts/Groups, with responsibility for overseeing and providing direction for incident learning relative to their business area's purpose, objectives and operations.
	• Likely to result from the analysis of a critical police incident or significant events.
	• Recorded in the minutes of Management meetings and stored in an appropriate format in the approved QPS record-keeping system.
	• Officers in Charge of Districts/Groups consider lessons from three perspectives:
	  ◦ Strategic level lessons – those lessons that relate to state-wide policy & procedure, processes and practice.
	  ◦ Operational level lessons – those lessons that relate to local processes, systems and resources required to achieve local service delivery objectives.
	  ◦ Tactical level lessons – those circumstances that impact on the ability of individuals and business units achieving service delivery objectives.
	• Lessons that affect other agencies, i.e. cross-agency activities are analysed with findings and recommendations actioned accordingly.

Tactical level	• Owned by Officers in Charge of business units with responsibility for overseeing and providing direction for lessons management in relation to their unit's purpose, objectives and functions. • Will have a material impact on a business unit's ability to achieve its business objectives. • May result from observations during or following any incident/event at the business unit level. • Some tactical level observations may have consequences that affect operational and strategic level lessons. These should be actioned at the tactical level however linkages to any operational and strategic lessons should be recorded and escalated accordingly.
Individual level	• Owned by individual members. • Includes actions and decisions that affect the individual's ability to achieve business objectives. • Typically managed by individuals through self-reflection and other self-directed research/review activities. • May be identified prior to, during or after an incident/activity.

Assurance

Assurance is integral to the Framework as it provides feedback to management that quality processes and controls are in place to effectively monitor and manage the system. Manghani (2011) asserts that quality management is essential to achieving organisational objectives with assurance mechanisms providing a level of confidence that processes and activities are conducted in a manner that comply with organisational standards and requirements. Table 3 below outlines the three levels of QPS assurance relative to the management of critical police incident analyses with responsibilities tethered to the roles highlighted in the previously mentioned governance structure at Figure 9:

Table 3: Three levels of assurance

LEVEL 1 Day to day management of incident learning and control activities (e.g. OIC/Supervisors, District/Group management team)	LEVEL 2 Oversight of critical police incident analysis activities. Separate from those responsible for day to day activities (e.g. Operational Review Unit)	LEVEL 3 Independent and objective business oversight (e.g. Critical Incident Review Committee)
Responsible for identifying lessons and implementing local changes. Communicate state-wide findings to the ORU.	Responsible for the design and implementation of the whole-of-service incident analysis policy and framework	Responsible for independent oversight
Manage district level incident analysis in accordance with QPS policy.	Monitor adherence to policy and framework	Provide independent advice and decision making on behalf of the Commissioner of Police
Promote the QPS' continuous improvement philosophy . Promote a learning capable organisation and culture of self-reflection.	Monitor and aggregate District level reporting. Monitor trends, themes and patterns across the organisation.	Provide assurance to the Executive Leadership Team and the QPS Board of Management relating to the effectiveness of the incident analysis framework.

Level 1 – Divisional and District management teams

Divisional and district level management teams are responsible for conducting immediate after-action reviews and analysis activities to ensure early identification of lessons at the local level. Georges, Romme and Witteloostuijin (1999) support this approach claiming that in complex human systems the best solution to a problem will most likely come from the collective wisdom of those closest to the source. Accordingly, local issues are managed at the district level while findings or issues with broader organisational implications are escalated via the ORU for consideration by the CIRC.

Divisional and district level management teams are also responsible for promoting the QPS' continuous improvement philosophy and a culture of self-reflection. The effective execution of these responsibilities provides the QPS with the assurance that critical police incidents are examined at the local level and offer opportunities for learning at the individual, tactical, operational and strategic level.

Level 2 – Operational Review Unit

The ORU analyses critical police incidents from a whole-of-service perspective. The unit's primary role is to analyse critical police incidents to:

- identify areas for improvement in processes and practices that will enhance the police response to future situations;

- communicate relevant information concerning the incident and the subsequent findings to all QPS members to enhance their response to future incidents; and
- provide recommendations to the CIRC concerning resources, training, policy, procedure and legislation implications.

This will provide opportunities for learning and continuous improvement at the individual, work unit, district and whole-of-service level.

Level 3 – Critical Incident Review Committee

The CIRC is a decision-making body with an ongoing responsibility to monitor the findings of the ORU to:

(i) identify trends and causal factors in relation to critical police incidents;

(iii) guide the ORU in the implementation of measures to address identified trends and causal factors;

(iv) guide the ORU in the implementation of any recommendations to policy, procedures or practices; and

(v) promote good practice and a culture of continuous improvement on a Service-wide basis.

The CIRC, where appropriate, acts in response to findings and recommendations, consistent with the Service's continual improvement philosophy and in accordance with its workplace health and safety obligations to employees and members of the public.

5.2.3 Incident analysis policy

Policy offers guidance and instruction for operational police to ensure their duties are discharged lawfully, ethically and efficiently (QPS 2020) and is a key component of the governance structure and the Framework. The policy details the overall intention and direction, set by the QPS executive in relation to learning from incidents, emphasising the Service's continual improvement philosophy. The key objective of the policy is to foster a culture of self-reflection and ensure all critical police incidents are subject to learning at the individual, tactical, operational and strategic level.

5.2.4 Incident analysis system

This component of the Framework describes the system that will support the QPS as a learning capable organisation. Marquardt (2011, p.247) defines a learning organisation as 'a company that learns effectively and collectively and continually transforms itself for better management and use of knowledge; empowers people within and outside the organisation to learn as they work; and utilises technology to maximise learning and production'. Wang and Ahmed (2003) emphasise that organisational learning is the collectivity of individual learning within an organisation and it is important to provide staff with the relevant training, development and problem-solving capability. In support of these assertions the incident analysis system encompasses: a learning culture; tools and templates; reporting and communication structure; and an evaluation and review process.

Culture

All managers within the QPS have an important role in promoting a culture of self-reflection and learning. The Queensland Government's values (2018) of customers first, ideas into action, unleashing potential, being courageous and empowering people positively encourage a learning culture where understanding, managing and improving the delivery of services to the community of Queensland is part of everyday decision-making. The QPS values of courage, fairness and pride further reinforce this in support of achieving the QPS vision of 'delivering safe and secure communities through collaboration, innovation and best practice' (QPS 2019).

Serrat (2017) affirms the following elements as contributing to a positive learning culture whereby employees share, acquire and create knowledge and skills:

- Leadership – as the transformative link between individual and organisational learning with an accent on purpose and reason for learning, support, training and development*;*
- Communication – facilitating the lateral transfer of information and promoting the benefits of a learning capable organisation at all levels

through open communication, developing a shared vision, rewarding initiatives, responding to challenge, and recognising teamwork; and

- Team development – with the team environment nurtured as a learning community and a powerful vehicle for reflection, dialogue and sharing of experiences and knowledge.

Leveraging these three elements, QPS managers have an opportunity to integrate incident learning with other business processes so the task of self-reflection and learning is perceived as a component of day-to-day activities and becomes normalised QPS culture.

Tools and templates

A key component of an effective incident analysis system is providing employees with the tools and templates to effectively analyse incidents. The following tools and templates have been developed by the author to assist in the classification, analysis, implementation, monitoring and review of lessons:

- QPS incident analysis workflow, Appendix A;
- QPS Organisational capability matrix, Appendix B; and
- Cause and effect concept diagram, Appendix C.

Reporting and communication

Reporting and communication are an important way of transferring information vertically and horizontally across the organisation so that trends and issues are escalated to the appropriate authorising environment and changes are implemented and managed effectively. Therefore, reporting of operational observations, findings and recommendations has been closely aligned with the governance model depicted at Figure 9: Governance – Critical Police Incident Analysis.

The QPS has multiple layers of reporting:

1. Strategic level (whole of service) – Findings, recommendations and significant issues with a state-wide impact, are reported via the ORU to the CIRC as required. These may result from the analysis of critical police

incidents by the ORU or escalated from the district following an after action-review or local analysis.

2. Operational level (District/Group) – Findings, recommendations and significant issues are reported to the District officer as the local authorising environment. Recommendations are considered from three perspectives: strategic level lessons; operational level lessons; and tactical lessons. Approved recommendations are actioned locally and/or escalated via the ORU for consideration by the CIRC at the strategic level.
3. Tactical level (business/work unit) - Findings, recommendations and significant issues may result from observations during or following any critical police incident. Some tactical level observations may have consequences that affect operational and strategic level lessons. These should be actioned at the tactical level however linkages to any operational and strategic lessons should be recorded and escalated accordingly.
4. Individual level (individual members) - Lessons at the individual level are typically managed by individuals through self-reflection, visioning and other self-directed research activities. This may occur prior to, during or after an incident. These should be actioned by the individual however linkages to any tactical, operational and/or strategic lessons should be recorded and escalated accordingly.

Evaluation and review

As the policing environment is constantly evolving, there is a need to regularly review all components of the Framework to maintain efficacy as a learning system and alignment with the QPS strategic objectives, Queensland Government priorities and community expectations. Garvin, Edmondson and Gino (2008) reinforce three essential building blocks for organisational learning that readily align to the components of the Framework. That is; a supportive learning environment; concrete learning processes; and leadership that reinforces learning. They further affirm that organisations must have a robust method to self-evaluate each building block area for sustainable and long-term learning. Critical police incident analysis goes beyond the examination of

incidents and extends to evaluating and reviewing the QPS' learning capability and governance arrangements. As the central coordinating body, it is incumbent on the ORU to periodically evaluate and review the integrity of the Framework.

5.3 Conceptual Framework - Process

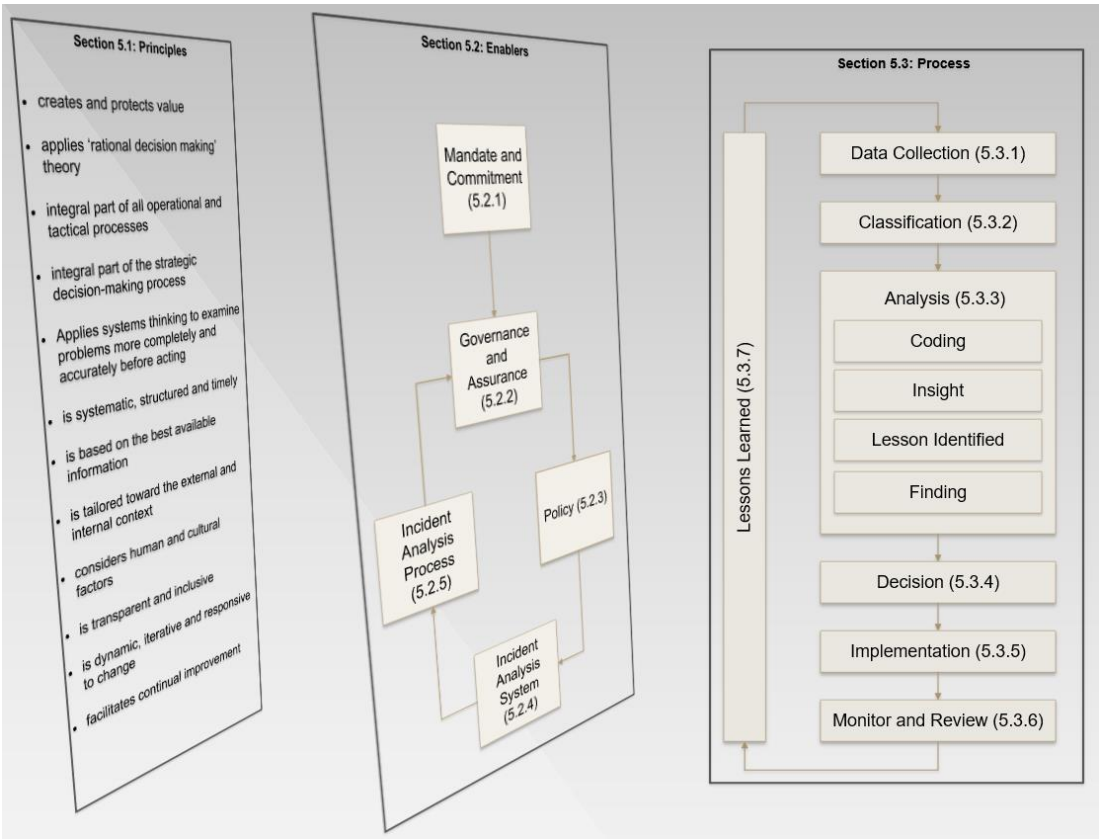

Figure 10: Conceptual Framework - Process

Cooke and Rohleder (2006) suggest that an incident learning system consists of several fundamental components including identification, reporting, investigation, identifying causality, making recommendations and communicating learnings. They further emphasise that for the system to be effective all components must be in place. The success of the model proposed by Cooke and Rohleder is determined largely by decision making, with the result from each activity informing the outcome of the next activity. Guo (2020) suggested a similar model and common approach to decision making for health care managers using six vital steps: define the problem; establish the criteria; consider all alternatives; identify the best alternative; develop and implement an action plan; and evaluate and monitor the solution. Termed the

‘DECIDE model’ Guo claims it as an effective method to make high quality decisions which leads to more effective outcomes in the work-place.

The *process,* depicted in Figure 10, is an integral part of the Framework and is the mechanism used to collect and analyse data, identify lessons, disseminate information and implement changes intended to improve the delivery of policing services. Informed by the literature review sub-topic of incident learning, the process component of the Framework has been developed using the following five-step approach: data collection; classification; analysis; implementation; and monitoring and review.

5.3.1 Data Collection

The first step in the *process* is the collection of data. This activity looks at identifying sources and gathering data that will be used during the *analysis* activity. Creswell (2014) emphasizes that successful data analysis is underpinned by the collection of multiple sources of data that are sufficient enough to investigate the underlying phenomenon and most likely to result in understanding the problem. He further states the most common sources of evaluative information fall into four categories namely interviews, observations, documents and audio-visual data. The QPS has access to multiple sources of information across all three categories. Some of the more common and widely available relating to critical police incidents include:

- individual and supervisor observations;
- management oversight activities and workflow reviews;
- statements, activity logs, action plans;
- body worn camera and CCTV footage;
- police communication audio recordings;
- post-event debrief outcomes; and
- internal investigation case file documents.

For an organisation to optimise the benefits from incident analyses, it is important that data collection is focused and planned. Reinach and Viale (2006), articulate the importance of a focused collection plan in their

application of a human factors analysis and collection system in the railroad industry. They claim that a focused approach to data collection enhances the investigation process by ensuring that all levels of an organisation, as a system, are considered and examined. Most critical police incidents however are unique, due to the infinite variables in the policing environment. Consequently, the analysis process must be flexible enough to capture the challenging circumstances that contributed to the outcome.

Creswell (2014) provides additional insight and benefits to adopting a flexible approach to collection planning. Flexibility allows the plan to be amended as information is gathered and provides for the application of inductive and deductive reasoning as information informs alternative avenues of enquiry and analysis. A collection plan should therefore be focused and guide the collection of data that are likely to result in the identification of contributing and causal factors, and ultimately lessons learned, but also remain flexible to accommodate the uniqueness of critical police incidents. Further, the collection plan should be detailed enough commensurate with the complexity of the incident, which in turn will determine if the plan is a simple list of relevant topics and questions or a more detailed plan examining broader organisational elements.

5.3.2 Classification

In this context, classification means the act or process of dividing things into groups according to their type. Within the QPS context, incidents are classified as either routine, a significant event, or a critical police incident. The classification hierarchy assists with identifying the owning business unit responsible for conducting the analysis, the depth of analysis to be undertaken, additional data sources and contributing organisational elements.

A *routine* incident may include any activity undertaken by a member of the QPS. An activity is considered routine if it is unremarkable in nature, policy compliant and achieved an effective and efficient service delivery outcome. Routine incidents are analysed by individuals to identify areas for self or team improvement with a focus on imitating good practice. Similarly, routine

incidents are analysed at the tactical level by supervisors and managers to promote continuous improvement in frontline service delivery.

A *significant event* includes an incident involving a member of the Service which by reason of its nature, seriousness, or frequency of occurrence, warrants further consideration. Significant events are analysed at the district level with findings and recommendations referred to the District Officer, as the appropriate authorising officer, for action. This promotes learning and continuous improvement at the operational level. This does not preclude individuals from reflecting on their involvement in a significant event for self and team improvement.

Critical police incidents are defined in the *Police Service Administration Act 1990* (Qld) (s.5A.2) and examined for the purpose of identifying state-wide trends, good practice, and organisational improvement. Findings and recommendations are referred to the CIRC at the strategic level for consideration and action. This does not preclude individuals from reflecting on their involvement in a critical police incident for self and team improvement nor does it preclude the district from conducting a local analysis.

Appendix D was developed by the author and depicts the District/Group level decision process map that aids with the initial classification of an incident and informs the relevant analysis pathway. Once the data is collected (3.1) the incident is then classified (3.2) as either routine, a significant event or a critical police incident. All activities, including routine matters, are subject to individual reflection with the intended outcome shown as ‘changed behaviour’. Significant events result in District/Group analysis, while critical police incidents are subject to a District/Group operational debrief and then referred for District/Group analysis and also to the ORU for detailed analysis.

5.3.3 Analysis

This step involves the analysis of collected data to identify trends or themes that may lead to findings and learning opportunities, which in turn informs possible solutions and implementation strategies for continuous improvement.

This section outlines a basic approach to conducting analyses underpinned by flexibility and scalability depending on the complexity of the incident being analysed and the variety and volume of data. Margetts et al. (2013) provide insight into conducting an effective and objective analysis for incident learning and claim that as a minimum, analyses should include the following:

- data coding;
- theming similar observations to form or support an insight;
- analysing insights to identify the root cause;
- developing recommendations; and
- authorising outcomes and recommendations.

Margetts et al. (2013) further claim that analyses must be conducted in a systematic and thorough manner so that all irrelevant facts are excluded, and the focus remains on organisational needs. The following subsections provide further detail about the steps in this approach.

Coding

Stroh (2000) suggest that systems thinking is an effective approach to understanding the interdependencies between different units within an organisation and their corresponding activities. He further argues it provides a foundation for systemic assessment and problem solving, translating complex data into simple explanations of what happened and why, plus legitimising and integrating multiple perspectives. Trobvich (2014) supports this and provides contemporary context, contending that systems thinking enables a holistic examination of an organisation's people, processes and structure ensuring that changes are made relative to internal and external drivers and demands.

