UNIVERSITY
OF SOUTHERN
QUEENSLAND

A COMPARATIVE ANALYSIS OF CLUSTERED AND CENTRALISED POLICING DEPLOYMENT MODELS: A MIXED METHOD STUDY IN METROPOLITAN TOWNSVILLE

A Thesis

submitted by

Graeme Matthew Paine

For the award of

Master of Professional Studies (Research)

2021

ABSTRACT

The deployment of resources in support of service delivery to uphold the rule of law is one of the most significant functions of policing. Organisational design is a critical component in how resources are deployed and coordinated, with recent literature providing a classification of two predominant policing models: clustered and centralised. A key decision for any policing organisation is the adoption of a model that aligns with critical environmental factors. This study identifies a number of recent reviews and audits which recommend consideration of police deployment models that are efficient, effective, flexible and responsive to police service delivery needs. The current situation in Townsville is one of increasing rates of offending and calls for service, and decreasing community confidence in police. With five 24-hour police stations in metropolitan Townsville operating within less than 20 kilometres of the central business district, this study employs an explanatory sequential mixed-method research design to identify how and to what extent the existing clustered, station-based policing deployment models relate to service delivery in metropolitan Townsville. The weight of research undertaken highlights the cross divisional nature of offending in Townsville, the lack of effective tasking and coordination of proactive resources between officers in charge, and the inefficiency of crews operating across divisional boundaries when responding to calls for service. The evidence informs the development of an alternative police deployment model for metropolitan Townsville, incorporating elements of centralisation and clustering. The deployment model and associated research contributes to the body of police research but addresses an area of study in regional Queensland that has had limited specific research. The research creates a platform for further study or examination and provides practitioners with an opportunity for application of findings.

CERTIFICATION OF THESIS

This Thesis is entirely the work of Graeme Matthew Paine, 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: Murray Gough

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

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

Chapter 6

LIST OF FIGURES

LIST OF MAPS

Chapter 2

CHAPTER 1: INTRODUCTION

This chapter provides an overview of key topics covered in the research. The chapter is arranged in the following order: 1.1 provides the context of the research to policing in Queensland; 1.2 lists the research questions; 1.3 describes the method of study; 1.4 discusses professional studies; 1.5 discusses reflective practice; 1.6 provides details of prior learning; 1.7 lists the learning objectives and dividends; and 1.8 provides an overview of the thesis.

1.1 Context of Policing in Queensland

The Queensland Police Service (QPS) is a large organisation providing an essential service to the Queensland community. To ensure the organisation is well-placed to meet the needs of a dynamic and diverse community, the QPS has four strategic objectives in their 'Strategic Plan' (QPS, 2020c); incorporating a focus on embracing new ideas that strengthen capability to manage crime and deliver safe and secure communities. The practical aspects of this objective require the identification and analysis of opportunities to enhance the organisation's capacity to meet internal and external contemporary demands.

In line with this objective, one of the most significant functions of policing is the deployment of resources in support of service delivery to uphold the rule of law. Current QPS deployment models have police stations clustered in locations set geographically, but the emergence of technology has impacted crime and facilitated a more mobile police service, resulting in questions as to whether the current 'clustering' model is the most effective for areas with police stations in close proximity to each other.

In 2012, the Queensland Commission of Audit *Interim Report* (QLD Government, 2012, p. 10-11) was released and found "the Queensland Government cannot continue to provide services to the same level or in the same way as at present. There is a need to rationalise core service delivery functions and evaluate whether there may be better ways of delivering some services".

As a consequence, the QPS (2012, p. 7) commenced the *Police and Community Safety Review* (PACSR) in late 2012 with stated objectives including: improving

frontline service delivery; enabling flexible and mobile responses to problem cases and places; and achieving efficiency gains. Whilst these objectives aligned with broader government objectives, the policing 'tone' was consistent with findings from similar reviews into policing in New South Wales (NSW) and Victoria. The *NSW Commission of Audit report* (NSW Government, 2012, p. 127) identified the clustered Local Area Command structures adopted by the NSW Police Force "may not promote the most efficient allocation of policing resources across boundaries", highlighting that "resource allocation is focused more on maintaining the existing distribution of strength rather than on where resources are needed".

The consistent theme of these reports, with a focus on resource allocation and service delivery was reinforced in the *Final Report* of the Queensland Commission of Audit (QLD Government, 2013, pp. 1-43) which provided a number of recommendations for the QPS including: resourcing decisions for the QPS must "support the application of police service models that are flexible and efficient in managing demand; and achieve better integration of workforce and infrastructure needs." The *Final Report* (QLD Government, 2013, p. 43) went further and recommended the QPS "adopt alternative models for service delivery; and adopt a broader infrastructure strategy that is more responsive to modern police service delivery needs."

To some extent, the release of the PACSR *Final Report* (QPS, 2013a, p. 17) confirmed the need for change in these areas, identifying an existing organisational structure in the QPS that was "resource intensive, bureaucratic, compliance-focused and risk averse". The *Final Report* (QPS, 2013a, p. 19) also recommended the implementation of a new QPS organisational structure to "ensure policing services are effective and efficient, with police less restricted by boundaries" with a focus on "meeting the communities needs without being inappropriately restricted by boundaries".

Together, these reports reflect the significance of police command structures and their subsequent impact on the deployment of resources in respective areas. Following the release of the PACSR *Final Report* in 2013, the QPS commenced implementation of the recommendations, resulting in the creation of Patrol Groups – where each Patrol Group incorporated a number of police stations being clustered in a

specific geographical area; this structure is virtually identical to the Local Area Command structure utilised by the NSW Police Force.

Whilst the alignment of policing models within Australian police jurisdictions may appear beneficial, the model has been under scrutiny for some time. Weisburd and Eck (2004, p. 44) noted the clustering model is a 'one-size-fits-all application of reactive strategies including increasing agency size, generalised random patrols, rapid response to calls for service, reactive follow up investigations, and intensive enforcement." In 2015, Eck (2015) subsequently reflected on nearly 20 years of research identifying that crime is not equally spread throughout communities, it is generally concentrated on a small number of specific places. Eck (2015) and Lum and Nagin (2017) asserted that evidence-based interventions at these places reduces crime, generally without displacing it to other areas; whilst Sherman (2013) provides similar evidence in line with the specific targeting of repeat offenders.

The weight of research suggests the proactive deployment and coordination of resources in a problem-focused and targeted way, rather than generalised patrolling is key to reducing crime and improving community safety. In this regard, the nexus between the deployment of resources and organisational design is where the opportunity lies for Townsville; and given the lack of existing research on the issue, especially within Queensland, this is the focus of the thesis.

1.2 Research Questions

With five 24-hour police stations in metropolitan Townsville operating within less than 20 kilometres of the central business district, this study will address two research questions (RQ): RQ 1: How and to what extent do the existing clustered, station-based policing deployment models relate to service delivery in metropolitan Townsville; and RQ 2: What alternative model could be advanced as a result of this research.

As the former Officer in Charge (OIC) of the largest of those stations, Townsville Police Station, the researcher is well-placed to conduct this study. RQ 1 incorporates the following sub-research questions: Sub-RQ 1: What is the current standard of police service delivery in metropolitan Townsville, and how has it been

achieved? Sub-RQ 2: What impacts are the current police deployment models having on efficient police service delivery in metropolitan Townsville? Sub-RQ 3: How efficient and effective are the existing police deployment models to meet the needs of the Townsville community and the strategic objectives of the QPS? Outcomes of the research undertaken when addressing RQ 1 will inform the model developed in response to RQ 2.