Leveraging this approach, the Framework uses a coding tool based on the various QPS systems that enable the delivery of policing services, plus the elements of capability residing within those systems and the individual work units that own those capabilities. This systems-centred approach to coding, based on organisational elements, or themes, facilitates consistency and ensures that the analysis remains an objective examination with a focus on

organisational learning rather than a person-centred subjective investigation. To assist in this process the QPS Capability Matrix, Appendix B, has been developed by the author as a thematic analysis tool using the following coding classifications:

- Organisational capabilities or lines of operation, represented on the vertical axis, are used to describe the activities undertaken across all functional areas of the QPS; and
- Elements of capability or themes, represented on the horizontal axis, have been identified as the specific building blocks or enablers of organisational capabilities.

Insights and root cause

Once the data are encoded against the relevant themes, similar observations can be arranged to form 'insights', which mean a clear, deep, and sometimes sudden understanding of a complicated problem or situation.

Insights are further analysed to determine causal and contributing factors and inform the identification of lessons and corrective action. *Appendix C: Cause and effect concept diagram* has been developed by the author as a diagnostic tool, adopting a fishbone analysis diagram and process as described by Phillips and Simmonds (2013). For informative purposes, all QPS elements of capability are recorded and represented as a green or black box. A green box indicates the QPS has control of this element and therefore the ability to modify or change it. A black box indicates an element the QPS has no, or limited, control of and therefore no ability to modify or change. When conducting an analysis a separate cause and effect diagram is generated for each of the pre-incident, incident and post-incident phases with the applicable QPS elements, or themes recorded. The associated processes, sub-processes and sub-sub-processes can also be represented. Akin to reductionism theory, presented by Manuele (2019), this approach breaks the various and complicated QPS systems into their component parts and enhances the ability to identify causal and contributing factors and therefore the reasons why the system malfunctioned.

Finding

In the context of critical police incident analysis and the Framework, a finding can be described as the conclusion reached after conducting an appreciation of the identified insights and causal factors relevant to the operational police environment. This activity can be further described as a logical process of reasoning by which the analyst considers all elements of the internal and external police environment and arrives at an outcome that can inform subsequent recommendations or an appropriate course of action (QPS 2011).

Once a finding is identified, options for addressing the situation can be documented and presented as recommendations for consideration in the appropriate authorising environment. This may include strategies to address deficiencies or gaps in organisational elements of capability and ensure that good practice is imitated in the future.

5.3.4 Decision – authorising environment

Findings and recommendations are documented and referred to the relevant authorising environment for consideration as outlined in the reporting and communication structure at section *5.2.4 Incident analysis system*. For district level analyses the authorising environment is the district management meeting with the District Officer as the authorising officer. For detailed critical police incident analyses conducted by the ORU, the authorising environment is the CIRC (refer also to *Figure 9: Governance – Critical Police Incident Analysis*).

5.3.5 Implementation

The implementation of key learnings is a critical element of the Framework. Margaryan, Littlejohn and Stanton (2017) highlight that for learning to occur, lessons identified through incident analysis must be circulated throughout the organisation. They further contend that transfer of knowledge can occur via multiple modes of communication including publications, circulars, policy and emails with learning more likely to occur when incident outcomes are aligned to professional practice. By leveraging the emotional connection of workers to their environment and daily tasks, this affective learning strategy coupled with

reflective activities, can help employees assimilate the new knowledge with what they already know and do.

The QPS has multiple knowledge transfer strategies that can be utilised to communicate lessons and other analysis outcomes such as changes to policy and procedures, including:

- formal/informal discussions facilitated by supervisors;
- tabletop or field style discussion exercises;
- general police notifications;
- curriculum development and/or changes;
- formal internal reporting;
- bulletin articles;
- multimedia and on-line learning products;
- official social media platforms including QPS Workplace; and
- webinars using Workplace or MS Teams.

5.3.6 Monitoring and review

Introducing an operational change into the QPS can be significantly enhanced by developing a strategy that monitors and reviews the uptake and effectiveness of the change. Argote and Fahrenkopf (2016) emphasise that measuring knowledge transfer is challenging, however not insurmountable. They offer several suggestions that may be applicable to the QPS context and broader policing environment. The use of surveys can be used as an informal and non-invasive method to gauge the acceptance and uptake of a new process or practice or the fitness-for-purpose of new equipment.

Using archival data may assist in comparing improved routines and practices with historical practices, a trend toward the improved practices indicating knowledge transfer has occurred. Additionally, data mining social media, blogs and forums using key words or phrases linked to the change/lesson may provide evidence that knowledge transfer has occurred or is occurring.

5.3.7 Lessons Learned

While monitoring and reviewing the operational environment may illuminate the effectiveness of the intended change, it is important to highlight that transfer of knowledge itself does not guarantee success. Weber, Aha and Becerra-Fernandez (2001, p.4) suggest that the goal of incident learning is to provide lessons that benefit employees who may encounter similar situations in the future. Margetts et al. (2013) provides greater clarity with the assertion that a lesson is only learned when there is an identified and measurable change in behaviour and the lesson becomes normalised operational practice or procedure. This infers that change is not automatic and for the change in behaviour to occur and become normalised there are organisational factors in play.

Rahman, Moonesar and Hossain (2018) supports this claim, suggesting that organisational culture has the greatest influence on knowledge sharing and learning lessons with an emphasis on trust, communication, and leadership as key elements. It is contended that this phase of the Framework closes the loop on the incident learning process and is therefore critical to the overall success of learning from critical police incident analyses. Further, this validates the requirement for the *principles* and *enablers* components of the Framework as drivers to promote a culture of continuous improvement and learning underpinned by effective communication and leadership.

5.4 Practical application of the conceptual framework

The purpose of the Framework is to analyse critical police incidents, identify areas for improvement, provide recommendations and communicate relevant information to the police community expeditiously. In practice, the ORU is the QPS area responsible for conducting critical police incident analyses and operates under the delegated authority of the Commissioner of Police and extends across all functional areas of the QPS.

Appendix E: Critical Police Incident analysis lifecycle, developed by the author and approved by the QPS Critical Incident Review Subcommittee, provides an

overview and chronology of activities undertaken during the analysis process. On each occasion that a 'critical police incident' occurs, the ORU will be notified and conducts an analysis on behalf of the QPS. Activities are conducted and progressed in line with the lifecycle schedule, commencing from the time the critical police incident occurs and, in the case of a reportable death, concluding once the CIRC have considered and actioned the coronial recommendations. The lifecycle assists all stakeholders in the management of the analysis process and ensures that accountability, responsibility and purpose of each activity is maintained.

Integral to the lifecycle is the incident analysis process, as developed by the author and approved by the QPS Critical Incident Review Committee. It is not intended for the ORU to apportion blame to individuals and critical police incident analysis is not part of the disciplinary process. Critical police incident analyses are conducted independently of any criminal, coronial, discipline or workplace health and safety investigation(s) which are being conducted in relation to an incident. However, the findings of such investigations will be used by the ORU as a source of information throughout the analysis activities depicted in *Figure 11: Process - overview*.

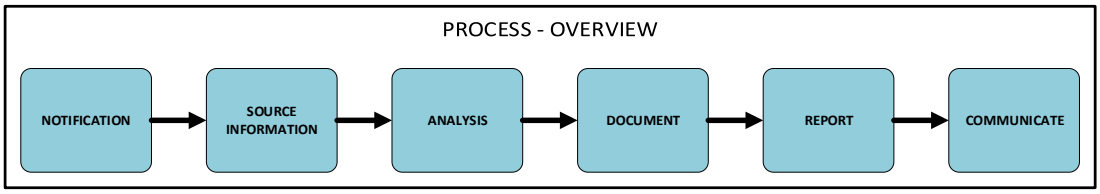

Figure 11: Process overview

On occasion, the Commissioner of Police, may also initiate an analysis of any 'significant event matter'. In each instance all findings and associated documentation from any criminal, coronial, discipline or workplace health and safety investigation(s) will be sourced by the ORU and form the basis of the analysis.

Throughout the course of an analysis, the ORU will identify and maintain regular contact with a liaison officer from the respective region(s), command(s) or division(s). Where an incident involves a specialist area (e.g. Special Emergency Response Team), the specialist area will be invited to provide a

subject matter expert (SME) to assist with the analysis. The ORU will conduct the analysis in such a manner that opportunities for learning and improvements may be identified at the individual, tactical, operational and whole-of-Service levels. The Officer in Charge (OIC) of the ORU is responsible for ensuring that a record of all analyses, including findings and recommendations are documented in accordance with the QPS information management policy.

Specific findings and recommendations shall be reported to the CIRC for consideration. Where appropriate, the analysis should also make recommendations to acknowledge and have good work and professional practice formally recognised. The OIC of the ORU is responsible for ensuring that all recommendations approved by the CIRC are conveyed to the relevant stakeholders and lessons learned are communicated to the broader police community.

The following section describes the various activities that are undertaken during a critical police incident analysis. The *process – overview* diagram at each subheading provides a reference to where the activity occurs within the overall process. The associated process map depicts the chronology of sub-activities that are numbered to indicate the sequence in which they are completed. The process maps are also colour coded with green denoting sub-activities that are performed by the Reviewing Officer and blue denoting a location and/or sub-activities performed by others:

5.4.1 Notification

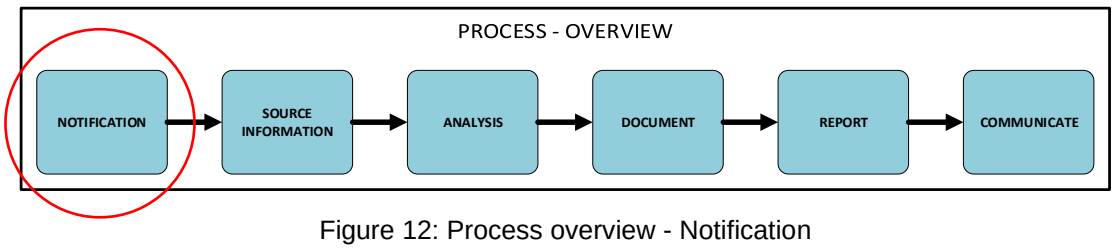

Figure 12: Process overview - Notification

On each occasion that a 'critical police incident' occurs, the ORU will conduct an analysis on behalf of the QPS. Notification that a critical police incident has occurred will generally be received via self-identification e.g. monitoring the Significant Event Messages, or via the office of the Commissioner or the

Deputy Commissioner by email, telephone or in person. Upon notification the ORU will commence the analysis process by liaising with investigative units to determine when data can be provided to the ORU.

On occasion, the Commissioner of Police, may also initiate an analysis of any 'significant event matter'. Notification may be received via the office of the Commissioner or the Deputy Commissioner by email, telephone or in person. Upon notification the ORU will commence the analysis process by gathering data from relevant sources. The following diagram provides a description of the sub-activities required when notification is received.

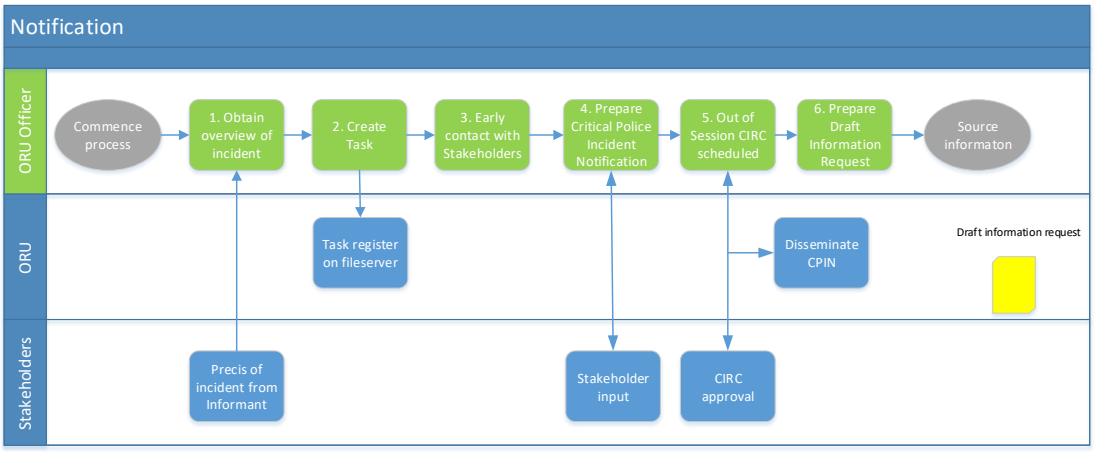

Figure 13: Process map - Notification

When notification of an incident is received the ORU officer obtains sufficient detail from the informant to determine the extent of the incident and possible stakeholders (1). A task is then created in the ORU task register (2). Stakeholders and key points of contact are identified and the ORU makes early contact to obtain preliminary information relating to the incident (3). A Critical Police Incident Notification (CPIN) is generated and socialised with key stakeholders until all parties are comfortable with the content (4). An out of session CIRC meeting is scheduled and the CPIN submitted for approval. Once approved the CPIN is disseminated state-wide to all police officers (5). A draft Information Request document is then prepared to source additional detailed information (6).

5.4.2 Source Information

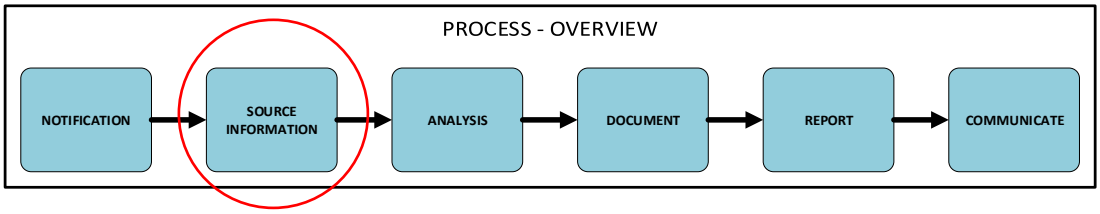

Figure 14: Process overview - Source information

The purpose of this activity is to identify all information sources that may provide a detailed account of the incident, including; background and chronology of events; person/s of interest; police units involved; relevant processes; relevant policies; police response; equipment; environmental factors; management and decision making. The following diagram provides a description of the sub-activities required to source the necessary information:

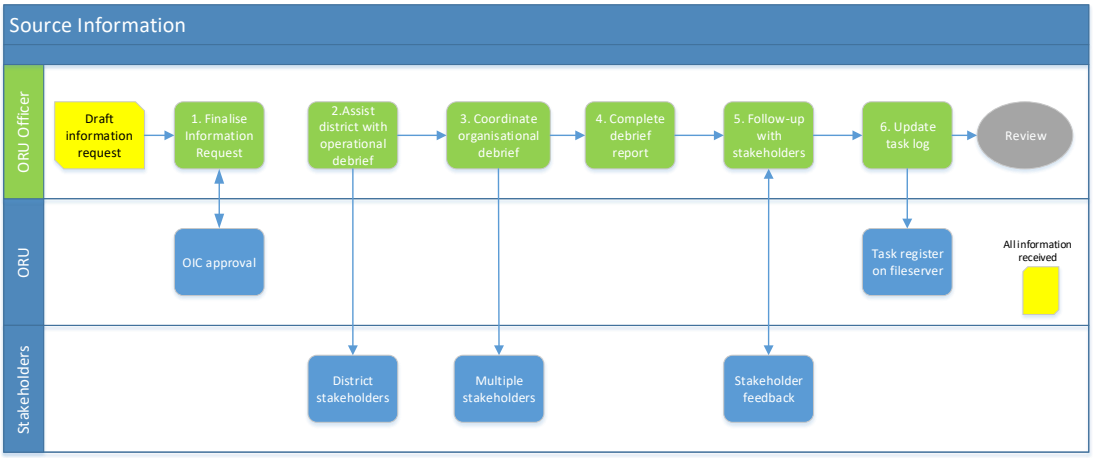

Figure 15: Process map - Source information

The ORU officer finalises the draft Information Request and submits it to the Officer in Charge for approval and dissemination (1). The district in which the incident occurred is supported and offered guidance in conducting a structured operational debrief to identify local lessons plus state-wide issues (2). The ORU officer identifies the likely stakeholder source for each category of information, mapped against the QPS Capability Matrix, prepares an invite list and schedules a structured organisational debrief (3). Key insights from the organisational debrief are themed and documented in a debrief report (4). The debrief report is socialised with key stakeholders to validate the content, including any issues and possible mitigation strategies (5). The task log is updated to track the most recent action. All requested information is received and filed electronically in a working folder (6).

5.4.3 Analysis

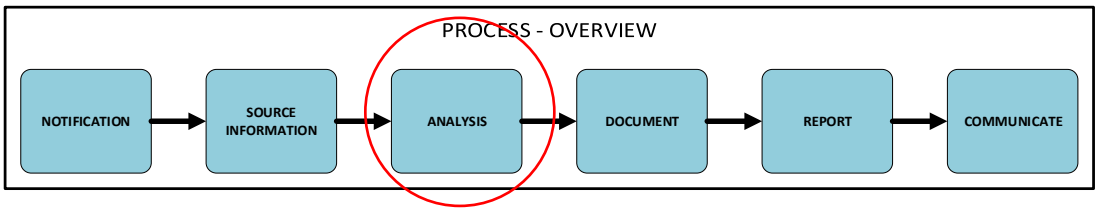

Figure 16: Process overview - Analysis

The purpose of this activity is to critically analyse all information relating to the incident to determine causal and contributing factors and where appropriate, possible intervention points to inform recommendations that will enhance future responses in similar situations. The following diagram provides a description of the sub-activities required to conduct the analysis:

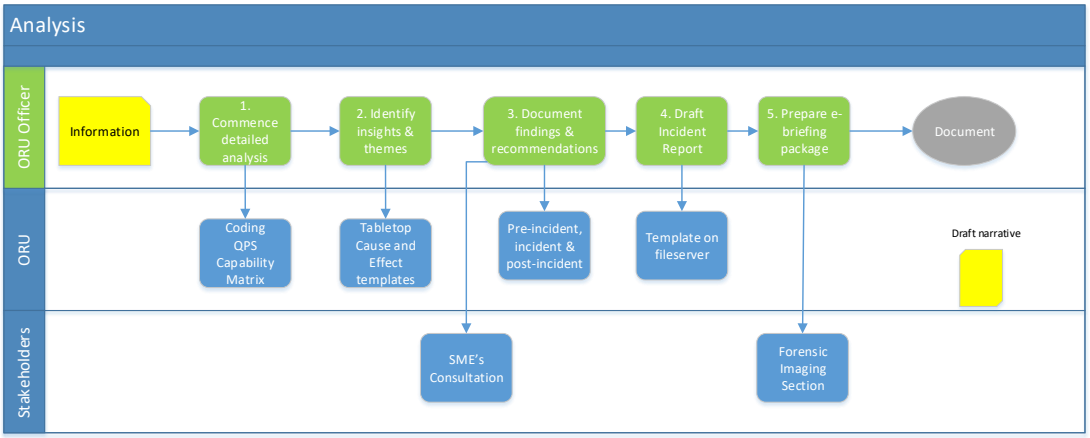

Figure 17: Process map – Analysis

A detailed tabletop analysis is commenced using the QPS capability matrix as a coding classification tool to identify themes relevant to the incident. This also ensures the focus is on organisational enablers and the analysis remains objective (1). Similar observations are then arranged to form insights. The cause and effect diagnostic tool is then used to map the relevant themes against the pre-incident, incident and post-incident phases of the incident to develop further insights into contributing and causal factors. (2). If required, consultation occurs with subject matter experts. The analysis findings and recommendations are then documented (3). A draft incident analysis report is prepared in obeyance with the formatting and styling approved by the CIRC (4). Forensic Imaging Section is engaged to prepare an e-briefing package to assist with presenting the analysis outcomes to the CIRC (5).