1.3 Method of Study

The research questions not only establish the agenda of the study, they require a specific research methodology. The research to be undertaken will employ a mixed methods approach within a Pragmatist paradigm, consisting of a two-phase explanatory sequential approach (Creswell, 2018, p. 221), adopting both qualitative and quantitative data collection methods to address the research question; this design can be notated as: QUAN > QUAL. This approach aligns with Armsby's (2000, p. 37) concept of Pragmatism given that the objectives of the work-based issue are problem-centred, involve the identification of effective actions (within the police deployment models) and the development of solutions (through identification of a new model).

The focus of sub-RQ 1 is quantitative and revolves around analysis of data sets to identify the standard of service delivery in metropolitan Townsville. The current police deployment models used by the five metropolitan police divisions will be identified and viewed against the two primary measures of police service delivery: responses to calls for service; and community confidence in police activities. In this regard, the QPS Computer Aided Dispatch (QCAD) program is the dispatch system that manages calls for service to the QPS. The system has the capacity to identify response times to calls for service. The National Survey of Community Satisfaction with Police (NSCSP) is one of the few existing tools to measure community perception of police activities. The data will be used to identify a base line of service delivery that can be compared to any other District or overall QPS results.

The method to address sub-RQ 2 is quantitative, adopting data mining and analysis as part of preparatory desktop research. A comprehensive data set has been generated from QCAD to identify the volume of calls for service generated within each of the five policing divisions in metropolitan Townsville. The data will be analysed to

determine the breakdown of calls for service within each division that were attended by officers allocated to the division, or officers from any of the other policing divisions or work units. Context on the issue will then be provided through questionnaire responses from the OICs of the metropolitan Townsville work units, with information used to determine what impact the current deployment models and associated demarcated boundaries have on efficient service delivery.

The efficiency and effectiveness of the current deployment models will be reviewed as part of the response to sub-RQ 3. This incorporates analysis of the rosters in the five metropolitan divisions in Townsville to determine the volume of 'discretionary tasks' used by individual OICs to provide a reflection on the efficiency of their roster. The effectiveness of the deployment models will be identified through analysis of rates of reported offending. Population data and OIC questionnaire responses will be used to provide further context around the data.

The use of a questionnaire within the research will incorporate extensive use of open-ended questions allowing free text responses from participant OICs. These responses will be subject to thematic analysis to allow the researcher to further demonstrate how related quantitative findings may be applied. This information, which has relevance to a number of the sub-research questions, will be used in conjunction with the researchers' knowledge and experience to develop an alternative police deployment model as part of the response to RQ 2, providing the catalyst for development of the practice-based project. As a former OIC of Townsville City division, the researcher is well placed to interpret related data and develop the alternative model due to his insider research status, as he shares an experiential base with OICs participating in the research (Asselin, 2003).

1.4 Professional Studies

Fergusson, Allred, Dux and Muianga (2018) suggest there is a growing demand for higher education to become more involved in work-based learning, work-based research, and professional development. Jennings (2012) suggests this demand is growing because the majority of adult learning occurs through experience, practice, conversations and reflections rather than formal learning in the workplace; he suggests that people learn 70% of what they know about their jobs informally. This aligns with

the provisions of the Australian Qualifications Framework (2013, p. 15), which incorporates a Masters' Degree (Research) at Level 9, specifying graduates must have "a body of knowledge that includes the understanding of recent developments in one or more disciplines; and advanced knowledge of research principles and methods applicable to the field of work or learning". This structure reflects the focus of professional studies incorporating practice and theory across multi- and trans-disciplines; and aligns with the researchers experience and approach to this current study. The concept is effectively summarised by Lester and Costley (2010, p. 567) "knowledge informs practice, which generates further knowledge, that in turn leads to changes in practice".

The alignment of work-based learning through professional studies helps personalise the study to an area of interest for participants. This not only increases the prospect of tangible benefits to participants' workplaces; it helps maintain the interest and relevance of participants. The research undertaken within this study is of significant personal and professional interest to the researcher. Bezanson (2008) suggests that when learning is not connected to some aspect of building the future we need or want we often lose interest in learning. Fergusson et al. (2018) suggest professional studies is a relevant and attractive option for mid-career professionals seeking to enhance learning and development in a context that has current and practical applications. The emergence of research producing evidence that emphasises the importance of work-based learning not only provides support when undertaking professional studies, it is changing the dynamics of the workplace. This a point reinforced by Cross (2012) when he suggests that talent chooses where to work, and power is now shifting from suppliers to customers as learning and work converge.

As a police officer for 26 years, the researcher has significant experience in a number of different roles and now finds himself in a position to genuinely influence decision-making. With the focus of professional studies incorporating multi- and trans-disciplines, it aligns exceptionally well with the researchers' work situation and provides a platform to develop capabilities in professional practice. This concept aligns with the research of Lester and Costley (2010, p. 568) where organisations respond positively to changes initiated by research from those already in positions of authority within the organisations, as opposed to those external. Whilst this is a perception issue,

it has a direct link to challenges within change management in large organisations, such as the QPS.

1.4.1 Benefits and Challenges of Professional Studies

Dweck (2012) suggests that motivation through engagement, effort and persistence is the key to creative accomplishment. This has been present throughout the researchers' career, and the opportunity to study in a professional studies program allows the researcher to channel that motivation into study related to his workplace. This context provides the researcher with a strong platform to avoid the assertion of Casebow and Ferguson (2012) that without immediate application, the acquired knowledge and skills resulting from a formal learning intervention are quickly forgotten.

1.4.2 Theoretical Foundations of Professional Studies

In terms of how learning is achieved within professional studies, Illeris (2004) identifies that learning in the workplace takes place in the encounter between the learning environments of the workplace and the employees learning process. He describes the learning environment as the opportunities for learning contained in all aspects of a person's surroundings, and the learning process as a continuous process building on one's past experiences that are shaped by future perspectives or goals.

In line with this, one of the strongest facets of professional studies is its relevance to the individual participant. Illeris (2004, pp. 434-435) highlights that given the history and prior knowledge of individuals impacting on their differing response to the same learning stimuli, genuine collective learning is unique due the diversity within a group. This is a challenge for learners in traditional learning where information is passed from the teacher to the student; it is content driven. Whereas the multi- and trans-disciplinary focus of professional studies programs enables enhanced individual learning as the learning is relative to the topic of interest selected by each participant; it is learner driven. This approach is described by Gregory (1994) as action-based, as professionals bring their own expertise and research their own practice to improve workplace performance. He expands on the concept further describing how it incorporates two main elements: action research, where participants investigate an

issue in their work situation in line with pre-determined research strategies; and action learning, where individuals learn within their organisational setting through reflection and action derived from peer group interaction. Police deployment models are a critical component of the researcher's workplace, where different models are facilitated and overviewed by a cohort of OICs reviewing and discussing the impacts of different models in their respective areas of responsibility.

The platform for such engagement within professional studies is group forums complementing self-directed and autonomous research, a process described by Johnson (2010) as learner led. Professional studies programs provide a framework of milestones and learning modules to guide participants during their research. Fergusson et al. (2018) describe four key learning milestones: developing a learning strategy; developing a research proposal; confirmation of candidature; and ethics approval. In terms of learning modules, given that these modules are not compulsory or assessable, the pathway to completing assessment pieces is dictated by individual student participation. Johnson (2010) identifies that this framework may not meet the social or academic needs of some participants, however, Nesbit (2012, p. 206) points out that learners must initiate and develop their learning experiences outside of formal organisational supports and utilise peers to problem-solve and move forward; hence the use of group forums in professional studies.

1.5 Reflective Practice

Whilst the Professional Studies framework is action-based and primarily self-directed, a central component of the program is reflective practice. Nilsen, Nordstrom and Ellstrom (2012) describe reflective practice as a mechanism to translate experience into learning by examining one's attitudes, beliefs and actions in order to draw conclusions that enable better choices or responses in the future. The process is grounded in the requirement for practitioners to combine their knowledge as experts in their field, with knowledge obtained through related research. This subsequently establishes the two elements of the process: practice-based knowledge and research-based knowledge.