5.4.4 Document

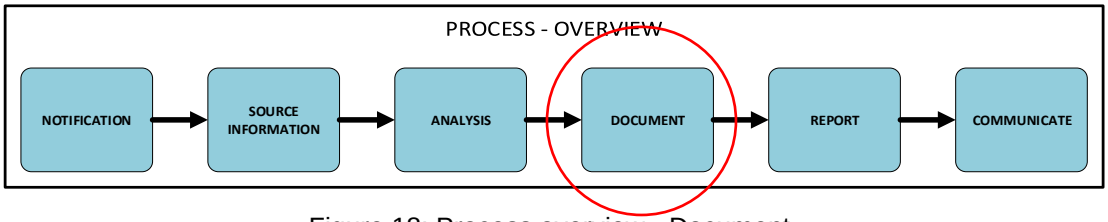

Figure 18: Process overview - Document

The purpose of this activity is to maintain accurate records and demonstrate rigour concerning the conduct of the analysis. This documentation will be used as the basis for any subsequent findings and recommendations submitted to the CIRC for consideration. The following diagram provides a description of the sub-activities required to document the analysis:

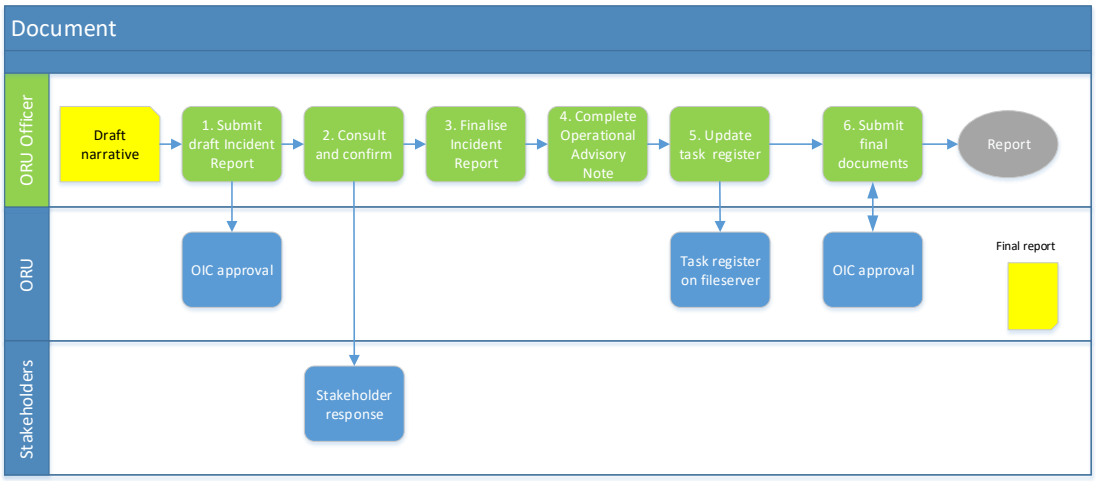

Figure 19: Process map - Document

The ORU officer submits the draft Incident Analysis Report to the OIC for review (1). Amendments are made and the draft report is forwarded to key stakeholders for consideration and response (2). The final report, including stakeholder responses, is then completed (3). An Operational Advisory Note (OAN), containing the key operational lessons identified from the analysis, is prepared (4). The task register is updated to reflect all actions undertaken (5). The completed report and OAN are submitted to the OIC for final approval (6).

5.4.5 Report

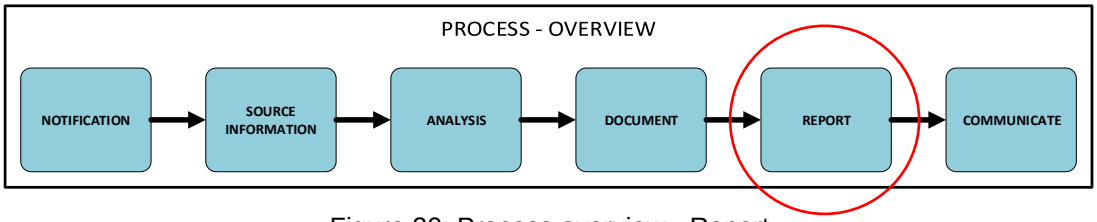

Figure 20: Process overview - Report

The purpose of this activity is to provide a detailed account of the incident, including findings and recommendations, to the CIRC for consideration. Details of the CIRC meeting must also be recorded in accordance with the QPS Governance handbook and the QPS Information Management policy. The following diagram provides a description of the sub-activities required to report the analysis findings and recommendations:

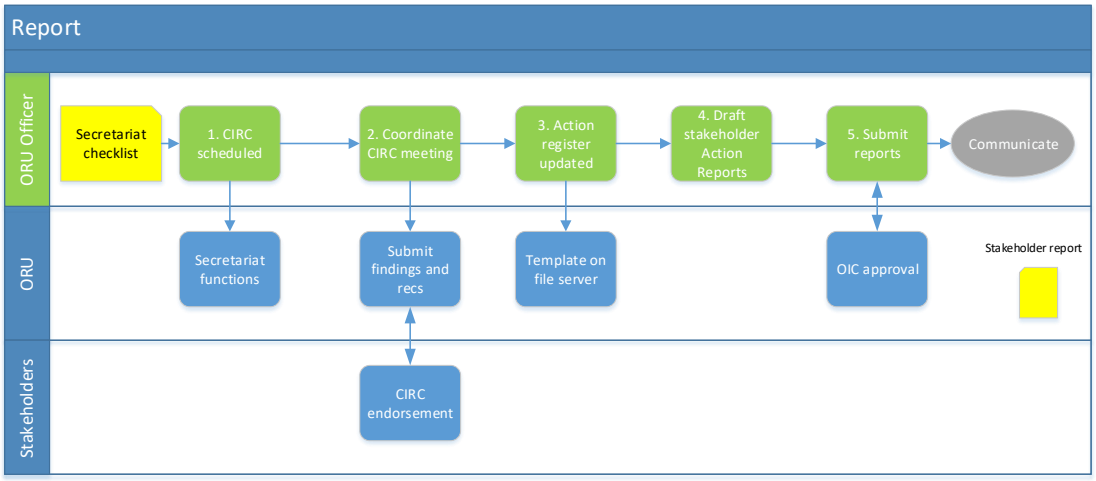

Figure 21: Process map - Report

The ORU officer, acting as secretariat, consults with the Chair of the CIRC and schedules a CIRC meeting (1). The CIRC meeting is conducted as per the agenda with the analysis findings and recommendations submitted for consideration. The e-briefing package is used to brief the CIRC members to ensure they have a sound appreciation of the incident and the analysis outcomes (2). Post the CIRC meeting, the CIRC Action Register is updated with the action items endorsed by the committee (3). Stakeholder action reports are drafted detailing the assistance required to action the items as assigned by the CIRC (4). The draft stakeholder reports are submitted for OIC approval (5).

5.4.6 Communicate

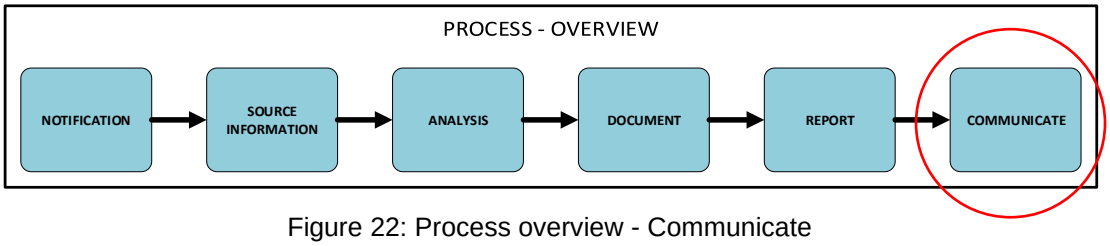

Figure 22: Process overview - Communicate

The CIRC has been established as a decision-making body with an ongoing responsibility to monitor the findings of the ORU and guide the implementation of any recommendations relating to policy, procedure or practices, and promote good practice and a culture of continual improvement on a Service-wide basis. It is the responsibility of the ORU to enable these recommendations as directed by the CIRC and to communicate analysis findings to the broader police community to promote organisational learning.

The following diagram provides a description of the sub-activities required to communicate the recommendations and learnings approved by the CIRC:

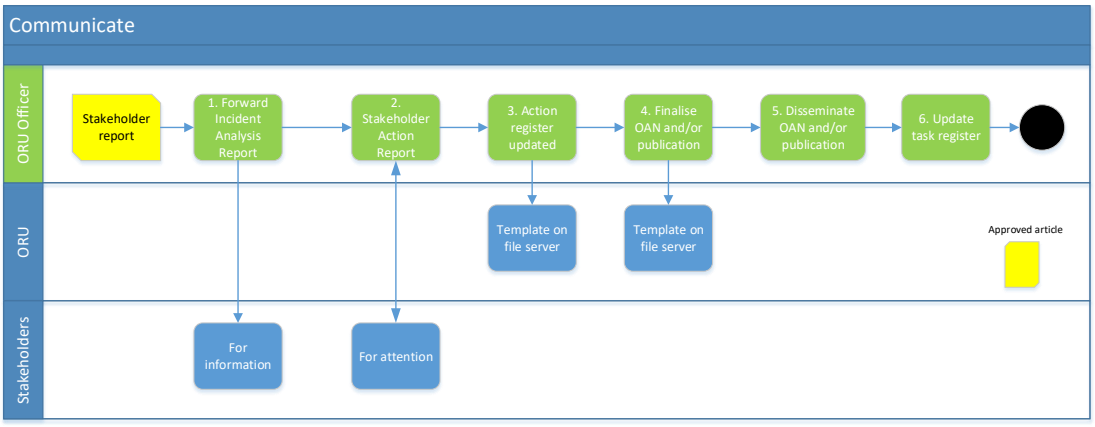

Figure 23: Process map - Communicate

A copy of the Incident Analysis Report is forwarded to the District Officer (DO) of the district in which the incident occurred (1). The Stakeholder Action Reports, with a copy of the Incident Analysis Report, is forwarded to the relevant business unit for necessary action (2). The CIRC Action Register is updated with details of the dissemination date, action required, and action date (3). Amendments are made to the OAN, if requested by the CIRC (4). The OAN is disseminated state-wide to all operational police units with suggested methods and strategies for communicating the key messages to staff (5). The task register is updated with the file marked as completed (6).

CHAPTER 6. CASE STUDY – CORONIAL REPORTS

Between August 2013 and November 2014, officers from the QPS, acting in the course of their duties, shot and killed five men in separate incidents. The five incidents occurred at the Sunshine Coast (n=2), Brisbane (n=2), and the Gold Coast (n=1). Of note, three of the deaths occurred over the period of one week, from 18 November 2014 – 24 November 2014.

The Queensland State Coroner, Mr Terry Ryan, held an inquest into each of the deaths and delivered a report on each death outlining the events leading up to the death, plus the interactions with members of the QPS. Due to similarities across all deaths, Mr Ryan reserved the inquest findings which he delivered in a single report on 20 October 2017.

Gerber and Jackson (2017) contend it is the distinction between reasonable and excessive force that underpins public attitudes towards police and therefore influences police legitimacy. The community has high expectations, particularly in times of crisis, that police will use only the minimum amount of force necessary. Operational police are trained in a range of UOF options including firearms, however when the use of police firearms result in a death the trust and confidence of the community in police can be significantly undermined. A death in these circumstances raises many issues, including:

- public scrutiny and suspicion of the circumstances of the death;
- financial and psychological cost to the community;
- the degree to which the use of firearms by police is controlled by appropriate safeguards;
- decision-making by police officers in critical incidents; including whether other UOF options could have been deployed.

The Coroners Act recognises the need for public scrutiny and accountability by requiring all deaths in custody to be investigated by the Coroner. Further, a primary objective of the Act is to help prevent deaths from similar incidents in the future by allowing coroners to provide commentary and recommendations related to public health and safety and the administration of justice.

Subsequently, five coronial case studies have been selected to test the efficacy of the Framework due to the direct correlation with the contemporary policing environment and the role the Coroner plays in providing commentary and recommendations to help prevent deaths from similar incidents. It is believed the objectives of a coronial inquest are the same as the Framework objectives, that is, to identify lessons, promote continuous improvement, develop prevention strategies and preserve police legitimacy.

The five coronial case studies are narrated in the following section using identical sub-headings as they appear in the Coroner's reports, that is: *Background*; *Pre-incident: events leading up to the death*; and *Incident: events leading up to the shooting*. This formatting maintains the integrity and chronology of events and supports, in part, the thematic analysis discussed at Chapter 7 *Application and Discussion of Case Studies to the Framework.*

6.1 Case Study 1: Anthony Young

The inquest into the death of Anthony Young was held between the 22 September and 17 November 2015. The findings of that inquest were delivered by State Coroner, Mr Terry Ryan, on 14 December 2015 at Brisbane (Coroners Court of QLD 2015).

6.1.1 Background

At the time of his death, Anthony Young was aged 42 years and living with his older brother, his brother's partner, and their 12-year-old daughter. He was unemployed and in receipt of a disability pension. Mr Young was described as 'like a roller coaster, up and down with his emotions', with anger management issues. His former partner asked him to move out in mid-2012 after she became concerned about his behaviour when she was seven months pregnant. He then went to live with his brother, David. Mr Young's daughter was born in December 2012. She described her relationship with him as amicable and would routinely drop their daughter off at his flat so that he could spend time with her. She had received some odd text messages from Mr Young in the days leading up to his death. One such message was received

two nights beforehand asking, ‘who wants to kill me?’ There was some suggestion of more tension than normal between Mr Young and his brother’s partner in the lead up to the incident.

Family members provided information suggesting that Mr Young had possible mental health issues from a young age however attempts to obtain professional help were met with strong resistance by him. This included an attempt to admit him to hospital for treatment only to be advised that unless he was hurting himself or other persons, the hospital was unable to assist. Mr Young did undergo a psychiatric assessment for Centrelink purposes which appears to be the only formal mental health assessment he was ever subjected to. The assessment concluded that he had a history of substance abuse plus a complex developmental post-traumatic stress disorder through an extremely prejudicial childhood. The recommended treatment was anti-depressants and psychotherapy.

Quantities of diazepam were found in Mr Young’s belongings after his death. His toxicology results depicted a small quantity of Midazolam and a trace of tetrahydrocannabinol, a constituent of cannabis. A review of the available medical records concluded that it did not seem that any of the health professionals involved in Mr Young’s care had anticipated a homicidal risk at any stage. There was no documented evidence that he expressed any suicidal/homicidal tendencies leading up to the night of his death, and at no stage had he been diagnosed with a psychotic illness. There was no obvious opportunity for intervention which may have resulted in a different outcome.

6.1.2 Pre-Incident: Events leading up to the death

Mr Young’s mental state was deteriorating rapidly and tensions within the home were increasing as a result of his increasingly irrational and angry behaviour, particularly towards his brother’s partner. His brother and partner had reached the point of discussing other options for Mr Young’s accommodation. In the days prior to his death Mr Young sent several text messages indicating he was very paranoid, confused and was losing his mind plus references to other random issues. He also called the Child Safety After

Hours Service Centre and expressed concerns about the well-being of his daughter and complained about Taoism and how the Chinese were taking over Australia.

At 9:52pm on 21 August 2013 Mr Young called 000 to report that a sex cult from China was attempting to take over Australia. The call taker advised him they would arrange for police to attend to see how he was going. From 10:00pm, a series of 000 calls was received by police. Each call related to an incident at Mr Young's address. The calls were from various neighbours and referenced screams of racial abuse, persons having been stabbed (and later, shots being fired). Two police officers were tasked to attend the location, arriving at 10:06pm.

6.1.3 Incident: Events leading up to the shooting

Body worn camera footage from the officers depicts the police car stopping at 10:06:04pm. The critical action occurs within nine seconds of police arrival, at 10:06:13pm. En route, the officers were advised the offender may have left the scene in a blue vehicle and a young girl was possibly still inside the house. Upon arriving they saw a male person, later identified as Mr Young, standing in the front driveway. He appeared 'calm' with his hands by his side as he watched the police car go past. Based on the previous information that the offender had left the scene, the officers assumed this person to be the informant.

Upon exiting the police vehicle one of the officers greeted the male person at which time Mr Young immediately advanced towards the officer and raised his right hand, which held a large bladed machete. Mr Young advanced to within two metres of the officer, slashing the machete in an aggressive manner. He was told to 'drop the knife' three times however ignored the direction and was subsequently shot by the officer. The officers immediately called for Queensland Ambulance Service (QAS) assistance and performed first aid until QAS arrived.

6.2 Case Study 2: Shaun Kumeroa

The inquest into the death of Shaun Kumeroa was held between the 22 September and 17 December 2015. The findings of that inquest were delivered by State Coroner, Mr Terry Ryan, on 18 January 2016 at Brisbane (Coroners Court of QLD 2016).

6.2.1 Background

Shaun Kumeroa was 42 years of age at the time of his death and was born in New Zealand. He had two sons however had little contact with them after his marriage dissolved in 1999, and he moved to Australia. Mr Kumeroa had considerable criminal and traffic history in New Zealand which resulted in periods of detention. He started using illicit drugs in his teen years and struggled to overcome the addiction throughout his life. He had been charged in relation to the possession of methamphetamine, had been a user of heroin, morphine and valium and in 2013 was registered on the opiate treatment program.

Although he struggled with literacy, Mr Kumeroa was engaged in full time employment and was supported by his employer to complete courses to gain higher qualifications. He entered into another relationship and had a daughter. This relationship ended around May 2014. Custody of his daughter became an issue and as the situation deteriorated a Domestic Violence Protection Order was made on 3 June 2014.