Schultz (2005) describes practice-based knowledge as the intuitive or tacit knowledge underlining the process of action, where the individual is unaware of the

knowing during the action as there is focus on the goal and not the decision-making elements. Nilsen et al (2012) describe research-based knowledge as knowledge grounded in analysis of research, theories, reports, concepts, models and frameworks. It is content driven and largely results from the significant investigation of an issue.

In terms of applicability, Schultz (2005) suggests the integration of both processes is what distinguishes an expert from an experienced actor, as the actor concentrates on the best performance of their action, whereas the expert reflects on action in the context of experience and knowledge. Nilsen et al (2012) propose that knowledge from both is translated into different levels of action. The first are skill-based action and rule-based action, these are aligned with practice-based knowledge on the basis of action using experience, requiring little subjective effort. Whereas the second is knowledge-based action or reflective action, these are aligned with research-based knowledge incorporating analysis or reflection of tasks and goals using factual information.

The elements and actions of reflective practice provide a strong platform for meaningful learning, as there is interaction between the ideas and findings of research, and the knowledge, experiences and attitudes of individuals; a process that can be incorporated into either creative or adaptive learning. Whilst there may be an element of conflict or ambiguity between tacit beliefs and what research identifies, this should not be viewed as a negative as it provides a motivated, self-directed learner with an opportunity to identify new ways of reasoning and behaving.

Whilst reflective practice is an exceptionally important process for any professional seeking meaningful self-development, there are challenges involved due to the pace and demands of modern workplaces. Nilsen et al (2012) and Nesbit (2012) both emphasise the importance of not being too narrow in one's reflection. Fergusson, van der Laan and Baker (2019) suggest the basis for narrow reflection often occurs because of the limited concept of what is considered work, suggesting that reflection should consider work from a broader perspective as the "innate human experience of effort, activity, and energy given to tasks that contribute to the overall social and economic welfare of communities and environments from which personal meaning and benefit are derived" (p.3). Individual experiences in differing environments and

situations, both work and daily life related, help provide context to contemporary society where there are continual environmental changes and demands.

Nesbit (2012) identifies the importance of the quality of reflection, not just the act or process of doing it. This is critical within self-reflection (practice-based) as it is not something that is done to a person, it is self-initiated. The capacity to address this (and the emotional responses associated with identification of negative issues) requires skilful navigation by the participant and can be complemented by external strategies such as 360-degree feedback and the use of mentors. Nesbit (2012) relates this back to the development of leaders, highlighting how gaining insight into a leader's developmental needs is a key part in the development process. Where reflection identifies developmental needs, it fosters developmental strategies, which, for a self-directed professional, contributes to the motivation to pursue developmental actions.

Doncaster and Thorne (2000) provide a detailed insight into how reflective practice relates to professional studies programs. Participants must reflect on their professional learning and explicitly apply the context of this learning to the area of intended study. The process is designed to develop coherent, focused and feasible study programs tailored to the professional needs of each participant. In this regard, the identification of prior learning is an important step in identifying what a participant already knows with the view to establishing what the participant needs to learn from the proposed study, resulting in learning objectives. Fergusson, et al. (2019, p. 7) suggest that students in professional studies programs, such as the one the researcher is engaged in, use "micro-reflective practice in a type of autoethnography, but also apply reflective practice throughout the learning and research journey at macroscopic levels of the work-based project and during the development and implementation of the research project". In line with this, the milestones within the professional studies program can be conceived as having a reflective nature, enabling students to function as practice professionals and researching professionals, fulfilling the goals of work-based learning (Fergusson et al. 2019).

These concepts were applied by the researcher to identify prior learnings as a basis for establishing personal professional objectives within the professional studies program; this will now be discussed in more detail.

1.6 Statement of Prior Learning

Daudelin's (1996) model of reflective analysis highlights a starting point of describing events and people, followed by an account of what occurred, the actions involved, and a subsequent analysis of why the response was implemented with a view to learning or identifying learning opportunities. The process can occur at an individual, pair, or group level.

In order to establish the researchers' strengths and weaknesses of prior learning, and reflect on his practice-based knowledge (for this study), the researcher undertook extensive reflection analysis incorporating a wide range of personal attributes and professional roles to ensure he had a broad base of experiences from which to identify learnings. As a result, the researcher established that his top five most prolific learning areas and professional capabilities were: communication skills; problem-solving; collaboration/teamwork; emotional intelligence; and analytical skills. The researcher identified his least prolific areas as: technology adoption; creativity and innovation; work methods/process logic; critical judgement; and information management and dissemination.

1.7 Learning Objectives and Dividends

Holden (2015) emphasises how learning objectives clarify the purpose of instruction to ensure training is successful and objectives are achieved. Clark (1999) highlights how Bloom's taxonomy, as it relates to learning objectives, consists of three overlapping domains: cognitive (knowledge recall and intellectual skills), affective (behaviours such as emotion, attitudes or values) and psychomotor (physical and kinaesthetic skills). Professional studies programs incorporate cognitive objectives aligned with Clark's (1999) concepts that are sequenced from lowest to highest levels based on the following: knowledge, comprehension, application, analysis, synthesis and evaluation; with the latter two being targeted at master and doctorate level. Holden (2015) proposes that each learning objective should be structured with the following component parts: condition, behaviour and degree; all relative to an audience.

In consideration of these guidelines and intended topic of research, relative to analysis of learning areas and professional capabilities, the researcher created the following learning objectives for his professional studies program:

1. *Develop high level research skills and knowledge by conducting quantitative and qualitative research investigating police deployment models in metropolitan Townsville and documenting these in a research article.*

Learning objective 1 addresses the areas of limited development from the researchers' self-reflection relating to work methods / process logic, and information management and dissemination.

2. *Enhance critical thinking skills by critically evaluating research studies associated with practice in policing in order to assess their quality and applicability in improving the functions of police deployment models.*

Learning objective 2 addresses the area of limited development from the researchers' self-reflection relating to critical judgement.

3. *Make significant intellectual contributions to the body of knowledge in policing by creating innovations in practice in order to develop strategic solutions for the deployment of police.*

Learning objective 3 addresses the areas of limited development from the researchers' self-reflection relating to creativity, innovation and adopts technology.

4. *Demonstrate superior communications skills appropriate to advanced policing professionals by using high level communication strategies to compose and support my research.*

Learning objective 4 develops the researchers' communications skills to a higher level when dealing with executive management throughout his research.

The purpose of these objectives is to create measurable and evidence-based contributions in three different capacities: individual, organisation, and knowledge. At an individual level, both personally and professionally, the targeting of areas where the researcher has less exposure to specific learning areas and capabilities will enhance

his capacity both personally and professionally; the achievement of these learning objectives is a strong personal and professional development opportunity. Organisationally, the QPS and any police agency will benefit from the analysis and identification of strategies to enhance capability, written in a context that can be applied anywhere. The academic community also stands to benefit as an initial literature review shows little existing research conducted in an area of interest that impacts significantly on the community.

1.8 Overview of Thesis

The thesis is presented in the following manner:

Chapter 2 provides readers with an understanding of policing structures in Queensland, and how they relate to the policing divisions in metropolitan Townsville. The chapter includes population data and projections, including associated mapping and graphs to provide a visual representation of key points and enable context of industry specific factors.

Chapter 3 contains a review of literature that is relevant to the research topic. The chapter explores a number of different policing systems, focussing on clustered and centralised police deployment models. Literature on the different types and the degrees of clustering and centralisation is reviewed, including their applicability to the Townsville metropolitan area. Policing systems and structures are reviewed, incorporating literature on measuring impact and performance. The literature identifies an approach incorporating elements of centralising and clustering as the most effective model, providing that associated structures have systems that support the model. This guides the research conducted in the thesis in order to addresses a gap in the literature and provide practitioners a basis for application of findings.

Chapter 4 describes the how a mixed methods research methodology incorporating a two phased explanatory approach (QUAN > QUAL) has been used during this research. The first phase involves quantitative analysis of secondary data from the NSCSP and QPS databases (QCAD, QPRIME, POLSIS and rosters). Phase 2 uses outcomes from phase 1 to inform a questionnaire with five key informants (OICs of the 24-hour police divisions in the Townsville metropolitan

area). The questionnaire has 2 key parts: the first being a series of statements using the Likert Scale to categorise responses; whilst the second part incorporates free-text responses to a number of open-ended questions. Analysis of results incorporates quantitative descriptive statistical analysis of questionnaire results obtained using questions incorporating the Likert Scale; whilst qualitative thematic analysis is conducted of free-text responses by key informants to open-ended questions in the questionnaire. Details are then provided around how the questionnaire was undertaken in accordance with conditions approved by the USQ Human Ethics Research Committee and the QPS Research Committee. The scope of research undertaken, and the evaluation of the efficiency and effectiveness of clustered deployment models in a regional area is unique and provides a strong platform for discussion that hasn't been undertaken previously.

Chapter 5 commences with results from phase 1 identified through a review of police related environmental factors in metropolitan Townsville. This includes the analysis of calls for service data to determine how operational crews respond to jobs, and associated response times; whilst rates of offending will be reviewed to determine levels of demand for police service delivery. Rosters of the five 24-hour divisions will be reviewed to determine the disposition of officers across the metropolitan area against the population base, and the level of discretionary tasking by each OIC. The NSCSP is reviewed to establish public perception of policing in Townsville. These results will address RQ 1 to determine the effectiveness and efficiency of the current police deployment models. Results from the questionnaire will be determined through quantitative and qualitative analysis in phase 2 to identify the perspectives of the OICs of the five 24-hour stations on a number of key issues including the current organisational structure, the different policing concepts. This approach contributes to the knowledge base through the scope of environmental factors addressed that are specific to regional Queensland.

Chapter 6 incorporates the results from phase 1 and 2 to provide an evidence-base and discussion around RQ 1 and the three related sub-research questions to determine the effectiveness and efficiency of the current police deployment models in metropolitan Townsville. The information is further used to address RQ 2 and propose an alternative police deployment model for metropolitan

Townsville incorporating the different operational and supervisory components required to support a new model. The proposed model is a completely new operational deployment model for Queensland, with a strong evidence-base to support its application.

Chapter 7 provides a summary on how the research has made a significant and original contribution to the personal and professional development of the researcher, the QPS and the broader policing knowledge base. This includes a review of the learning objectives to determine whether research has met the required outcomes. Limitations of the research are also discussed.

CHAPTER 2: POLICING STRUCTURES AND METROPOLITAN TOWNSVILLE

This chapter provides context to the research by describing the organisational structure of the QPS and its applicability to Townsville. The chapter is comprised of the following sections: 2.1 provides details of policing structures in the QPS; 2.2 describes Townsville Police District; 2.3 lists the population data for Townsville Police District; and 2.4 provides information related to each of the five 24-hour police divisions in metropolitan Townsville.

2.1 Policing Structures

In line with the PACSR Final Report (QPS 2013a), the current regional policing structure in Queensland is as follows:

- The QPS is divided into 5 regions;
- Each region is divided into a number of districts;
- Districts are divided into patrol groups; and
- Patrols groups are divided into divisions.

A 'division' is a locally based work unit, usually operating out of a police station in the main township of the division. Each division has an 'Officer in Charge' (OIC) who has significant autonomy and responsibility for delivering policing services in their respective division. There are police officers assigned to each division, with the allocated numbers dependent on how the QPS assesses related demand factors; these include (but not limited to) current and projected population size, reported offences, calls for service, and related environmental factors. Each OIC has a deployment model which is a roster used to facilitate the deployment of officers assigned to the division.

2.2 Townsville Police District

Townsville Police District (*see Map 1*) in totality is comprised of 21 Divisions: Ayr, Charters Towers, Clare, Deeragun, Giru, Greenvale, Halifax, Home Hill, Hughenden, Ingham, Kirwan, Magnetic Island, Mundingburra, Palm

Island, Pentland, Prairie, Ravenswood, Richmond, Rollingstone, Stuart, and Townsville City. The district covers a total land area of 149,017 square kilometres with an estimated population of 238,773 (POLSIS, QPS 2018a).

Map 1: Map of Townsville District, with the approximate metropolitan area highlighted in purple.

What can reasonably be considered as the Townsville metropolitan area is highlighted in purple on the above map (*Map 1*); however, in order to provide more context, the metropolitan area has been expanded in the below map (*Map 2*). Whilst the metropolitan area is geographically quite small in comparison to the remainder of the District, the population density is far greater, and provides the vast majority of demand for policing services in the district. The five police stations in the metropolitan area of Townsville City, Mundingburra, Kirwan, Stuart and Deeragun are shown using a red dot on the below map.
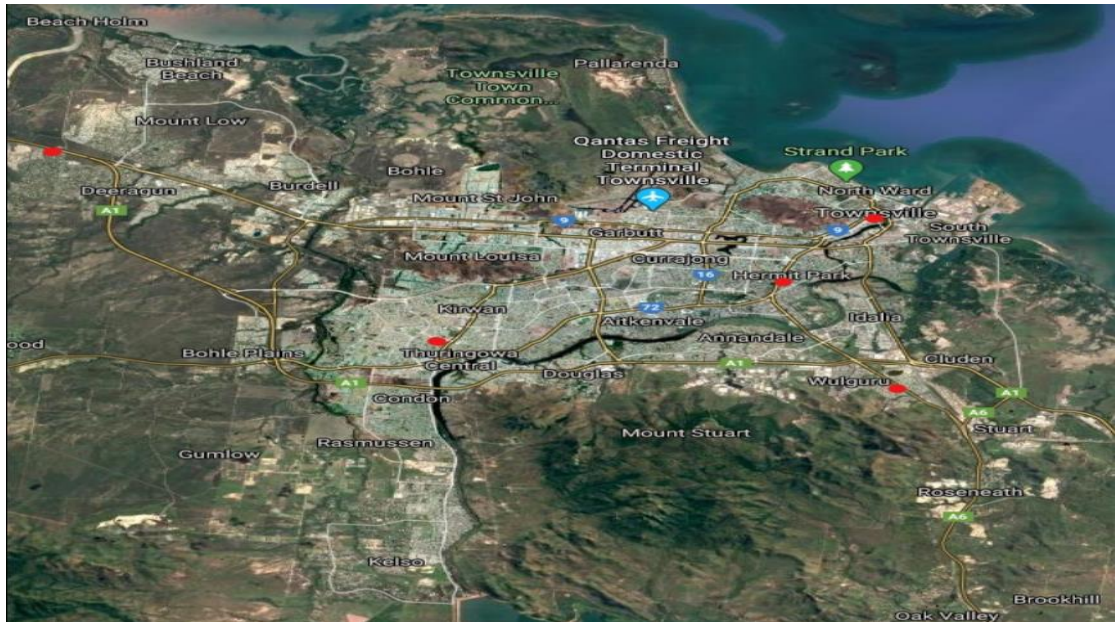
Map 2: Map of Townsville metropolitan area showing the proximity of the 5 metro police stations (highlighted in red).

2.3 Townsville Population Data

In terms of the population spread, Tables 1 and 2 provide the following information for the five 24-hour divisions in the Townsville metropolitan area (POLSIS, QPS 2018b):

- Townsville City: Population of 33,357; 10-year annual population growth to 2018 of 1.4%; & projected annual population growth to 2041 of 1.4%.

- Kirwan: Population of 59,996; 10-year annual population growth to 2018 of 0.4%; & projected annual population growth to 2041 of 0.4%.