Throughout July-August 2014, Mr Kumeroa undertook a positive parenting program, attending five of the six sessions, and was also involved in a drug rehabilitation program. Toxicology tests following his death revealed the presence of non-toxic levels of the anti-anxiety medications Diazepam and Nitrazepam. No alcohol or other drugs were detected. Pathology confirmed evidence of previous drug use while serological testing returned a positive result for Hepatitis C. A review of medical records concluded there were no records confirming any contact with psychiatrists or psychiatric institutions; there was never a clear diagnosis of depression; no mental health disorder was ever formally described; and antidepressants and sedative drugs were

prescribed intermittently for management of what appeared to be a sleep disturbance. Overall, the records demonstrated drug seeking behaviour on multiple occasions.

6.2.2 Pre-Incident: Events leading up to the death

On 11 September 2014, a Family Dispute Resolution Conference was held with respect to future arrangements for the care of Mr Kumeroa's daughter. Mr Kumeroa refused to agree to the conditions and interpreted the mediation outcome to mean he had lost the care of his daughter. This unfortunate misunderstanding and the prospect of a protracted legal process precipitated the series of events that followed.

On 16 September 2014, Mr Kumeroa attended his partner's residence where he assaulted and threatened her mother with a knife and hammer. On 17 September 2014, police started an investigation into the assault. During a subsequent phone call to his partner he was recorded as stating he was not going back to jail, that he had a '45' on him and would go down with a bang. Mr Kumeroa also lost contact with the Suboxone2 program and missed several scheduled doses. The clinic contacted Mr Kumeroa however he became irritable and ended the call. An appointment date and time was sent to him via text message, but he did not attend.

A witness told police that on the 29 September he was approached by Mr Kumeroa asking for directions to an address. The witness ended up getting into the car with Mr Kumeroa, at which time he saw a gun on the front passenger seat. Mr Kumeroa said he wanted to get Suboxone, and that he had not been able to collect any from his usual chemist because he was wanted by police. It is believed that this interaction may have prompted the anonymous call to the Police about a drug deal taking place between two persons in a parked car at that address.

6.2.3 Incident: Events leading up to the shooting

At 11:45am, police received an anonymous call with two officers arriving at the location at 11:48am. Mr Kumeroa was sitting in the car in a carport and when

approached by police stated that he was waiting for a friend and then produced what appeared to be a gun. The officers withdrew and within a short period of time several other police units arrived. Body worn camera footage clearly depicts the officers giving forceful and repeated directions to Mr Kumeroa with only limited success engaging in any conversation at that time. Police then engaged in conversation with Mr Kumeroa via his mobile phone at which time he told police that *'his little girl had just been taken away from him and this is what this is all about.'*

A Police Forward Command Post was established, and an emergency situation declared at 12:05pm. Between 12:30pm and 12:40pm members of the Special Emergency Response Team (SERT) took control of the inner cordon. The SERT armoured vehicle was positioned behind Mr Kumeroa's vehicle to provide a safe platform for the police negotiator and to prevent Mr Kumeroa leaving in his vehicle. Negotiations commenced at 1:30pm, and a surrender plan was created and communicated to Mr Kumeroa via loudspeaker. He was told to leave any weapons inside the vehicle, exit the vehicle with his palms facing out and to proceed to the rear of the vehicle. The consequence of pointing his weapon at police was restated on numerous occasions. Repeated attempts attracted a limited verbal response other than Mr Kumeroa stating he wanted to speak with his daughter.

Mr Kumeroa's initial behaviour after the message was described as positive. He was seen to put the gun down, grab some clothing from the back of the car, and put the keys in the ignition and sunglasses on his head. These actions were considered a sign that Mr Kumeroa was preparing to exit the vehicle safely. Officers encouraged the positive behaviour and further instructed Mr Kumeroa to place both hands on the steering wheel, step out of the vehicle safely and await further instructions, while reinforcing that he was doing the right thing. Mr Kumeroa put the clothes back down and took hold of the gun. He looked back, stated 'ain't life a bitch' then sat for some time, looking around over his shoulder and through the rear vision mirror.

At 3:49 pm, Mr Kumeroa exited the vehicle quickly with the gun in his right hand at waist height. As he turned to face police officers, he continued to raise the gun bringing his left hand to his right hand and pointing it directly at SERT officers. Numerous SERT officers fired simultaneously and Mr Kumeroa fell to the ground. Officers immediately commenced CPR. The QAS was already staged at the incident location and attended to Mr Kumeroa within 1 minute 40 seconds of the shooting. Mr Kumeroa was pronounced deceased at the scene by QAS officers. It became apparent, sometime after the shots were fired, that the gun possessed by Mr Kumeroa was a replica. Evidence was presented that the gun was a replica of exact size and weight and had moving metal parts that appeared operative. The overall effect was the weapon looked like a genuine Beretta and there was no indication that it was not a functioning weapon.

6.3 Case Study 3: Laval Zimmer

The inquest into the death of Laval Zimmer was held between the 22 September 2015 and 16 March 2016. The findings of that inquest were delivered by State Coroner, Mr Terry Ryan, on 3 May 2016 at Brisbane (Coroners Court of QLD 2016).

6.3.1 Background

Laval Zimmer was 33 years of age at the time of his death. He was born in Perth, Australia and was the younger of two children. Mr Zimmer had lots of friends during his childhood and was generally well liked. He did not appear to struggle with anything of significance or experience any illnesses or injuries during his school years. After his parents separated Mr Zimmer's behaviour changed and he did not do very well at school, often not attending. Instead, he would meet up with friends and use cannabis. As a teenager Mr Zimmer suffered from headaches and seizures. At times he would get angry, which was associated with his use of marijuana. Following an incident where he thought people were out to hurt him, he was diagnosed with paranoid schizophrenia.

From about the age of 22, Mr Zimmer began to live in shared accommodation and boarding houses, and initially had limited contact with his parents. However, after he moved to the share house at Kippa Ring several years before his death, he enjoyed increased contact and a positive relationship with his mother. He had a minor and sporadic criminal history, mostly relating to the possession of cannabis and street offences, but had not been convicted of any significant offences since 2012 when he was dealt with for charges of common assault and assault or obstruct police.

Mr Zimmer had a longstanding history of paranoid schizophrenia, epilepsy and hepatitis C which was being managed by various hospitals and agencies. He was noted to be a habitual user of cannabis and was a voluntary consumer of mental health care. His mental state had been generally stable between 2013 and his death. As a result of having had 7 presentations to various emergency departments in 2014, due to seizures, a referral was made to a neurologist. A CT scan was booked for 11 November 2014 (in the week before his death). Mr Zimmer did not attend.

On 16 November 2014, he presented to the Prince Charles Hospital emergency department with back pain post-seizure. He underwent a CT scan and blood tests. It appears that seizures negatively impacted Mr Zimmer's mental state, resulting in confusion and a decline in his overall presentation. Following his death, toxicology testing revealed non-toxic levels of various therapeutic drugs. A constituent of cannabis was also detected in Mr Zimmer's blood and urine. A review of Mr Zimmer's medical history concluded that: his psychosis was a little different to what is often seen with many patients in that he did not have a large number of admissions; he was usually able to be treated on a voluntary basis and would self-present or comply with referrals from others; was generally complaint with his prescribed medication; and the management of his schizophrenic disorder was appropriate and orthodox.

6.3.2 Pre-Incident: Events leading up to the death

On the day before his death, 17 November 2014, Mr Zimmer was involved in a public fight. He was subsequently involved in a confrontation with police,

tasered, handcuffed and arrested. This interaction contributed to his high level of unhappiness with police that day and influenced his subsequent behaviour. QAS officers assessed Mr Zimmer and he was taken to the watchhouse where a custody risk assessment was conducted. Mr Zimmer disclosed his mental health history however there was no behaviour that warranted a further mental health assessment. After being released from the watchhouse Mr Zimmer arrived at his share house around dinner time. He became angry and increasingly agitated about the events of that afternoon and made 21 calls from his mobile phone to police via the 000 network from 11:30pm onward.

The difficulty for call takers was that Mr Zimmer was not seeking police assistance to deal with an emergency. Therefore, his calls were classified as nuisance calls and a decision was made to task officers to attend Mr Zimmer's house with the objective of causing the calls to stop and freeing up the 000 lines for genuine emergencies. As a consequence of the arrest and tasering of Mr Zimmer that afternoon, five police officers were tasked to attend the incident address. The officers staged prior to arriving at the address and discussed their approach to the job, anticipating they would be met with significant aggression by Mr Zimmer.

6.3.3 Incident: Events leading up to the shooting

By the time the officers arrived at the address Mr Zimmer had telephoned the non-urgent Police Link line 131 444 and was engaged in a conversation with an operator that had been continuing for some 5 minutes. Upon arriving at the house, one of the officers recognised it as a "boarding house". Officers knocked at the open front entrance to the house and announced that it was the police who were attending. An occupant responded and stated he was 'crippled' indicating the police would have to come to him. The officers then entered the residence and spoke with this occupant who was in the front bedroom. He indicated that Mr Zimmer was in the lounge room.

The lounge room was empty, so police proceeded to search through the house. Police spoke with another occupant of the house who had been sleeping but was woken by the police presence. This occupant offered to get

Mr Zimmer and knocked on an adjacent bedroom door. Mr Zimmer opened the door and was told the police were there for him. Police Link call records indicate that Mr Zimmer was still on the Police Link call at this time. Mr Zimmer looked at the police and is heard on the body worn camera footage to say loudly '*Get off the property, boys'*. Mr Zimmer was holding a large knife at this time. One officer produced his OC spray, and proceeded to spray into Mr Zimmer's room while alerting the other officers of the knife. Mr Zimmer exited the bedroom and faced two officers with the knife held in a raised position. He then began moving the knife in a throwing motion, starting with smaller movements back and forth, with those movements becoming larger.

Officers drew their firearms and directed Mr Zimmer to 'drop the knife' multiple times. These directions did not provoke any response from Mr Zimmer or change his actions. The officers attempted to withdraw by moving backwards, but Mr Zimmer was moving towards them more quickly than they could move backwards plus the hallway was narrow and they found themselves prevented from effectively withdrawing from danger. Two officers discharged their firearms causing Mr Zimmer to immediately fall to the ground. He continued to hold the knife in his hand and was making some attempt to crawl forward. Mr Zimmer ended up releasing his grip on the knife and it was kicked out of the way. Officers proceeded to handcuff Mr Zimmer however he strongly resisted this process and it was achieved only with difficulty. The handcuffs were removed a short time later and Mr Zimmer was relocated to the lounge room area where CPR was commenced until the arrival of the QAS at 01:18am. Mr Zimmer was pronounced deceased at the scene at 1:43am.

6.4 Case Study 4: Edward Logan

The inquest into the death of Edward Logan was held between the 22 September and 19 November 2015. The findings of that inquest were delivered by State Coroner, Mr Terry Ryan, on 14 December 2015 at Brisbane (Coroners Court of QLD 2015).

6.4.1 Background

At the time of his death, Edward Logan was 51 years old. Born in New Zealand he moved to Australia in 1998 where he lived with his de-facto partner. At the time of his death he was visiting his son who lived in the Brisbane area. Mr Logan had criminal history in New Zealand, Victoria and Queensland and had served a period if imprisonment. He was on bail for a serious assault charge at the time of his death. Mr Logan's previous de-facto and other family members described several incidents involving him making threats to kill family members and assaulting others. Mr Logan's current de-facto stated that in the six months leading up to the death, Mr Logan was 'unbalanced'. He believed he was going to be imprisoned for the serious assault of his employer but had indicated he was not prepared to return to jail.

Mr Logan had a mental illness and was seeing a GP in Victoria. He was referred to Beyond Blue and placed on medication. In the two weeks before his death the medication dosage was increased. Medical evidence suggests that Mr Logan had been diagnosed with bipolar disorder. Traces of Citalopram (an anti-depressant) and Escitalopram (commonly sold as Lexapro and used to treat anxiety and depression) were detected in his toxicology results. Quantities of Lexapro were located in his belongings after his death.

On 9 October 2014, Mr Logan had voiced thoughts of violent suicide attempts but said he would never carry this through because he was 'too much of a coward'. Mr Logan had been assessed in 2010 as displaying traits of 'psychopathic personality'. He was referred to a psychiatrist in October 2010 but he did not attend that appointment. Toxicology indicated a relatively high level of escitalopram post-mortem. However medical evidence suggested this could be due to a metabolic abnormality or accidental or intentional overdose. It was considered that while the level was high, it was probably within the therapeutic range, which suggested Mr Logan was taking the medication as prescribed. Despite the therapeutic level of escitalopram, Mr Logan still went on to exhibit extreme rage and violence. This supported the medical opinion that Mr Logan's personality was the cause of the behaviour, rather than it being the result of mental illness.

Mr Foster's mental health history in Queensland was no more recent than 2005. In the lead up to his death, Mr Logan was living in Melbourne and had been since June 2008. Health records confirm an incident whereby Mr Logan was detained under the *Mental Health Act 2000* (Qld) for an Emergency Examination Order in October 2005. This followed an incident where he poured petrol on the floor of his home and threatened to kill his de-facto and himself. At that time, Mr Logan was assessed as having a personality disorder but no acute mental illness requiring involuntary treatment.

6.4.2 Pre-Incident: Events leading up to the death

Mr Logan travelled to Queensland on 12 November 2014 for his son's birthday. He was staying with his son, his son's partner and their three-year-old son. Prior to travelling to Queensland Mr Logan had expressed suicidal thoughts during telephone conversations stating he was 'sick of the world and his head' and would kill himself before going back to prison.

At about 1:30pm numerous people arrived at the home to celebrate the birthday. This was a surprise visit, which unsettled Mr Logan's son who did not like crowds or special occasions. Shortly after an argument developed between Mr Logan and his son. During this argument his son made some comments about the quality of his upbringing and expressed unhappiness about the way he had been brought up. These comments appear to have made Mr Logan particularly agitated and inflamed the argument. Mr Logan was asked to leave and went to the spare room to pack a bag. He came back to the lounge room where he started to put his shoes on and said words to the effect of 'Fuck it - I'll do you all'. Mr Logan then went into the kitchen and grabbed two knives from the knife block and was holding a knife in each hand. He then stated that he was not leaving 'unless he was in a body bag'.

The son's de-facto called 000 and the call records her telling Mr Logan to 'get out' and 'we've got kids' and 'he's got knives and he's pissed'. Mr Foster's son, his son's de-facto and her mother, all managed to leave the house via the front door with Mr Logan still inside with the knives and menacing them through the

front screen door. Mr Logan then put the knives down and followed the others out to the front of the house. While they were all on the front lawn a melee ensued during which Mr Logan assaulted both women when they tried to intervene to stop Mr Foster and his son from fighting.

Both women and Mr Foster's son managed to get back into the house and were able to lock the door behind them. They did not know where Mr Logan was, so they proceeded to the backyard where the children were playing. They could hear Mr Logan banging and smashing things and they heard the sound of breaking glass. Mr Logan had caused extensive damage to the windscreens, roof, lights and mirrors of several vehicles and also smashed the windows to the home and damaged the garage door. A further 000 call was made as the occupants sheltered in the back yard against the rear fence.

Mr Logan then came walking down the left-hand side of the house holding a complete metal mailbox, still attached to a metal pole. Mr Logan was trying to get the letterbox off the pole while saying words to the effect of 'at least you will remember this birthday for the rest of your life.' He then left the backyard and walked back to the front of the house.

6.4.3 Incident: Events leading up to the shooting

Several 000 calls were received by police with a two-officer crew being tasked to attend the address location. The officers were advised there was a disturbance in which a family had retreated, and there was possibly a knife involved. The officers arrived at approximately 2:18pm. When they parked the police vehicle, they could see Mr Logan smashing the mirror of a vehicle parked on the opposite footpath and thought at that stage Mr Logan was armed with a sword. Body worn camera footage shows that as soon as the police van pulled over to the curb and the police alighted from the vehicle Mr Logan ran to the police vehicle wielding a metal pole and stating he was going to kill the officers.

Mr Logan was in fact armed with a splayed metal letterbox pole, which was approximately one metre in length. The closest officer drew his firearm but did

not, at first, shoot. Instead, he started to run backwards and then turned and ran around the back of the police van. Mr Logan then changed direction and ran at the second officer with the metal pole. This officer then discharged his firearm at Mr Logan while moving backwards. Mr Logan was within several metres of the officer. Both officers then fired, and Mr Logan fell to ground.

These events happened within seven seconds of the officers' arrival on the scene. Both officers are heard to call on Mr Logan to 'put it down, put it down' on four occasions before discharging their weapons. Mr Logan's only response was 'get fucked'. Both officers then commenced first aid until the QAS arrived approximately two minutes later. Mr Logan could not be revived and died at the scene.

6.5 Case Study 5: Troy Foster

The inquest into the death of Troy Foster was held between the 22 September 2015 and 16 March 2016. The findings of that inquest were delivered by State Coroner, Mr Terry Ryan, on 3 May 2016 at Brisbane (Coroners Court of QLD 2016).

6.5.1 Background

Troy Martin Foster was 32 years of age at the time of his death. Born in Sydney, Australia he was the youngest of five children. Mr Foster had a learning difficulty from an early age and could not read or write. He had various behavioural disorders including ADHD and also suffered from temporal lobe epilepsy. Mr Foster's formal education stopped at the age of 12 and he received a disability pension in his adult years as a consequence of his impaired cognitive functioning.

Mr Foster was described by his mother as being very unpredictable and capable of violence when using drugs or alcohol. She further stated that 'he hated life, he hated people, and couldn't get along with anybody in the long term.' Mr Foster had been the subject person in a siege incident in Victoria and had spent numerous years in prison in Victoria following an attempted armed robbery and parole breaches. Mr Foster's frequent contact with the police

began when he was aged 11. He disliked police intensely and had a number of convictions for assaulting police.

Mr Foster's criminal offending related to a number of factors including his substance abuse, which was lengthy and entrenched. Quite a lot of his criminal offending appears related to obtaining money to purchase and obtain drugs of various classes. Toxicology testing after Mr Foster's death revealed a high level of alcohol (214mg/100mL) as well as methamphetamine, diazepam, clozapine (an antipsychotic), and marijuana derivatives. The clinical report confirmed that Mr Foster was not prescribed clozapine, which is a restricted drug that has some very significant and potentially very serious side effects. The report concluded that Mr Foster had to have obtained this drug 'on the street' and there was a chance that Mr Foster did not know what he was taking. Further, that the toxicology results were consistent with Mr Foster's longitudinal history of serious poly-substance abuse and that at the time of his death Mr Foster was extremely intoxicated with multiple substances. All of which were likely to have had profound emotional, behavioural and cognitive effects.