- Mundingburra: Population of 27,023; 10-year annual population growth to 2018 of -0.4%; & projected annual population growth to 2041 of 0.2%.

- Stuart: Population of 35,337; 10-year annual population growth to 2018 of 1.4%; & projected annual population growth to 2041 of 2.8%.

- Deeragun: Population of 33,481; 10-year annual population growth to 2018 of 6.3%; & projected annual population growth to 2041 of 2.9%.

Analysis of the population data provides that Kirwan has by far the largest population, with Deeragun's population growing at the fastest rate. Whilst Townsville City division has the third largest population base, it incorporates the Townsville CBD which traditionally has an influx of persons working and or socialising in the area; this has an impact on the demand for policing services.

District/Division	As at 30 June			Average annual growth rate	
	2008	2013	2018p	2008-2018p	2013-2018p
	number			%	
Townsville Police District	215,130	233,487	238,773	1.0	0.4
Ayr	12,018	12,219	11,745	-0.2	-0.8
Charters Towers	10,747	10,985	10,487	-0.2	-0.9
Clare	556	545	526	-0.6	-0.7
Deeragun	18,205	26,682	33,481	6.3	4.6
Giru	1,952	2,003	1,996	0.2	-0.1
Greenvale	308	320	310	0.1	-0.6
Halifax	1,736	1,721	1,618	-0.7	-1.2
Home Hill	4,086	4,004	3,863	-0.6	-0.7
Hughenden	1,547	1,489	1,295	-1.8	-2.7
Ingham	9,926	9,734	9,038	-0.9	-1.5
Kirwan	57,084	60,158	59,996	0.4	-0.1
Magnetic Island	2,257	2,352	2,377	0.5	0.2
Mundingburra	28,119	28,541	27,023	-0.4	-1.1
Palm Island	2,276	2,540	2,647	1.5	0.8
Pentland	435	454	440	0.1	-0.6
Prairie	248	239	208	-1.7	-2.7
Ravenswood	318	331	320	0.1	-0.7
Richmond	986	949	825	-1.8	-2.7
Rollingstone	1,588	1,672	1,703	0.7	0.4
Stuart	30,877	33,287	35,337	1.4	1.2
Townsville	29,138	33,265	33,537	1.4	0.2

Table 1: Populations for each Division in the Townsville Police District.

District/Division	As at 30 June						Average annual growth rate
	2016(a)	2021	2026	2031	2036	2041	2016-2041
	number						%
Townsville Police District	**237413**	**249270**	**267118**	**286629**	**306300**	**326032**	**1.3**
Ayr	11,917	11,995	12,255	12,456	12,602	12,743	0.3
Charters Towers	10,724	10,828	10,903	10,960	10,968	10,955	0.1
Clare	531	523	505	487	467	447	-0.7
Deeragun	31,460	36,274	43,379	49,941	56,197	64,810	2.9
Giru	1,992	2,035	2,136	2,269	2,434	2,609	1.1
Greenvale	307	311	314	317	318	319	0.1
Halifax	1,628	1,593	1,528	1,462	1,391	1,319	-0.8
Home Hill	3,909	3,851	3,720	3,584	3,434	3,282	-0.7
Hughenden	1,330	1,183	1,117	1,064	1,016	968	-1.3
Ingham	9,211	8,894	8,516	8,137	7,736	7,341	-0.9
Kirwan	60,069	59,982	61,090	62,587	64,483	65,607	0.4
Magnetic Island	2,413	2,476	2,668	2,876	2,967	2,989	0.9
Mundingburra	27,511	28,196	28,527	28,888	29,180	28,776	0.2
Palm Island	2,612	2,744	2,954	3,166	3,365	2,552	1.2
Pentland	435	445	453	459	463	464	0.3
Prairie	214	196	189	182	176	168	-0.9
Ravenswood	317	320	321	323	324	324	0.1
Richmond	828	733	686	649	614	579	-1.4
Rollingstone	1,703	1,904	1,993	2,123	2,183	2,034	0.7
Stuart	34,755	38,743	45,862	52,470	60,711	68,722	2.8
Townsville	33,548	36,046	38,003	42,228	45,273	48,025	1.4

Table 2: Population Projections for each Division in the Townsville Police District.

2.4 Police Divisional Profiles – Metropolitan Townsville

In terms of Townsville City division, the following is provided as a snapshot of the structure in place; Townsville City division is highlighted in black on the below map (*Map 3*).
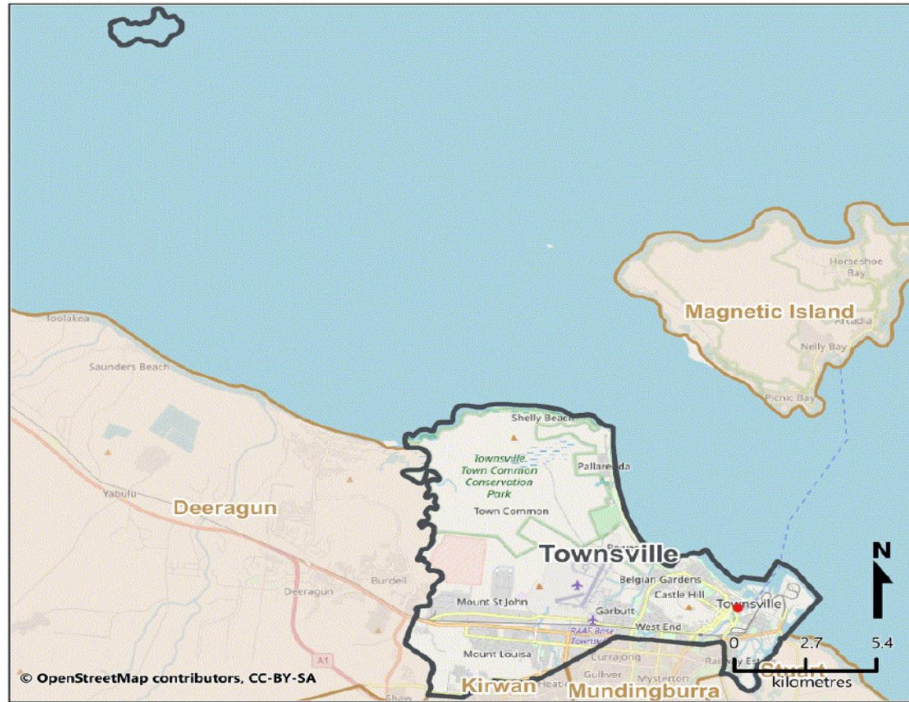
Map 3: Map of Townsville Police Division

Townsville City police division has a population of 33,357 (POLSIS, QPS 2018b). The police station is situated at 134 Stanley Street, Townsville. The allocated operational strength of Townsville City division as of 4th June 2020 was 111 officers. Townsville City division operates with a deployment model consisting of a 6-team roster matrix where shifts are allocated based on a roster formula identifying a set number of officers on a set rostering structure. Whilst there is limited flexibility within five of the teams on the matrix, the sixth team on the matrix is designed to provide an element of operational flexibility as the sixth team is not rostered for first response duties, they are proactive based for discretionary tasking by the OIC. As with all QPS based rostering, any changes made to rostering must have a reasonable alignment with yearly rostering equity requirements.

In terms of Kirwan division, the following is provided as a snapshot of the structure in place; Kirwan division is highlighted in black on the below map *(Map 4)*.
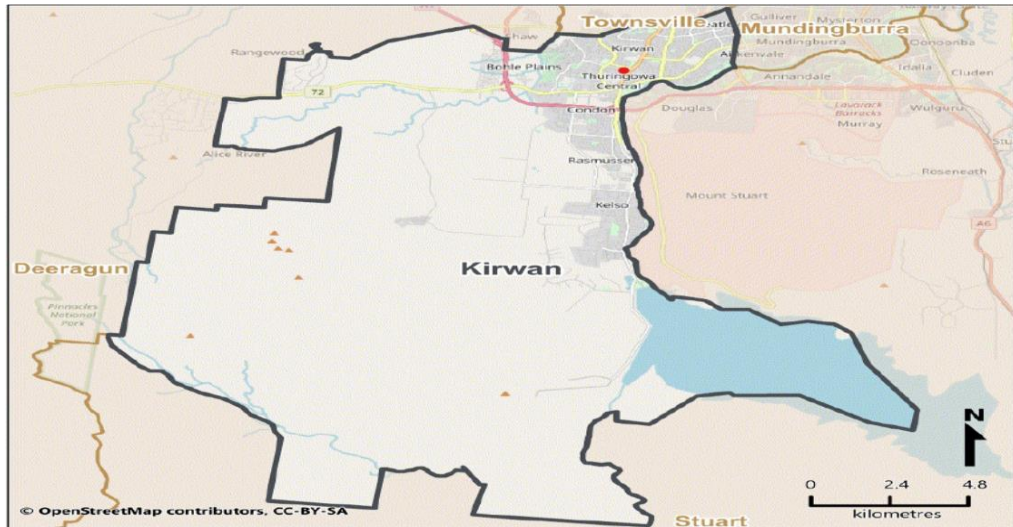
Map 4: Map of Kirwan Police Division

Kirwan police division has a population of 59,996. The police station is situated at 76 Thuringowa Drive, Kirwan. The allocated operational strength of Kirwan division as of 4th June 2020 was 69 officers. Kirwan division operates with a deployment model consisting of a 5-team roster matrix where shifts are allocated based on a roster formula identifying a set number of officers on a set rostering structure. There is limited flexibility within the framework based around the OIC changing shifts; however, changes can be made but are likely to impact on the availability of first response crews.

In terms of Mundingburra division, the following is provided as a snapshot of the structure in place; Mundingburra division is highlighted in black on the below map (*Map 5*).

Map 5: Map of Mundingburra Police Division

Mundingburra police division has a population of 27,023. The police station is situated at 240 Charters Towers Road, Mundingburra. The operational strength of Mundingburra Division as of 4th June 2020 was 39 officers. Mundingburra Division operates with a deployment model incorporating flexible rostering where the OIC does not have a set formula for the volume of staff rostered (like a matrix). The OIC has flexibility to vary the number and shift times of staff based around demand factors but must still ensure roster equity (in terms of the various day, afternoon and night shifts) is maintained across the yearly roster. Given the significant work incorporated in this type of rostering, flexible rosters are generally used by work units with smaller numbers of staff.

In terms of Stuart division, the following is provided as a snapshot of the structure in place; Stuart division is highlighted in black on the below map (*Map 6*).
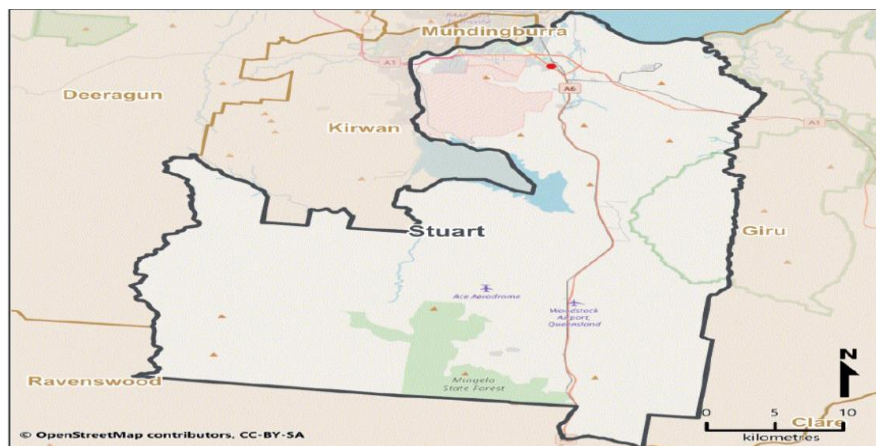
Map 6: Map of Stuart Police Division

Stuart police division has a population of 35,337. The police station is situated on Stuart Drive, Stuart. The operational strength of Stuart Division as of 4th June 2020 was 23 officers. Stuart division operates with a deployment model incorporating flexible rostering.

In terms of Deeragun division, the following is provided as a snapshot of the structure in place; Deeragun division is highlighted in black on the below map (*Map 7*).
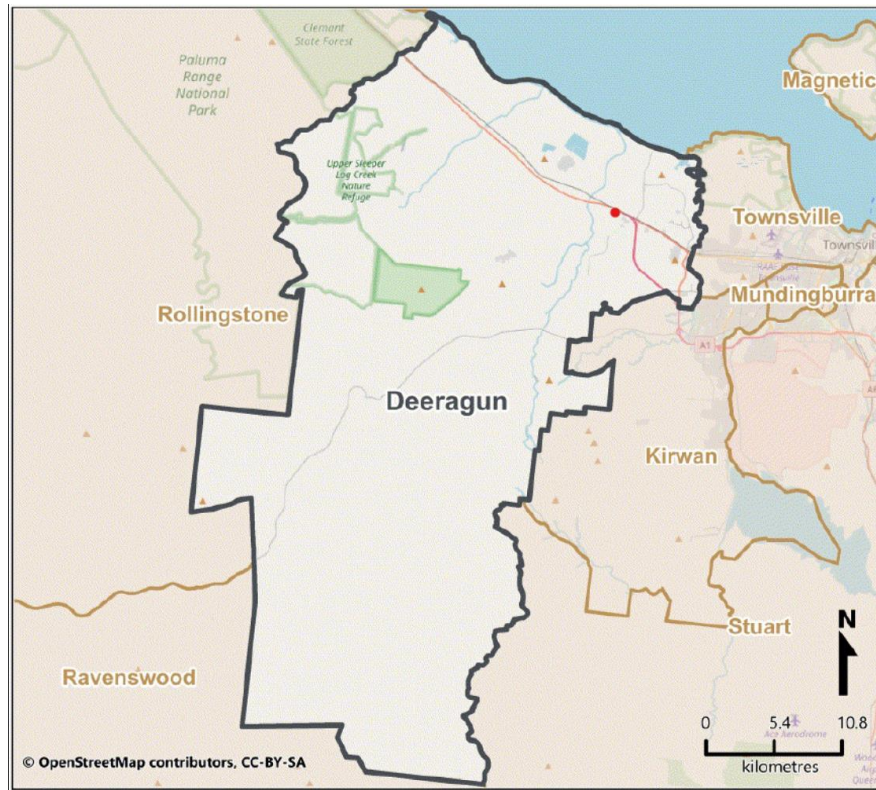
Map 7: Map of Deeragun Police Division

Deeragun police division has a population of 33,481. The police station is situated at the corner of Bruce Highway and Veales Road, Jensen. The operational strength of Deeragun division as of 4th June 2020 was 21 officers. Deeragun division operates with a deployment model incorporating flexible rostering.

As of 4th June 2020, the Townsville RAP had an allocated strength of 45 officers, whilst Townsville TCS had an allocated strength of 22 officers.

CHAPTER 3: LITERATURE REVIEW

This chapter addresses issues critical to the research questions by exploring literature related to the key components of different policing systems. The chapter is arranged as follows: 3.1 provides definitions within the concepts of policing that are fundamental to the research topic; 3.2 provides an overview of the different police systems in use throughout the world; 3.3 looks at different elements of clustering/decentralisation; 3.4 addresses the different components of centralisation in policing; 3.5 to 3.8 reviews policing systems and their relationship to the Townsville metropolitan area; 3.9 looks at measuring impact and performance; and 3.10 concludes the literature review and identifies how this review contributes to increased knowledge for QPS operations and organisational relationships.