6.5.2 Pre-Incident: Events leading up to the death

On Monday 24 November 2014, Ms Ryan made a phone call to 000 stating that Mr Foster was driving around, totally psychotic and had been involved in a car crash. Police located Mr Foster and had a conversation where they relayed to him concerns from Ms Ryan that he had expressed thoughts to kill himself. He initially denied these thoughts but later admitted that he had been trying to kill himself in the vehicle. He said he was 'sick of living' and planned to drive over a cliff. Mr Foster was detained under the Mental Health Act and taken to Gold Coast University Hospital for the purposes of an Emergency Examination Order, arriving at about 1:33am. Mr Foster was compliant and was not aggressive at any time. The triage nurse on shift signed the EEO form at 1:45am. The effect of signing the EEO was that Mr Foster was, from that time, detained at the hospital. A psychiatric assessment for an EEO is required to be carried out within 6 hours, after which time a patient is considered to be a voluntary patient and may leave at any time. Mr Foster's blood alcohol

concentration (BAC) level was 0.07 and his observations were unremarkable. The police officers remained at the hospital for the duration of Mr Foster's triage assessment and were unaware that Mr Foster was a suspect for an armed robbery at Labrador earlier that night.

Hospital records show that observations were conducted at 3:10am, 5:00am, 7:45am, 10:00am and 11:00am. At 10:00am, a note is made '*pt not to be D/C home CIB to be contacted prior to this. EPS seeing pt now*.' At 11:00am, a note was made '*pt not in bed. Search of ED nil sign*.' At 7:45am, the time for involuntary assessment had expired. Mr Foster was free to leave the hospital from that point onwards.

6.5.3 Incident: Events leading up to the shooting

Between 11:00am and noon on 24 November 2014, Mr Foster's mother saw him walking from a nearby bus stop and picked him up and drove him to her home so he could shower, get a change of clothes and then leave again. After showering Mr Foster remained at his mother's house where he consumed almost the entire contents of a 700ml bottle of Vodka and smoked an amount of cannabis. At about 4:00pm there was a marked change in Mr Foster's demeanour which was likely attributed to the consumption of amphetamines. Mr Foster became increasingly aggressive when refused access to the car and proceeded to damage the house by punching and kicking holes in the walls. He then went into the kitchen and used a steak knife to stab the wall and began threatening his mother and his niece, at one stage holding the knife to his mother's throat.

At 6:55pm, Mr Foster's mother dialled 000 from her mobile phone and left the phone open but hidden on the couch. The Police Communications Centre received the call and conducted the relevant checks identifying the incident location, the domestic violence history and identities of both the caller and the male at the address. At 6:58pm the job was tasked as a Code 2 priority with numerous police units responding. The audio of the initial job call was replayed during the inquest and it was apparent to the Coroner that the full extent of the

information available from that call was not absorbed or heard by the responding officers.

Body worn camera captured the police approach to the residence, the meeting at the nearby child-care centre, and the immediate aftermath of the shooting. Due to concerns about the escalating violence and the fact that Mr Foster was wanted for questioning regarding an armed hold up the previous night, three dog squad officers were dispatched. However, the recollection by these units of the initial job details was very limited and each officer did not recall being told that Mr Foster was armed with a knife, the nature of the relationship between Mr Foster and his mother, or details of the persons involved in the disturbance they were to attend. There was also an impression that general duties crews were attending the job location rather than staging nearby waiting for the arrival of the dog squad.

The dog squad officers proceeded to the address, while the general duty officers had arrived at a nearby childcare centre to plan their approach to the incident which included driving over the address in an unmarked car to identify the address and establish a cordon at the other end of the street. At this time Mr Foster, while in possession of a meat cleaver, had made his way out of the front door and down the driveway with his mother standing nearby and attempting to coax him to a friend’s house. Mr Foster was very drunk and fell numerous times as he was walking down the driveway.

At approximately 7:15pm, police drove over the address and provided commentary over the police radio that an assault was taking place between two persons on the driveway of the residence. The dog squad units heard this update and moved immediately to the address. However, the general duties crews were not informed that the dog squad officers were going to the address. As the officers approached the driveway, Mr Foster who had been laying down on his back at the bottom of the driveway, stood up and then reached down to the ground and picked up a meat cleaver with his right hand. Mr Foster then began walking up the driveway towards his mother and another female. Both women appeared petrified and officers were immediately concerned about

their safety. One officer had managed to position himself between Mr Foster and his mother and observed a markedly changed attitude as Mr Foster turned his focus directly toward the police officers. Mr Foster was walking up the driveway, holding the knife in a low position and moving it slightly in repetitive movements. The officers gave Mr Foster repeated directions to drop the knife which were ignored.

Mr Foster took two ‘purposeful steps’ toward one of the officers described as a ‘charging motion’ with the knife raised to shoulder level and the blade facing the officer. At this time both officers discharged their firearms from a distance of 3 metres and 5 metres respectively hitting Mr Foster with four rounds and causing him to fall to the ground. The officers immediately transitioned from law enforcement to emergency care providing first aid until the arrival of QAS personnel. A crime scene was established, and internal investigations personnel arrived at the scene to commence the critical incident investigation.

6.6 Queensland State Coroner’s Summation

On the 20 October 2017 the State Coroner, Mr Terry Ryan, delivered his final report in relation to the five deaths (Coroners Court of Queensland 2017). In the narrative the Coroner highlighted that in four of the deaths, police officers were confronted by a hostile male armed with a knife or other weapon within seconds of arriving at the scene while the other death followed a prolonged stand-off where officers were suddenly confronted with a replica pistol being pointed at them. Further, that each of the men had a history of known or suspected mental illness. In his summation, the Coroner provided commentary on issues he considered as ‘common to all deaths’ and ‘not common to all deaths’. These issues are narrated in the following section.

6.6.1 Issues common to all deaths

The Coroner identified numerous issues which were common, or relevant to all deaths:

1. The appropriateness of the current QPS UOF model and the options of force available to police officers;
2. The adequacy and appropriateness of QPS:

(i) policies in relation to the use of firearms; and

(ii) training provided to operational police officers in the use of firearms.

3. The adequacy of the approach taken by the Ethical Standards Command Internal Investigations Group in conducting the investigation into the deaths, particularly, whether an improved methodology might be adopted which places appropriate weight on and protects the welfare of first response police officers, post-incident, and also preserves the integrity of the evidence of those officers and other evidence at the scene including whether the timing of and means of conducting interviews of first response officers by ESC officers should be varied or subject to greater flexibility;

4. The adequacy and appropriateness of the current training of police officers with respect to the imposition of handcuffs after the use of lethal force;

5. The adequacy of the current processes for dissemination of information, and updates of information, for attending crews to an incident including possible implementation of the Q-Lite program;

6. The adequacy and appropriateness of QPS policies, procedures and training in relation to police dealing with mental health incidents, including the adequacy of the availability to QPS members, responding to an incident, of information/records from Queensland Health, and other medical practitioners, regarding the mental health history of persons;

7. The current position regarding ownership of body worn cameras used by QPS officers and the storage of data including the progress of the roll out pursuant to the Commissioner's direction; and

8. Lessons learned from these five inquests as to the benefits of body worn cameras being used by the police officers in terms of:

(i) preserving evidence;

(ii) providing a reliable record of what occurred;

(iii) avoiding unnecessary controversy about what happened;

(iv) vindicating police officers who have acted in accord with their training and policy.

6.6.2 Issues not common to all deaths

The Coroner also nominated several issues which were not common to all deaths, but rather specific to an incident:

9. The need for and, if necessary, the appropriate form of regulation of replica firearms in Queensland. *(Kumeroa)*

10. The effectiveness of the negotiation processes as observed in the incident involving Mr Kumeroa, including the options available for use when trying to negotiate a surrender plan and ways in which the process might be assisted in the future. *(Kumeroa)*

11. The positioning of inner cordon police officers in the incident involving Mr Kumeroa leading to the necessity to use lethal force soon after Mr Kumeroa departed his car and whether any practical alternatives were available or might be available in a future incident. *(Kumeroa)*

12. The adequacy and appropriateness of QPS policies, procedures and training for Police Communications personnel, especially, in dealing with nuisance callers who are not an appropriate use of 000 service time but may be people facing emotional or other difficulties and may require QPS assistance. *(Zimmer)*

13. Methods available to first response police officers who are deployed to deal with nuisance callers including means of establishing and maintaining communications without necessarily requiring officers to enter dwelling houses to prevent calls from continuing. *(Zimmer)*

14. The appropriateness of the mental health assessment of Troy Foster conducted at the Gold Coast University Hospital on 24 November 2014. *(Foster)*

15. The adequacy of the current processes by which police escort a person detained under ss. 33 – 36 of the Mental Health Act to a place of safety; by which police are required to provide information to hospital staff about the person for the purposes of the assessment; and by which hospital staff and police continue to communicate, if necessary, with regard to the person. *(Foster)*

The Coroner's issues can be categorised and themed as: training; equipment; policy and legislation; processes and practice; communications; investigations; incident management; and other government agencies. The application of these themes to the Framework will be discussed further at

Chapter 7 Application and discussion of Case Studies to the conceptual framework.

CHAPTER 7. APPLICATION AND DISCUSSION OF CASE STUDIES TO THE CONCEPTUAL FRAMEWORK

In this chapter the coronial case studies will be dissected and applied to the Framework to test its efficacy in realising the same, or similar, outcomes to that of a coronial inquest. The subsequent discussion will focus on three primary areas. The first, comparing the coronial investigation process to the various components of the Framework. This examination will be conducted to determine the degree of similarity between both processes and therefore the likelihood of achieving similar outcomes. The second, analyse the Coroner's findings and attempt to theme the issues against the QPS elements of capability.

This part of the discussion aims to validate the coding classification and diagnostic tools, based on the themes arising from the QPS case study analysis, and again determine the prospect of achieving similar outcomes to the Coroner. The third focus area is time. This discussion will compare the difference in time between the QPS waiting for the Coroner's recommendations compared with using the Framework to self-identify lessons. Additionally, aspects of the Framework will be highlighted as conducive to expediting organisational learning. The outcome of this comparison lends itself to the value in the QPS adopting an incident learning process to self-identify lessons expeditiously.

Components of the Framework – comparison

With reference to Figure 8 at section 5.2, the *enabler* component of the Framework has five elements: mandate and commitment; governance and assurance; policy; process; and management system. By overlaying these elements and comparing them to what can be considered as the 'coronial framework' it can be established that the Framework will in fact result in expeditious QPS recommendations.

All enablers of the Framework are evident in the coronial framework. The 'mandate and commitment' for coronial investigations and inquests is

established under provision of the Coroners Act. The Framework relies in part on a previous coronial recommendation but primarily on a commitment from the QPS senior executive. The 'governance and assurance' arrangements for the Coroner are provided for in legislation with the Coroner recognised as the final arbiter in coronial matters. In addition, the Coroner's office operates within established practices and processes as a function of the Department of Justice. The Framework recognises the need for a governance structure with an appropriate authorising environment. Comparable to the Coroner's legislated delegation, the Framework includes a decision-making entity with the delegated authority to make decisions on behalf of the QPS when considering findings and actioning recommendations. The 'policy' and 'management system' element of the Framework provides the necessary guidance, tools and support, ensuring consistent application of the process.

This occurs largely through specific content contained within the QPS Operational Procedures Manual and Management Support Manual. For the coronial framework this is derived primarily from legislation. Characteristic of government agencies, it is assumed that further guidance and support is offered via internal Department of Justice policy and practices. The remaining element is the 'process'. This is pivotal to the Framework as it encompasses all other elements and underpins the outcome of all analyses. Therefore, the following section provides a detailed narrative and breakdown of the activities undertaken by the Coroner from gathering information on each incident to delivering the associated recommendations. These will be compared with the activities identified in the process phase of the Framework to determine if a QPS critical incident analysis process can realise similar recommendations, expeditiously.

The first activity in the process is the gathering of information. Predominantly, the Coroner relies on QPS officers assigned to the Internal Investigations unit to conduct an internal police investigation, compile a coronial brief of evidence, and submit the brief to the Coroner. Mandated under provisions of the Coroners Act and the *Police Powers and Responsibilities Act 2000* (Qld) these QPS officers work for the Coroner and gather the information and evidence

that the Coroner requires to fulfil their obligation under the Act. The evidence may include physical evidence from an incident scene, witness statements, notes, logs, police communication audio transcripts and recordings, body worn camera footage, CCTV footage, subject member walk-through video statements, forensic statements, ballistic reports and pathology reports.

By comparison, the first step in the Framework is the gathering of information. Largely this is also leveraged from the information obtained by the internal investigations team and consists of the same information that is contained in the coronial brief. From this first step it is evident that any subsequent internal finding and recommendations is based on similar information to that of the Coroner. A point of difference is the Coroner has the benefit of gaining greater insight by holding an inquest and questioning key persons as they provide evidence.

As a parallel, the Framework provides a mechanism to gain greater insight from members that were involved in the incident, local supervisors, district managers, plus others that may provide input as QPS subject matter experts. The richness of this information is gathered through the application of the post-incident debrief process by conducting hot debriefs, structured operational debriefs, organisational debriefs and multi-agency debriefs.

Coroner's findings – thematic analysis

The second focus area for discussion involves an analysis of the Coroner's reports in an attempt to theme the documented issues against the QPS elements of capability. The Coroner's final report and inquest reports provide insight into the recurring themes that occur during police shootings plus those themes the Coroner considers are relevant when providing commentary and recommendations to prevent similar incidents. The reports also provide insight into the Coroner's preferred examination structure which is reflected in the report format. These insights offer valuable direction to the QPS for structuring and conducting critical police incident analyses.

Document analysis was conducted on the five coronial case studies using thematic analysis techniques suggested by Guest, MacQueen and Namey (2014). The purpose of this analysis was twofold. First, to determine if similar themes could be identified to those arising from analysis of the QPS case studies and secondly, if similar themes were identified, assess them against the Framework's coding classification and diagnostic tools. Text analysis, using the key-word-in-context (KWIC) method, was undertaken based on the key words; pre-incident; incident; and post-incident. The identification of similar parent themes became readily apparent as the formatting of the coronial inquest reports used the sub-headings of *Pre-incident: Events leading up to the death* and *Incident: Events leading up to the shooting*.

The format and structure of the Coroner's inquest reports adopt a logical approach commencing with the background details of the subject person, building a profile of the subject members life in the lead up to the incident. The background then combines with a pre-incident phase where the Coroner captures and records relevant information leading up to the police call for service. Further thematic examination illuminates the Coroner's rationale, that is to identify earlier intervention points that may have prevented the incident from occurring. This is supported by the following statements, extracted from the *Pre-incident: Events leading up to the death* sections of the inquest reports:

- 'There was no obvious opportunity for intervention which may have resulted in a different outcome'
- '…the management of his schizophrenic disorder was appropriate and orthodox.'
- 'This supported the medical opinion that Mr Logan's personality was the cause of the behaviour, rather than it being the result of mental illness'.
- '…was assessed as having a personality disorder but no acute mental illness requiring involuntary treatment'.
- …'longitudinal history of serious poly-substance abuse and that at the time of his death, was extremely intoxicated with multiple substances, all of which were likely to have had profound emotional, behavioural and cognitive effects'.

The direct reference by the Coroner to a pre-incident phase validates the categorisation of a pre-incident phase within the Framework and the use of the Pre-incident Phase 'fishbone' concept diagram at Appendix F as a cause and effect diagnostic tool. The diagnostic tool is populated using the QPS 'elements of capability', or themes, that were identified during the coding activity and considered relevant to the initial police response. These are recorded in green as independent variables while the related processes, and sub processes if applicable, are recorded in blue as dependant variables. This approach breaks the various and complex systems into their component parts and enhances the ability to identify causal and contributing factors. Further, as a visual reference this provides greater clarity and focus on areas where early intervention and disruption may have prevented the incident from occurring and supports the development of strategies that align with the QPS strategic enablers of *prevent* and *disrupt*.

The subsequent section of the Coroner's report, *Incident: Events leading up to the shooting,* details those events leading up to the incident including the police call for service and the arrival of police. Thematic examination illuminates the coroner's rationale, that is to identify alternative options regarding the police response that may have resulted in a different outcome. This is supported by the following statements, extracted from the relevant sections of the inquest reports:

- 'The critical action occurs within nine seconds of police arrival'.
- 'Body worn camera footage clearly depicts the officers giving forceful and repeated directions to Mr Kumeroa with only limited success'.
- 'Officers encouraged the positive behaviour'.
- 'These directions did not provoke any response from Mr Zimmer or change his actions'.
- '…officers attempted to withdraw by moving backwards, but Mr Zimmer was moving towards them more quickly than they could move backwards'.

- ‘These events happened within seven seconds of the officers’ arrival on the scene’.
- ‘The officers gave Mr Foster repeated directions to drop the knife which were ignored’.

The direct reference by the Coroner to an incident phase validates the categorisation of an incident phase within the Framework and the use of the Incident Phase ‘fishbone’ concept diagram at Appendix G as a cause-and-effect diagnostic tool. The diagnostic tool is populated using the QPS ‘elements of capability’, or themes, that were identified during the coding activity and considered relevant to the prelude to the critical action. These are recorded in green as independent variables while the related processes, and sub processes if applicable, are recorded in blue as dependant variables. This approach breaks the various and complex systems into their component parts and enhances the ability to identify causal and contributing factors. Further, as a visual reference this provides greater clarity and focus on areas where the police response may have resulted in a different outcome and supports the development of strategies that align with the QPS strategic enablers of *prevent* and *respond*.

The inquest reports make several references to post-incident care provided by officers to the subject person but includes this information in the incident phase narrative. Continuing with the previous theming convention it is proffered that these events occur after the critical police action and could be categorised, and therefore narrated, under a heading of Post-incident phase. While it is accepted that the Coroner’s primary concern is preventability, there is evidence in the Coroner’s final report that indicates post-incident activities are also considered, as indicated by the following statement:

> The adequacy of the approach taken by the Ethical Standards Command Internal Investigations Group in conducting the investigation into the deaths, particularly, whether an improved methodology might be adopted which places appropriate weight on and protects the welfare of first response police officers, post-incident, and also preserves the integrity of the evidence of those officers and other evidence.

The above statement, while highlighting a post-incident issue, also identifies the nexus between officer welfare and the efficiency of the investigation. The scrutiny of this aspect of a critical police incident is not unique to the Coroner. The Queensland Police Union of Employees (QPUE), the Queensland Police Commissioned Officers' Union of Employees (QPCOUE) and the Crime and Corruption Commission (CCC) all conduct oversight activities in relation to officer welfare and the efficacy of QPS investigations. It is therefore contended the various references made by the Coroner regarding post-incident care of the subject person plus the highlighted issue regarding investigation methodology, validates the categorisation of a Post-incident phase within the Framework and the use of the Post-incident Phase 'fishbone' concept diagram at Appendix H as a cause-and-effect diagnostic tool. The diagnostic tool is populated using the QPS 'elements of capability', or themes, that were identified during the coding activity and considered relevant subsequent to the critical action. These are recorded in green as independent variables while the related processes, and sub processes if applicable, are recorded in blue as dependant variables. This approach breaks the various and complex systems into their component parts and enhances the ability to identify areas where the post critical incident response could be improved. As a visual reference this provides greater clarity and focus and supports the development of strategies that align with the QPS strategic enabler of *investigate*.

Further document analysis of the Coroner's reports was undertaken to identify similar subordinate themes, with a particular focus on those issues the Coroner determined as *common to all deaths* and *not common to all deaths*. Again, text analysis of the Coroner's narrative was undertaken using the key-word-in-context (KWIC) method. The key words being investigated reflected the subordinate themes identified during the QPS case study analyses. There was no limitation placed on the number of words before or after the key word to include in the analysis. Due to the Coroner's *issues* narrative being succinct it was determined that as many of the surrounding context words as necessary would be considered to achieve the analytic aim.

This analysis generated numerous and similar subordinate themes to those identified during the QPS case study analyses as depicted *Appendix I: Coroners issues themed against QPS elements*. The coding table references the QPS elements of capability, or subordinate themes, across the horizontal axis and the corresponding case study number along the vertical axis. The entries recorded in standard black text represent issues the Coroner determined as common to all deaths while the entries in red text represent issues not common to all deaths. The entries in italicised black text represent relevant data extracted from the individual inquest reports.

The analysis resulted in the identification of a corresponding subordinate theme across all coronial case studies. Notwithstanding the omission of *issues not common to all deaths,* an entry would remain against each subordinate theme for each case study. The result provides overwhelming evidence the subordinate themes identified through analysis of the QPS case studies are similarly evident in the coronial case studies. The assertion is this outcome validates the construct of the QPS Capability Matrix and further supports the efficacy of the Framework.

Coronial Recommendations – time comparison

A comparison between the wait-time for the Coroner's recommendations and the time taken for the QPS to self-identify lessons using the Framework, was undertaken to determine if the Framework would result in expeditious improvement. The comparison focused on four principal areas. First, the Coroner's final report with recommendations was delivered on 20 October 2017. As depicted in the below *Figure 24: Wait time for Coroner's recommendations*, the average time from the five incidents occurring to the delivery of the final report was 3 years and 2 months. The earliest incident, Young, occurred in August 2013 with the QPS waiting 4 years and 2 months for the Coroner's recommendations. The last incident, Foster, occurred on 24 November 2014 with the QPS waiting 2 years and 11 months for the Coroner's recommendations. These time periods represent an extreme delay where more decisive, proactive, and preventive action could be taken by the QPS to

self-assess the actions of its officers, generate internal findings and recommendations and apply strategies expeditiously to reduce the likelihood of similar occurrences in the future.

Figure 24: Wait time for Coroner's recommendations

By aligning the Framework to the analysis lifecycle, depicted at Appendix E, nominated activities and time periods can be readily identified. An extract of the analysis lifecycle, Figure 25, clearly indicates that by using the Framework interim findings from critical police incidents can be identified within 2 months (column 1, authority to release information) and final findings within 10 months (column 3, Authority to action lessons).

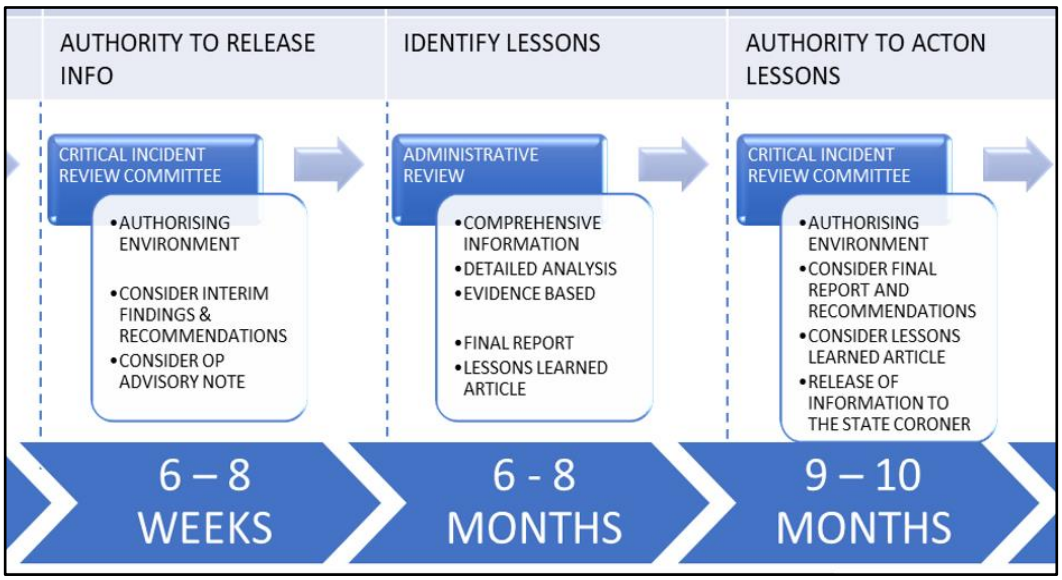

Figure 25: Extract - Critical Police Incident Analysis lifecycle

When compared with the wait-time for the Coroner's recommendations, it is evident that continuous improvement and change is commencing 2 years and 9 months sooner when compared with the shortest wait-time of 2 years and 11months from the five case studies, as depicted in the below *Figure 26: Time comparison - current process versus conceptual framework.*

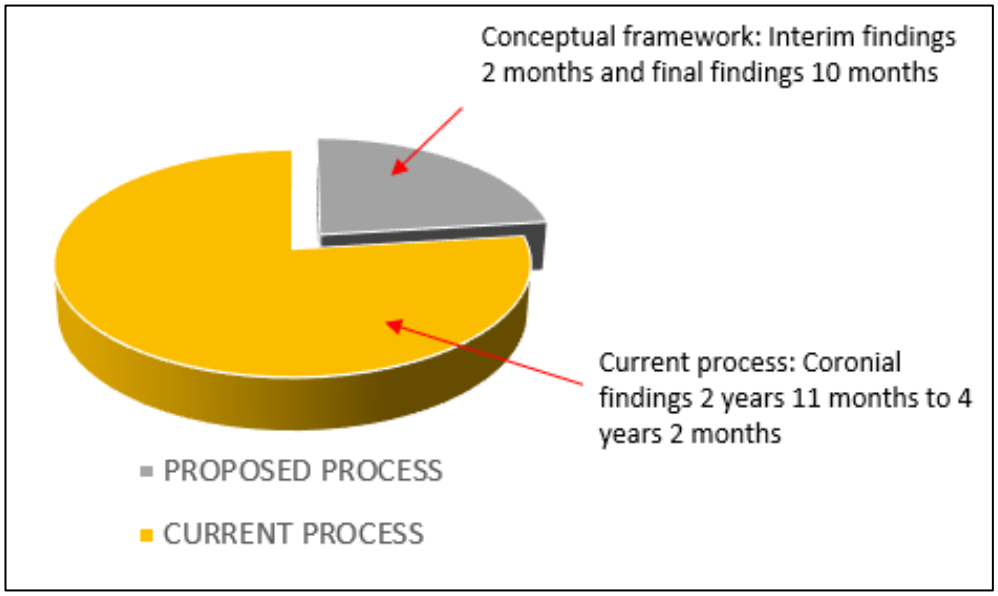

Figure 26: Time comparison - current process versus conceptual framework

Second, current QPS policy stipulates that coronial investigations are to be completed within six-months and forwarded to the Coroner without undue delay. The irony of this policy and stipulated timeframe is the prolonged wait-time between the submission date of the coronial brief and the Coroner's recommendations. In contrast, if a critical incident analysis is conducted at the time the coronial brief is complete, the benefits to the QPS could be realised much sooner. With reference to the 'timeline' specified in the analysis lifecycle at Figure 25, a detailed analysis based on comprehensive information is completed at six to eight months of the incident occurring.

This activity refers to a detailed analysis of the incident using the comprehensive IIG investigation case file. The authority to action the findings occurs at nine to ten months. Even in the absence of interim findings being realised within two months of the incident occurring, when compared with the wait-time for the Coroner's recommendations it is evident that continuous

improvement and change can occur two years and one month sooner than the shortest wait-time of two years and 11 months from the five case studies.

Third, the ‘principles’ that guide the critical incident analysis process and documented at section 5.1, are expressive of an expeditious process. Key phrases such as: *identifying best practice; ensures optimal solutions; philosophy of continuous improvement; promoting a learning capable organisation; structured and timely; communicated expeditiously; is dynamic, iterative and responsive to change* support an internal process independent of an external arbiter such as the Coroner. Notwithstanding, the Coroner’s findings and recommendations are not discarded when they are delivered. Quite the opposite, the Framework provides a pathway and governance mechanism for coronial findings to be delivered to an appropriate authorising environment for consideration and action. Further, this provides a level of comfort to the Commissioner of Police and the Director General of the Department of Justice that coronial recommendations are being managed effectively and efficiently within a robust process through to closure.

Fourth, the ‘benefits’ documented at section 5.1, are similarly expressive of an expeditious process. Key phrases such as: *action operational shortfalls; proactive approach; commitment to continuous improvement; growth and maturity; creates an evidence basis; public confidence; conformance with best practice; identify trends and support change; enhance officer safety and delivery of services* support an internally driven and independent process. These benefits promote the QPS as a mature organisation with a transparent and expeditious method of self-assessment focused toward maintaining public confidence and delivering policing services that meet the expectations of the community of Queensland.

CHAPTER 8. CONCLUSION

In conclusion, this research was undertaken to develop and test the efficacy of a conceptual Framework that was designed to analyse critical police incidents and benefit the QPS by driving continuous improvement and organisational learning. The original research problem statement identified three focus areas: the first, to investigate the benefits and value to the QPS of reviewing critical police incidents; the second, investigate the barriers and enablers to organisational learning; and the third, define 'critical police incident' within a QPS context. This resulted in the development of the following four research questions which have been answered by this research:

RQ1. How and to what extent will analysing critical police incidents benefit organisational learning within the QPS?

In answer to this question, first the term 'critical police incident' was defined, adopting the definition from the Police Service Administration Act. Statistical analysis of QPS data then established that critical police incidents involving police firearms occur across all police districts on a regular basis with an upward trend in the volume of violent confrontations and the presentation of firearms since 2016. These data provide evidence of both the current state and future state and support the assertion that critical police incidents are likely to continue to increase, and therefore the analysis of critical police incidents will significantly benefit organisational learning within the QPS.

In addition, the literature review provides insight into the immeasurable benefits of organisational learning through the analysis of incidents, identification of lessons and the transfer of knowledge. The literature review also emphasises the potential impacts that police UOF, particularly firearms, have on the community and police legitimacy and therefore the value for police organisations in having a process to self-critique and improve transparency and accountability. All aspects provide irrevocable evidence as to how critical police incident analyses will benefit organisational learning within the QPS.

RQ2. What are the common themes and how do they contribute to critical police incidents within the QPS?

In answer to this question, document analysis was conducted using six QPS case studies, representing critical police incidents that occurred between August 2018 and July 2019. A coding matrix using 26 operational descriptors was designed and based on terminology that reflects the contemporary police environment. The coding process resulted in a focused description of the key operational elements that contributed to each incident. Once completed, numerous parent themes appeared as incident phases, including pre-incident, incident and post-incident.

The significance of identifying the parent themes was highlighted as fundamental in identifying and aligning lessons to the QPS strategic enablers of *prevent*, *disrupt, investigate* and *respond*. Lessons to *prevent* and *disrupt* can be gleaned from the pre-incident phase, lessons to improve *response* from the incident phase and lessons to improve *investigation* from the post-incident phase. Numerous subordinate themes were also identified. These are considered as elements of capability that directly influence the policing response and are divided into internal and external elements. The internal elements include communications, practice, policy, training, equipment, organisation, management and response.

The external elements include person of interest, environment, time and other agencies. These subordinate themes were used to develop the coding and diagnostic tools including the cause-and-effect concept diagrams plus the QPS Capability Matrix that are integral to the analysis activities in the *process* component of the Framework. Further, both the parent and subordinate themes formed the basis of the thematic analysis of the five coronial case studies that were used to test the efficacy of the Framework.

RQ3. What are the barriers and enablers of organisational learning, and how do they contribute to learning from critical police incidents within the QPS?

Numerous disciplines were examined in the literature review that provided the foundational arrangements for this research and informed the structure of the Framework. The primary discipline included organisational learning, which was divided into two focus areas, one of which was *barriers and enablers*. Subordinate disciplines of organisational maturity, incident learning, knowledge management, police legitimacy, cost benefit, critical incident analysis, and barriers to learning were also examined. It was identified that incident reporting for the purpose of critical incident analysis, while common practice in other high-risk industries, appears to be embryonic within police organisations. Many business oversight and review mechanisms exist within the QPS, including supervisory workflows, however systemic organisational barriers to learning are common. These include: fear of punitive action and sanctions to individuals; risk exposure to the organisation; conflict with other investigations; limited understanding of how and why incidents are analysed; and ill-defined pathways and mechanisms to affect change and transfer knowledge.

It was also established that further barriers stem from the learning culture within an organisation including the adoption of defence routines designed to pretend that learning has occurred when in fact there has been a cover-up of mistakes in order to avoid embarrassment or threat. Conversely the literature review identified numerous enablers to organisational learning. These include well-defined principles, established processes and policy, clear mandate and commitment from executives, established oversight body and governance, an analysis capability embedded within a learning cycle, knowledge transfer strategies, and a strong organisational learning culture. Consequently, the outcome from the literature review was used to inform the construction of the Framework, with the identified enablers adopted as foundational elements and as a counter measure to the barriers of organisational learning.

RQ4. As a result of asking and answering research questions 1, 2 and 3, can a Framework explaining the relationship between critical police incidents and organisational learning be developed which will aid QPS in achieving continuous improvement expeditiously.

The results of asking and answering research questions 1, 2 and 3 informed the construction of the Framework as did the researcher's own personal police knowledge. To fully answer RQ4 and determine if the Framework will aid the QPS in achieving continuous improvement expeditiously, the five coronial case studies were examined using thematic analysis methods. The results identified that the major components of the Framework existed in the Coroner's process and therefore similar findings and recommendations could be achieved.

Of note, the results highlighted that QPS analyses of critical police incidents could identify lessons and commence change improvement activities two years and nine months sooner compared to waiting for the Coroner's recommendations. When considered holistically, the application of the coronial case studies to the Framework demonstrates the efficacy of the Framework in achieving findings and recommendations that would aid the QPS in organisational learning and continuous improvement and more importantly, this can be achieved expeditiously.

A further benefit of this research was the outcomes achieved as a result of the learning contract representing an agreement between the researcher, the QPS, and the University of Southern Queensland (USQ). Fergusson, Allred and Dux (2018) refer to this as the 'triple dividend' meaning a benefit for: the individual; the organisation; and the profession. The individual dividend includes a contribution to the researcher's personal and professional development by achieving pre-determined learning objectives.

The organisational dividend includes a benefit to QPS improvement through innovation, problem solving, new data and analysis, product development and strategy. The professional dividend includes a benefit to academia and professional practice with the results of the work-based project, supported by academically sound evidence and rigorous research design, contributing to enhanced practices.

With regards to the researcher's personal and professional development, the following pre-determined learning objectives have been achieved:

Intellectual Capabilities -

- Provide innovative solutions that enable the evaluation and critique of critical police incidents in a contemporary police environment.
- Demonstrate the benefits of conducting analyses of critical police incidents in an expeditious manner, to develop strategies for knowledge management and organisational learning.

Methodological Capabilities -

- Critically analyse and assess current work methods and processes to identify optimal alternatives from a practitioner perspective.
- Identify, analyse and evaluate internal and external data sources from an impartial perspective.

Personal and Social Capabilities -

- Embrace and articulate cultural differences and challenges that may influence research objectives and industry solutions.
- Leverage personal potential and capabilities to drive change regarding the knowledge management of critical police incidents.
- Conduct rigorous research to combine academic and professional perspectives with a direct alignment to critical police incidents.

Communication-Related Capabilities -

- Demonstrate superior communication skills appropriate for advancing new industry knowledge through a written thesis and publication.

In addition to the pre-determined learning objectives, the Professional Studies program had a further profound effect on the researcher's standing as a scholarly professional and life-long learner. During the program, research participants became widely known to the QPS Executive and peers as undertaking higher level work-based research. The significant contribution of discretionary effort above and beyond normal work hours, over an extended period, has been recognised as a commitment to the QPS while the completion of the program has demonstrated an ability to solve strategic problems and achieve outcomes.

On a personal level, completion of the Professional Studies program has provided academic competencies and capabilities such as critical thinking, research methodology and academic writing. The result being an enhanced professional identity that continues to develop whereby the researcher is more confident in leading their community of practice, influencing strategic direction and enhancing organisational performance. Further, the research experience and knowledge gained throughout the program has buoyed the desire to proactively undertake further complex work-based problems knowing that they have the tools and critical thinking ability to achieve successful outcomes.

Contributions to the QPS can be described as tangible and intangible benefits. Tangible benefits include productivity gains and process improvement. The development of a critical incident analysis framework promotes continuous improvement in training, practices and procedures which ultimately improves the QPS' capability to deliver effective and efficient policing services. This translates to an increased capacity, and therefore productivity gains, to meet current and future demands for service. The process improvement benefits are realised in two ways. Firstly, the Framework reflects a novel and repeatable business process by which lessons are learned from critical police incidents and changes made expeditiously. Secondly, the Framework is tethered to existing governance arrangements. This provides an intuitive, coordinated and streamlined approach for the escalation of lessons learned plus the transfer of new knowledge across all levels of the QPS.

Intangible benefits can be realised as a contribution to the QPS' strategic direction, increased community satisfaction, and enhanced reputation. The Framework, and critical police incident analysis process, contributes to the QPS strategic direction through direct alignment with the QPS strategic enablers of prevent, disrupt, respond and investigate. In particular, the analysis process leverages the parent themes of pre-incident, incident, and post-incident for the primary purpose of developing enhanced prevention, disruption, response and investigation strategies.

Increased community satisfaction is realised as the Framework provides a mechanism for the QPS to self-analyse the actions of its workforce which results in the ongoing delivery of improved services that meets or exceeds community expectations. While enhanced reputation, public perception and police legitimacy is realised by committing to a process that demonstrates a high level of transparency and accountability to the community of Queensland.

The contribution to USQ has been achieved through enhancing professional practice supported by academically sound evidence, observations and rigorous research design. This research project combined analytical, problem-solving skills and industry knowledge to develop a conceptual framework that enables the analysis of critical police incidents in a contemporary police environment. This knowledge discovery, in the context of critical police incidents and organisational learning, has established new industry knowledge as clearly narrated through this written thesis.