3.1 Concepts of Policing

For clarification, definitions are provided of key terms found in the literature and used in this study. Mawby (2008) defines policing as "a process of preventing and detecting crime and maintaining order" (p. 17) whilst describing the police (at p.18) as an "organised and specialised public, non-military agency with the legitimate power to enforce the law and maintain order." Mawby (2008) uses the three key elements of structure, authority and functions to differentiate police from other law enforcement organisations (such as security guards and parking inspectors).

Police Systems are not explicitly defined but refer to the formal governance and structural arrangements by the organisation designated 'the police'. Police deployment models are also not formally defined but refer to the specific process of rostering officers within an organisational work unit (such as a police division).

Relevant literature often refers to 'decentralisation' as opposed to 'clustering'. It is noted however that when addressing the two terminologies, Tsegaye, Missimer, Kim, and Hock (2020, p. 2) describe decentralised systems as small sub-systems, or clusters, that operate with a degree of autonomy within an overall system. In line with this and in terms of this thesis, the term 'decentralisation' in the context of police systems and deployment models is used interchangeably with 'clustering'.

3.2 Police Systems

Policing systems used throughout the world are as varied as the communities being policed. Many factors impact on communities and these are often reflected in the systems applied to police organisations in those communities. Critical to understanding the application of policing systems is the different models within these systems and their level of effectiveness. In 2003, the United Nations, Asia and Far East Institute for the prevention of crime and treatment of offenders (UNAFEI) provided a classification of two predominant policing models: centralised and decentralised. The centralised model refers to a system of central command and control through a vertical chain of command. The decentralised model is a system where the control, management and superintendence of policing is dispersed throughout local provinces. Similar to UNAFEI in providing a general classification around two police systems, Esparaza (2012) emphasises that centralised police systems have a singular unit charged with implementing policing functions, and the decentralised or clustered systems having multiple units implementing related policing functions collectively.

Whilst these classifications focus specifically on centralisation and clustering as the two types of policing systems, Bayley (1985, 1992) incorporates the two but uses three components in his classification of police systems: the amount of autonomous force, distribution of command, and the structure of coordination. The amount of autonomous force incorporates concepts of centralisation and clustering in terms of policing governance. Distribution of command refers to organisational responsibility for policing at different levels within an organisation and as such, can be viewed as horizontal decentralisation (Pollitt, 2005). Whilst Bayley and Reichel (2013) classify the final component, structure of coordination, around the existence of overlapping layers of authority and jurisdiction to determine the level, or lack of, coordination.

The importance of the different systems is a critical issue for police and by extension, governments, due to the advantages and disadvantages of each system. Kurtz (1995, p. 90) highlights this during his research, declaring that "the question of centralised versus decentralised police organisation is perhaps the most important police decision facing the nations of the world."

Kurtz (1995) supports his assertion by emphasising the impact organisational design has on service delivery due to the wide range of functions undertaken by police in local communities incorporating emergency response, maintaining good order, resolving disputes, administering regulations and providing general assistance to the public (Sparrow, 2015). A key challenge for policing organisations is how they find ways to respond to calls for service from the community, whilst finding ways to reduce crime and improve community safety. In this regard, this thesis will explore the critical components of centralisation and clustering in more detail.

3.3 Clustered/Decentralised Policing

Pollitt (2005, p.373) suggests that decentralisation is "the notion of authority being spread out from a smaller to a larger number of actors" and relates to the transfer of power away from the centre (Schneider 2003). Smith (1985) notes it involves governance and administration through the reversal of concentrated administration and disseminating responsibility and authority to lower levels of an organisation.

In policing terms, these definitions reflect the current structure of policing in Townsville. Whilst not formally documented by the QPS, the origins of the current organisational structure follow the themes in the literature that focus on the need for organisational design and management practices to focus on responsiveness to local community needs, public participation and mission-focussed teamwork whilst reducing costs and improving public service delivery (Oates, 1972; Ahmad, Devarajan, Khemani, & Shah, 2006; Cheema and Rodinelli, 2007). Pollitt (2005) suggests the accountability of local administrators is also enhanced under a decentralised structure as local community members have enhanced accessibility to local managers, with greater capacity to monitor and raise issues around the delivery of services to local communities.

3.3.1 Types of Decentralisation

In this regard, there are different types of decentralisation that can impact on the scope of service delivery. Cheema and Rondinelli's (1983) classification of

decentralisation focuses on the objectives of the organisational structure and the degree to which responsibility and discretion is transferred based on specific environmental factors for individual area (political, spatial, market, and administrative factors).

Both Cheema and Rondinelli (2007) and Cohen and Peterson (1997) assert that administrative decentralisation is the most significant form of decentralisation as it enhances efficiency and decision-making through smaller organisational units with shorter bureaucratic hierarchies. This reflects the current situation in metropolitan Townsville where there are five 24-hour police divisions (each run by an OIC) operating within two larger patrol groups (each run by an Inspector) reporting to a District Superintendent. This operates conjointly with two proactive policing units that are managed by OICs reporting to a single Inspector, who also reports to the District Superintendent. Pollitt (2005) expands on the decision-making element of administrative decentralisation to highlight its enhanced innovation and responsiveness to local environmental factors, which subsequently increases work unit morale and connectivity to local communities.

Fiscal decentralisation relates to the movement of authority for revenue allocation and expenditure from a central unit to subordinate units (Norris, 2008). The aim of fiscal decentralisation is to create economic efficiency through expenditure in a manner that is responsive to local requirements (Fritzen & Ong, 2008). Given that fiscal decentralisation is limited to revenue allocation and expenditure, as opposed to areas such as resource generation, the level of autonomy is consistent with that of administrative decentralisation and as such, fiscal decentralisation can either operate in conjunction with, or as part of administrative decentralisation (The World Bank, 2001). This structure aligns with current process in metropolitan Townsville, where each policing division is allocated a budget and has a reasonable level of discretion around how the budget is applied to local requirements.

Devolution is another form of decentralisation that is more extensive than administrative decentralisation as it transfers far more autonomy to lower level work units than just the administrative functions (Rondinelli, Nellis, & Cheema, 1983). The transfer of decision-making and public functions ensures subordinate

units have a significant degree of autonomy and independence across their area, becoming quasi-autonomous authorities (Cohen & Peterson, 1997; Schneider 2003). In this regard, Townsville does not operate to the extent of decentralisation applied under devolution as the scope of decision making is more administrative based without capacity to amend significant factors, such as legislation and broader organisational requirements.

3.3.2 Decentralisation and Townsville

The implementation of a clustered, decentralised policing model in Townsville is consistent with other areas of Queensland and most policing jurisdictions in Australia; these models have been in place for many decades. Literature at the time supports the application of such models. Oates (1972, 1999) and Tiebout (1956, 1961) provide support for the decentralised use of public goods; asserting that local officials are closer to local communities and have more information and awareness of local community needs and perceptions; so the costs and benefits are accrued within local boundaries. Oates (2006) counters that centralised control reduces the effectiveness of engagement at a local level in identifying local priorities, with a broader, centralised focus on uniform application through a one-size-fits-all approach.

As discussed earlier, the link between these decentralised concepts and the current clustered organisational structure of the QPS is broadly reflected in the organisational goals of the QPS Strategic Plan incorporating a strong commitment to work with local communities. However, the QPS PACSR *Final Report* (2013) and the QLD Government Commission of Audit *Final Report* (2013) have raised questions about the efficiency and effectiveness of the existing structure, highlighting the need for policing and infrastructure models that are responsive, efficient and less restricted by boundaries. In many respects, boundaries are fundamental to the concept of clustering and decentralisation and form a critical part of this research.

3.4 Centralised Policing

Carrington and Schulenberg (2016, p. 2) define a centralised police service as "one which is characterised by close control exerted by headquarters over all policing activities within the agency's jurisdiction." The authors further assert that centralised policing may have several geographic divisions within its region; however, they are not autonomous given that all operations, policy, procedure and programming are closely controlled by a central administration.