A further benefit can be described as academic excellence which supports and strengthens the quality and reputation of USQ. The ongoing partnership with the QPS, plus other entities, facilitates a nexus between academia and industry. This places USQ at the forefront of assisting with developing real-world solutions to contemporary issues and increases their standing as leaders in the field of knowledge creation.

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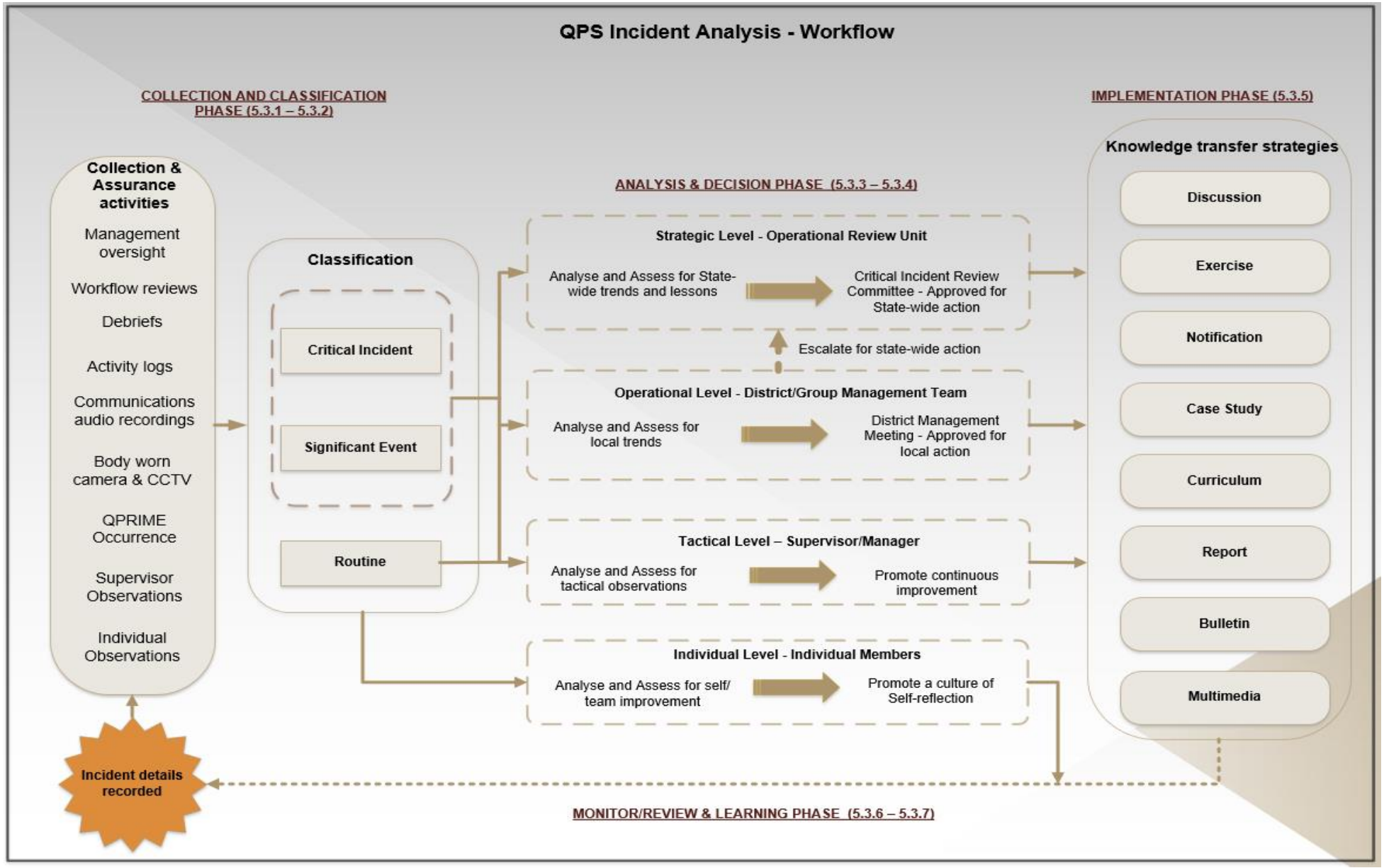
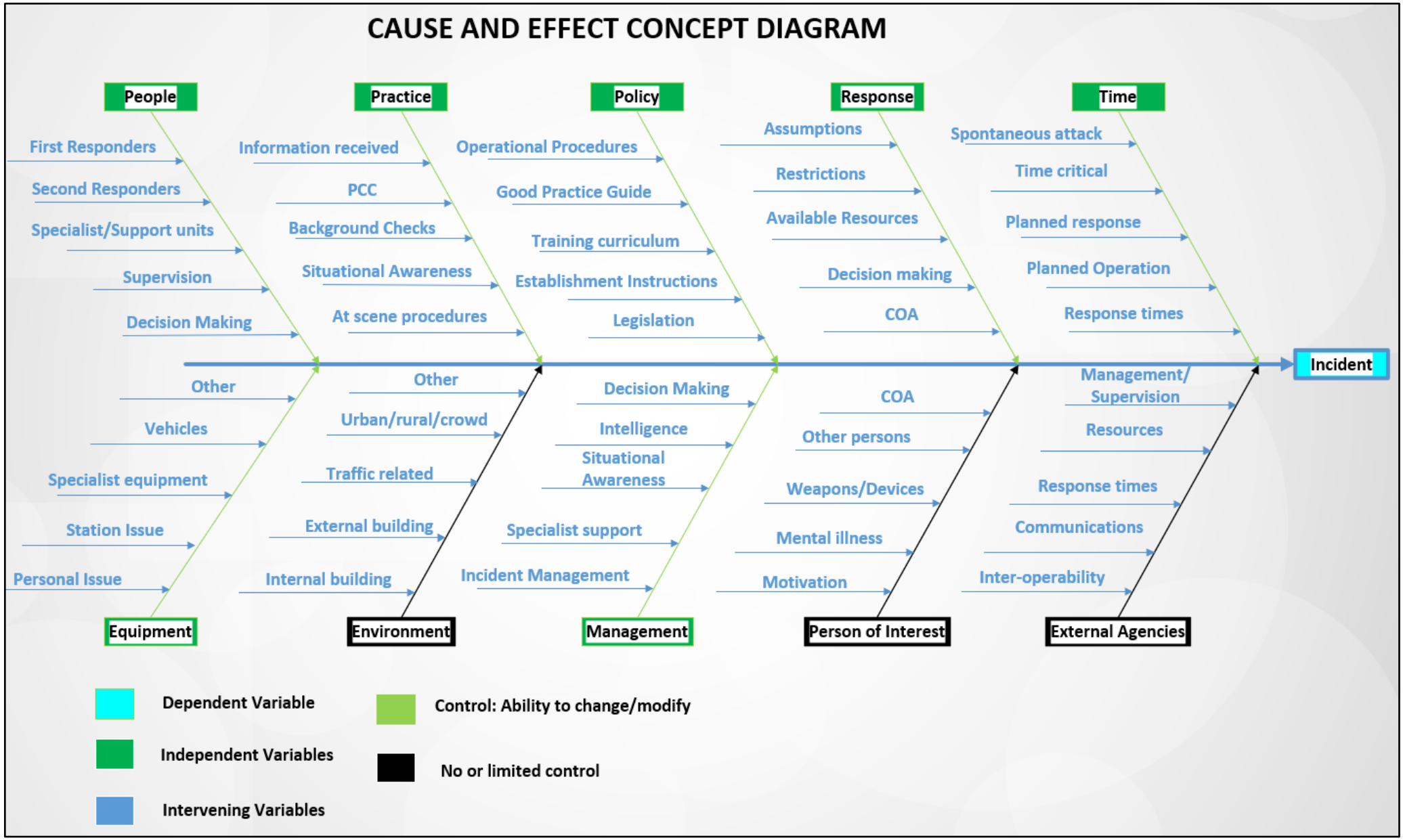
Appendix A


QPS Incident Analysis - Workflow
COLLECTION AND CLASSIFICATION PHASE (5.3.1 – 5.3.2)
Collection & Assurance activities
Management oversight
Workflow reviews
Debriefs
Activity logs
Communications audio recordings
Body worn camera & CCTV
QPRIME Occurrence
Supervisor Observations
Individual Observations
Classification
Critical Incident
Significant Event
Routine
ANALYSIS & DECISION PHASE (5.3.3 – 5.3.4)
Strategic Level - Operational Review Unit
Analyse and Assess for State-wide trends and lessons
Critical Incident Review Committee - Approved for State-wide action
Escalate for state-wide action
Operational Level - District/Group Management Team
Analyse and Assess for local trends
District Management Meeting - Approved for local action
Tactical Level – Supervisor/Manager
Analyse and Assess for tactical observations
Promote continuous improvement
Individual Level - Individual Members
Analyse and Assess for self/ team improvement
Promote a culture of Self-reflection
IMPLEMENTATION PHASE (5.3.5)
Knowledge transfer strategies
Discussion
Exercise
Notification
Case Study
Curriculum
Report
Bulletin
Multimedia
Incident details recorded
MONITOR/REVIEW & LEARNING PHASE (5.3.6 – 5.3.7)

Appendix B

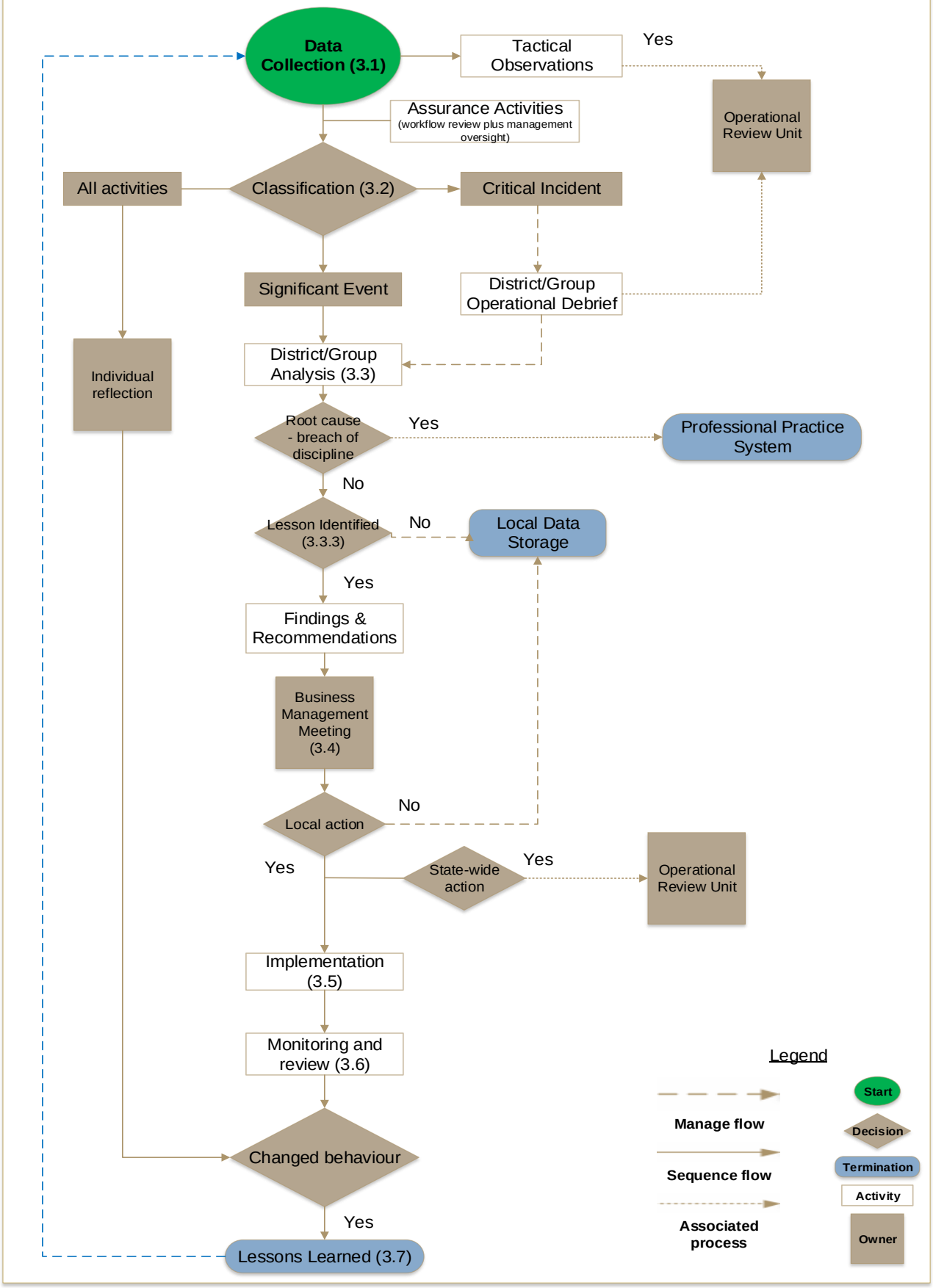
Organisational Capabilities	Elements of capability								External Elements			
	Communications	Practice	Policy	Training	Equipment	Organisation	Management	Response	Person of Interest	Environment	Time	Other Agencies
Frontline Operations												
Public Order												
Canine Operations												
Aviation Operations												
Railway Operations												
Marine Operations												
Disaster Management												
Search and Rescue												
Mounted Operations												
Weapons Licensing												
Special Emergency Response												
Negotiator Response												
Explosive Ordinance Response												
Protective Services												
Forensic Services												
Communications Operations												
Information Management												
Counter Terrorism												
Intelligence												
Covert Operations												
Traffic Operations												
Investigations												

Appendix C

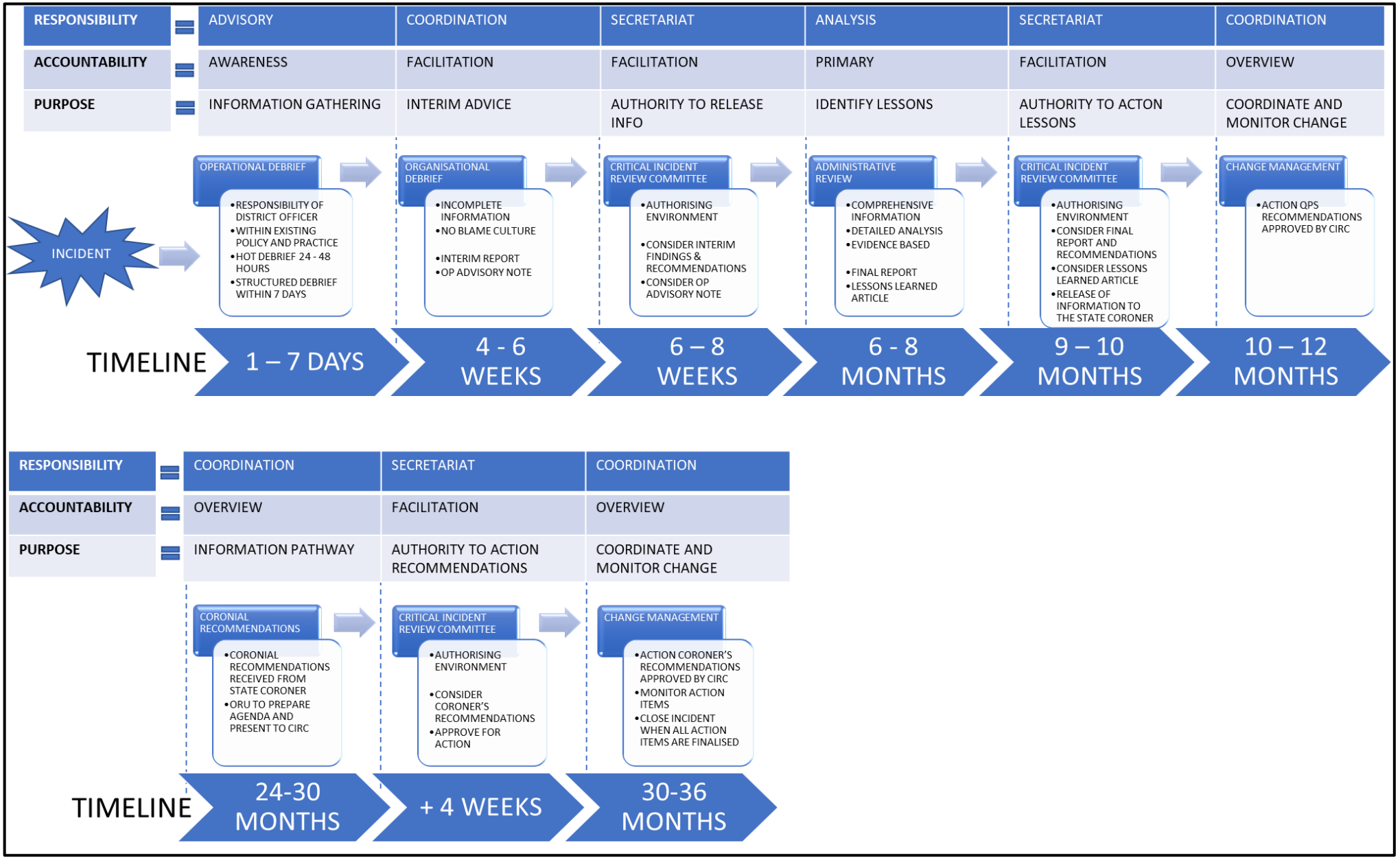

CAUSE AND EFFECT CONCEPT DIAGRAM
People
Practice
Policy
Response
Time
First Responders
Second Responders
Specialist/Support units
Supervision
Decision Making
Information received
PCC
Background Checks
Situational Awareness
At scene procedures
Operational Procedures
Good Practice Guide
Training curriculum
Establishment Instructions
Legislation
Assumptions
Restrictions
Available Resources
Decision making
COA
Spontaneous attack
Time critical
Planned response
Planned Operation
Response times
Incident
Other
Vehicles
Specialist equipment
Station Issue
Personal Issue
Other
Urban/rural/crowd
Traffic related
External building
Internal building
Decision Making
Intelligence
Situational Awareness
Specialist support
Incident Management
COA
Other persons
Weapons/Devices
Mental illness
Motivation
Management/ Supervision
Resources
Response times
Communications
Inter-operability
Equipment
Environment
Management
Person of Interest
External Agencies
Dependent Variable
Independent Variables
Intervening Variables
Control: Ability to change/modify
No or limited control

Appendix D

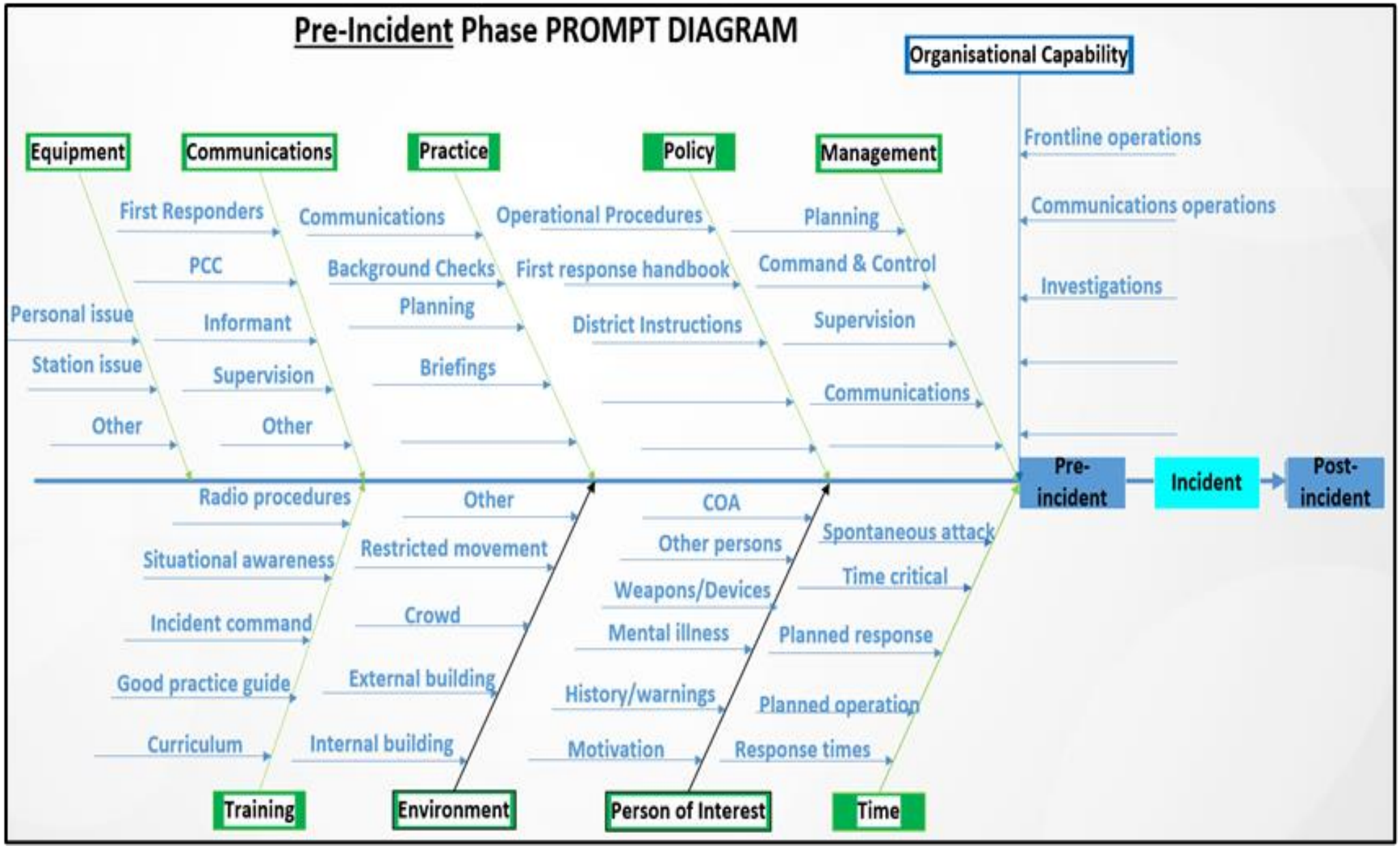
Incident Analysis – District/Group Level Decision process map



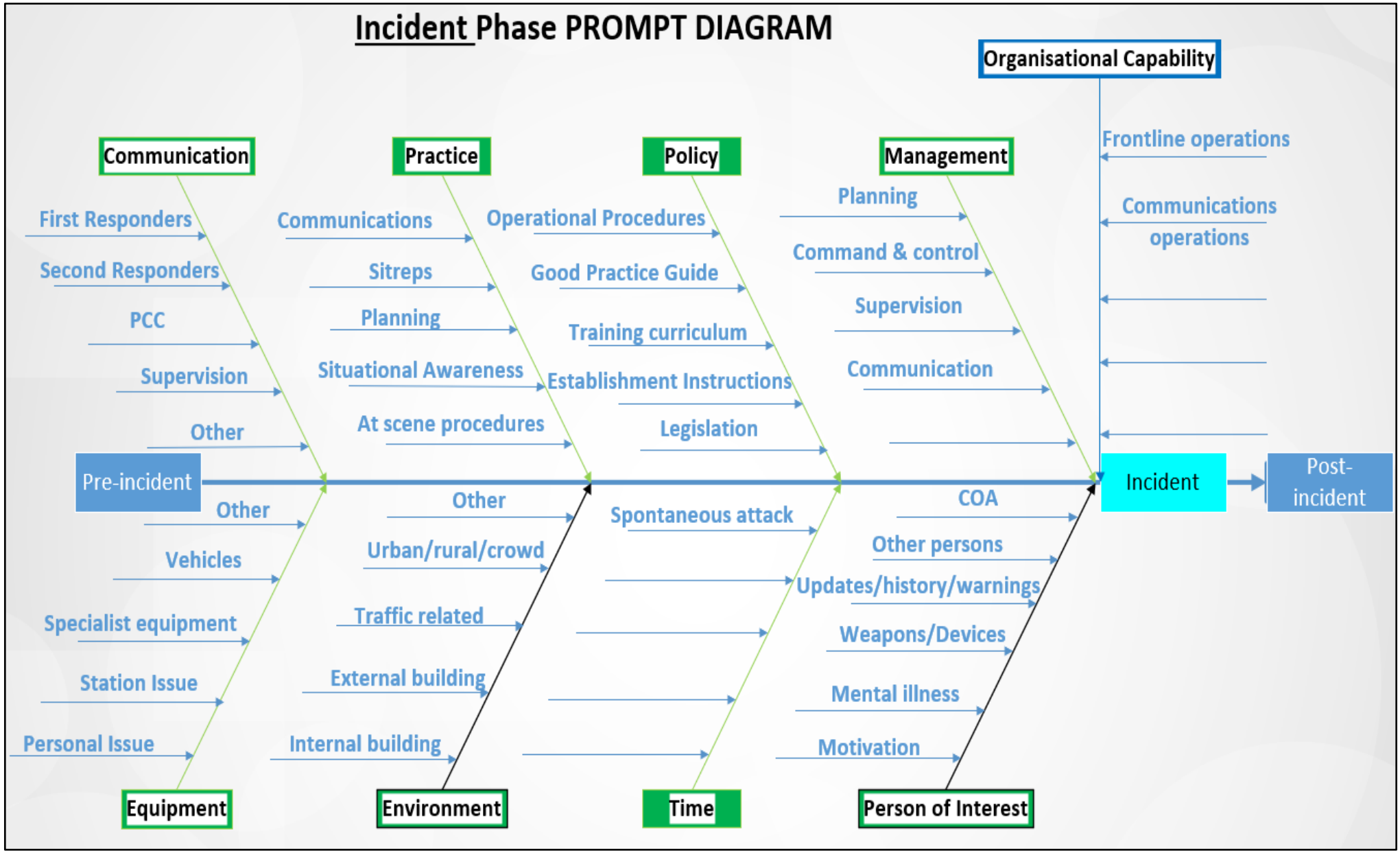
Appendix E


RESPONSIBILITY
ADVISORY
COORDINATION
SECRETARIAT
ANALYSIS
SECRETARIAT
COORDINATION
ACCOUNTABILITY
AWARENESS
FACILITATION
FACILITATION
PRIMARY
FACILITATION
OVERVIEW
PURPOSE
INFORMATION GATHERING
INTERIM ADVICE
AUTHORITY TO RELEASE INFO
IDENTIFY LESSONS
AUTHORITY TO ACTON LESSONS
COORDINATE AND MONITOR CHANGE
INCIDENT
OPERATIONAL DEBRIEF
•RESPONSIBILITY OF DISTRICT OFFICER
•WITHIN EXISTING POLICY AND PRACTICE
•HOT DEBRIEF 24 - 48 HOURS
•STRUCTURED DEBRIEF WITHIN 7 DAYS
ORGANISATIONAL DEBRIEF
•INCOMPLETE INFORMATION
•NO BLAME CULTURE
•INTERIM REPORT
•OP ADVISORY NOTE
CRITICAL INCIDENT REVIEW COMMITTEE
•AUTHORISING ENVIRONMENT
•CONSIDER INTERIM FINDINGS & RECOMMENDATIONS
•CONSIDER OP ADVISORY NOTE
ADMINISTRATIVE REVIEW
•COMPREHENSIVE INFORMATION
•DETAILED ANALYSIS
•EVIDENCE BASED
•FINAL REPORT
•LESSONS LEARNED ARTICLE
CRITICAL INCIDENT REVIEW COMMITTEE
•AUTHORISING ENVIRONMENT
•CONSIDER FINAL REPORT AND RECOMMENDATIONS
•CONSIDER LESSONS LEARNED ARTICLE
•RELEASE OF INFORMATION TO THE STATE CORONER
CHANGE MANAGEMENT
•ACTION QPS RECOMMENDATIONS APPROVED BY CIRC
TIMELINE
1 – 7 DAYS
4 - 6 WEEKS
6 – 8 WEEKS
6 - 8 MONTHS
9 – 10 MONTHS
10 – 12 MONTHS
RESPONSIBILITY
COORDINATION
SECRETARIAT
COORDINATION
ACCOUNTABILITY
OVERVIEW
FACILITATION
OVERVIEW
PURPOSE
INFORMATION PATHWAY
AUTHORITY TO ACTION RECOMMENDATIONS
COORDINATE AND MONITOR CHANGE
CORONIAL RECOMMENDATIONS
•CORONIAL RECOMMENDATIONS RECEIVED FROM STATE CORONER
•ORU TO PREPARE AGENDA AND PRESENT TO CIRC
CRITICAL INCIDENT REVIEW COMMITTEE
•AUTHORISING ENVIRONMENT
•CONSIDER CORONER'S RECOMMENDATIONS
•APPROVE FOR ACTION
CHANGE MANAGEMENT
•ACTION CORONER'S RECOMMENDATIONS APPROVED BY CIRC
•MONITOR ACTION ITEMS
•CLOSE INCIDENT WHEN ALL ACTION ITEMS ARE FINALISED
TIMELINE
24-30 MONTHS
+ 4 WEEKS
30-36 MONTHS

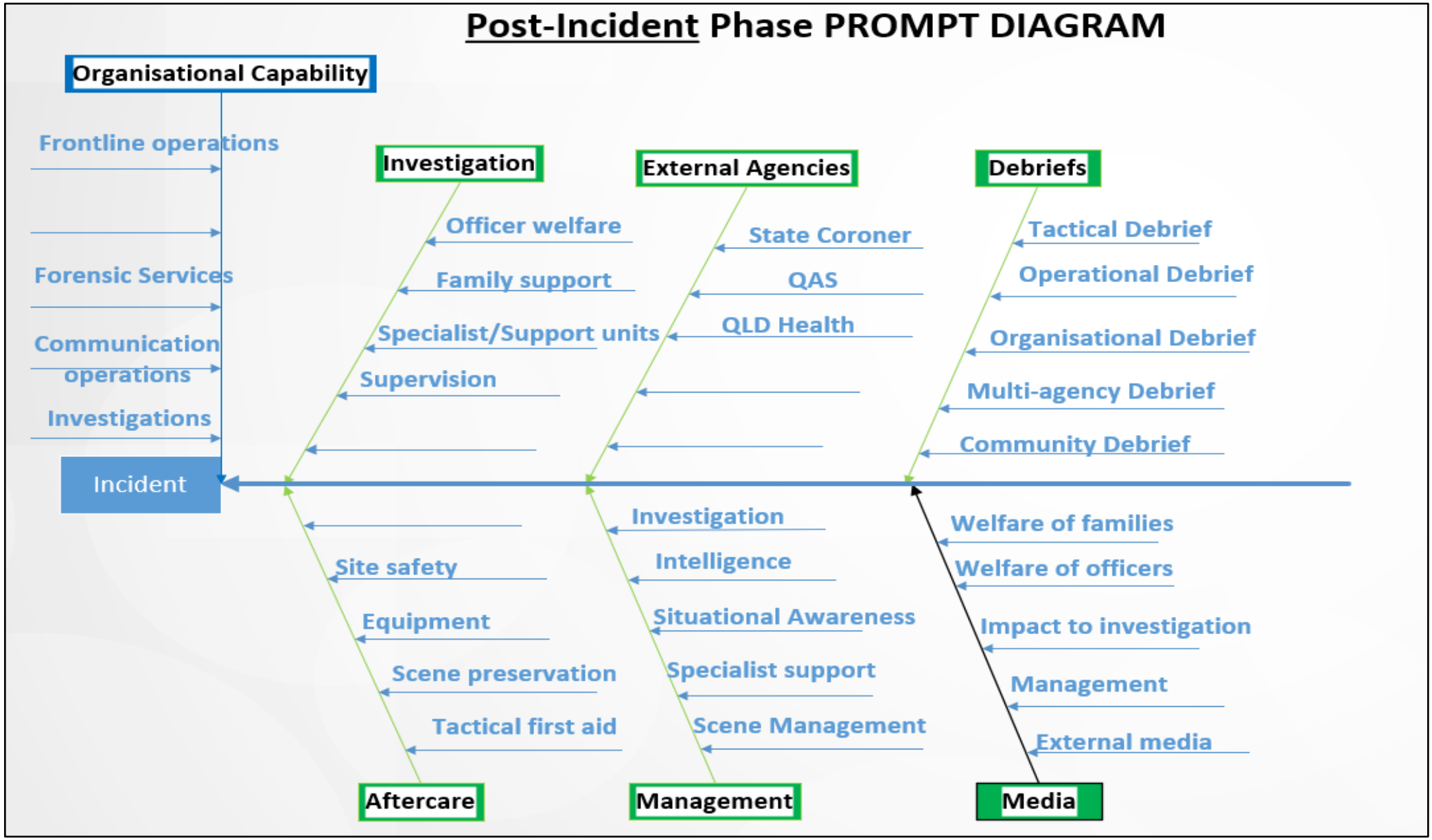
Appendix F


Pre-Incident Phase PROMPT DIAGRAM
Organisational Capability
Frontline operations
Communications operations
Investigations
Equipment
Communications
Practice
Policy
Management
First Responders
PCC
Personal issue
Informant
Station issue
Supervision
Other
Other
Communications
Background Checks
Planning
Briefings
Other
Operational Procedures
First response handbook
District Instructions
Planning
Command & Control
Supervision
Communications
Pre-incident
Incident
Post-incident
Radio procedures
Situational awareness
Incident command
Good practice guide
Curriculum
Other
Restricted movement
Crowd
External building
Internal building
COA
Other persons
Weapons/Devices
Mental illness
History/warnings
Motivation
Spontaneous attack
Time critical
Planned response
Planned operation
Response times
Training
Environment
Person of Interest
Time

Appendix G


Incident Phase PROMPT DIAGRAM
Organisational Capability
Frontline operations
Communications operations
Communication
Practice
Policy
Management
First Responders
Second Responders
PCC
Supervision
Other
Communications
Sitreps
Planning
Situational Awareness
At scene procedures
Operational Procedures
Good Practice Guide
Training curriculum
Establishment Instructions
Legislation
Planning
Command & control
Supervision
Communication
Pre-incident
Incident
Post-incident
Other
Vehicles
Specialist equipment
Station Issue
Personal Issue
Other
Urban/rural/crowd
Traffic related
External building
Internal building
Spontaneous attack
COA
Other persons
Updates/history/warnings
Weapons/Devices
Mental illness
Motivation
Equipment
Environment
Time
Person of Interest

Appendix H


Post-Incident Phase PROMPT DIAGRAM
Organisational Capability
Frontline operations
Forensic Services
Communication operations
Investigations
Incident
Investigation
Officer welfare
Family support
Specialist/Support units
Supervision
External Agencies
State Coroner
QAS
QLD Health
Debriefs
Tactical Debrief
Operational Debrief
Organisational Debrief
Multi-agency Debrief
Community Debrief
Site safety
Equipment
Scene preservation
Tactical first aid
Aftercare
Investigation
Intelligence
Situational Awareness
Specialist support
Scene Management
Management
Welfare of families
Welfare of officers
Impact to investigation
Management
External media
Media

Appendix I

	Elements of capability								External Elements			
Case Study	**Communications**	**Practice**	**Policy**	**Training**	**Equipment**	**Organisation (team and support structures)**	**Management**	**Response**	**Person of Interest**	**Environment**	**Time**	**Other Agencies**
1	Dissemination of information and updates	Adequacy of the ESC investigation Body worn camera as evidentiary tool	UOF model Firearms Mental Health BWC	Firearms Handcuffing post shooting Mental Health	UOF options BWC	*2 officer crew*	Welfare of officers	Mental health incidents	*Mental illness*	*External*	*night*	Information sharing
2	Dissemination of information and updates	Adequacy of the ESC investigation Body worn camera as evidentiary tool	UOF model Firearms Mental Health BWC Regulation of replica firearms	Firearms Handcuffing post shooting Mental Health	UOF options BWC	*Multiple officers* *PFCP* *SERT* *Negotiators*	Welfare of officers Application of standard plans Positioning of the inner cordon	Mental health incidents Effectiveness of the negotiation process	*Mental illness*	*External*	*afternoon*	Information sharing
3	Dissemination of information and updates Managing nuisance calls from persons in crisis	Adequacy of the ESC investigation Body worn camera as evidentiary tool	UOF model Firearms Mental Health BWC Managing nuisance calls from persons in crisis	Firearms Handcuffing post shooting Mental Health Managing nuisance calls from persons in crisis	UOF options BWC	*Multiple officers*	Welfare of officers	Mental health incidents Methods available to first response officers	*Mental illness*	*internal*	*night*	Information sharing
4	Dissemination of information and updates	Adequacy of the ESC investigation Body worn camera as evidentiary tool	UOF model Firearms Mental Health BWC	Firearms Handcuffing post shooting Mental Health	UOF options BWC	*2 officer crew*	Welfare of officers	Mental health incidents	*Mental illness*	*external*	*afternoon*	Information sharing
5	Dissemination of information and updates	Adequacy of the ESC investigation Body worn camera as evidentiary tool Current practice of escorting a person to a place of safety	UOF model Firearms Mental Health BWC	Firearms Handcuffing post shooting Mental Health	UOF options BWC	*Multiple officers* *Dog squad units*	Welfare of officers	Mental health incidents	*Mental illness*	*external*	*night*	Information sharing Mental health assessment by GCU Hospital Adequacy of communication between police and hospital staff