Webber (1947), Mackenzie (1978), and Hall (2002), show a consistent historical perspective that aligns with Carrington and Schulenberg (2016), identifying that centralisation has focused on two key components: function and decision-making authority. They describe functional centralisation as each geographical unit doing only one part of the business and often unable to carry on the business without the integrated cooperation of other units. Whilst centralised decision making is described as the retention of decision-making authority in the hands of headquarters.

In terms of centralised decision making from a policing perspective, Feeley (1973, p. 410) found that "culable rules, not people, attain means and goals and assume an elaborate apparatus that processes arrests' consistent with well-defined rules and procedures". This historical perspective aligns with McCluskey, Cancino, Tillyer, and Tillyer's (2014, p. 254) suggestion that an overarching benefit for centralised policing is the pooling of resources under a unified structure that stimulates coordination of effort and reduction of personnel demands. They further assert that centralisation is likely to be most beneficial when reorganisation affects small independent units conducting similar activities. This statement has implications for Townsville given there are five 24-hours police stations operating within 20 kilometres of each other, supported by a further two work units tasked to proactive operations. These work units' range in size from between 20 to 110 officers.

In consideration of work unit size and scope, McCluskey et al. (2014, p. 254) stipulate the success of centralisation depends on an organisational strategy that facilitates activities where "smaller units engage only the partial services of

individuals whose spare time would not be devoted to other tasks if the structure was centralised". This reflects a structure where several small, related units are brought under single supervision to reduce lost motion; and the associated administrative focus provides a channelling effect on activities.

3.4.1 Organisational Strategy, Centralisation and Performance

Organisational strategy can be broadly defined as the overall way an organisation seeks to maintain or improve its performance (Andrews, Boyne, Law, & Walker 2009, p. 62). Miles, Snow, Meyer and Coleman (1978) argued that the successful implementation of organisational strategy is dependent on adopting an appropriate internal structure and processes. In line with this, Andrews et al. (2009) deemed it essential to establish a balance between the strategy being pursued and the internal characteristics of an organisation. Any misalignment between strategy and structure can hinder performance, leaving organisations with the challenge of determining not only which strategy to adopt, but also the selection of structures that are consistent with the strategy (Andrews et al., 2009).

O'Toole and Meier (1999) assert that one of the core functions for public managers is the creation of organisational structures that provide stability and institutional support for internal organisational elements. From their study of police departments in the United States, McCluskey et al. (2014) assert that centralisation encourages police to share information about offending across broader geographical areas, significantly reducing the challenges associated with offences committed across demarcated police boundaries.

McCluskey et al. (2014, pp. 256-264) conducted a specific case study of the robbery unit in San Antonio Police Department as a result of their 2009 move from a decentralised (clustered) organisational structure, to a centralised work unit. The authors assessed data from 1 January 2005 until 30 November 2010, allowing a 14-month period to analyse data after centralisation of the work unit in early October 2009. Data analysis included population rates and demographic analysis, local and national rates of reported offending and clearance rates, supervision structure, and external offence analysis to address displacement.

Rigorous models were applied to the data to address the possibility of trend and auto correlation; this enabled testing of the hypothesis (whether the change of organisational structure to a centralised unit substantially influenced reported offences and clearance rates). In this regard, the Auto-Regressive, Integrated, Moving Average (ARIMA) model and the Dickey-Fuller test were applied (McCluskey et al., 2014).

The case study found that there was a "a significant increase in the percentage of cases cleared by arrest for the 14 months observed under the centralised model, a trend which persisted once systematic components were removed" (McCluskey et al., 2014, p. 261). The case study then applied the same process to rates of reported offences and found there was a similar percentage reduction in offending, without increases in other offence categories due to displacement. The authors concluded that there was no other intervention that coincided with the centralisation of the work unit that could explain the significant relationship between centralisation, the increase in clearances, and the decline in reported offences.

McCluskey et al. (2014) found that critical information exchange is more permeable in the centralised unit through shared computing archives and personal interaction. They also found that supervision and tasking facilitated by the centralised model built the team ethos of collective responsibility and action around executing their mandate. McCluskey et al. (2014) further asserted, that based on their findings, centralisation of policing resources, when compared to the decentralised structure, created a more holistic perspective of crime patterns and investigative resource capacity, and removed constraints on operational and proactive policing actions.

3.4.2 Characteristics and Degrees of Centralisation

The degree to which decision making in centralised or decentralised is a key indicator of how an organisation allocates resources and determines policies and objectives (Andrews et al., 2009). This is reflected in the current decentralised organisational structure in Townsville, and other policing districts within Queensland.

In centralised organisations, the degree of centralisation is often indicated by the hierarchy of authority and the degree of participation in decision making (Carter & Cullen, 1984). Hierarchy of authority refers to the extent to which the power to make decisions is exercised by the upper levels of an organisation, whereas participation in decision making relates to the level of staff involvement in the determination of organisational policy. Both components reflect the distribution of power in the organisation (Carter & Cullen, 1984).

These components take on critical importance given that theorists, Gulick and Urwick (1937) and Webber (1947) regard the relative degree of centralisation as critical in understanding how an organisations decision making process is conducive to enhanced organisational efficiency. In line with this, Dalton et al. (1980) show that by providing an indication on how power is distributed throughout an organisation, the hierarchy of authority and participation in decision making can illustrate how the structuring of an organisation has implications for organisational effectiveness. Starbuck and Nystrom (1981) contend that even modest improvement in the structure of an organisation can generate large gains for both the community and employees of the organisation.

These concepts not only align with the strategic objectives of the QPS, they align with the focus of the research questions in this paper around how and to what extent does the organisational structure in the Townsville metropolitan area impact on police service delivery. Whilst there appears to be positives in both structures and applicability for police, especially in Townsville, to incorporate aspects of each structure within their organisational designs, the literature also indicates that a balance may be the most appropriate position.

This concept is supported by Mackenzie (1978, p. 201), who provides a perspective on organisational structure by asserting that "no organisation of any appreciable size is perfectly centralised or decentralised: the key question is the choice of which functions or activities are to be performed or controlled by headquarters and which are to be delegated to subunits." This is supported by Carrington & Schulenberg (2016) from a policing perspective where their study indicated that police agencies, like most organisations, fall along a continuum regarding their degree of centralisation. The research of Jacot-Descombes &

Niklaus (2016, p. 348) focused specifically on community policing, with findings indicating that centralisation can reset police community partnerships through changes in structure, scope and priorities. The authors caution that whilst certain policing functions can be centralised, effective community policing requires local decision making and implementation, resulting in most institutional changes to police organisations fluctuating with degrees of centralisation and decentralisation.

3.5 Policing Strategies

Organisations with a strong performance culture generally have the correct balance and consistency between organisational structure and organisational strategy (Andrews et al., 2009). In terms of organisational structure, metropolitan Townsville currently operates with five police divisions (each run by an OIC) operating within two larger patrol groups (each run by an Inspector), with two proactive policing units each run by an OIC, reporting to a single Inspector. All these units operate 24-hours per day and within 20 kilometres of each other. This organisational structure is used to support operational strategies through the Priority Policing model (QPS, 2013b) and the Place and Case Management strategy (QPS, 2013c).

The Priority Policing model is a reactive strategy targeted at operational policing responses to calls for service from the community (QPS, 2013b). The QPS implemented the model due to the inherently unpredictable nature of policing and the need for flexibility when responding to calls for service, to ensure community expectation is met in terms of a timely and effective response (QPS, 2013b).

Priority Policing embodies a flexible operational resource allocation model which ensures that internal organisational and administrative structures do not impede the efficient and effective delivery of policing services. The priority policing process establishes a method for determining whether to initiate an immediate response to a call for service or to implement an alternative expectation strategy based on the nature of the call for service and the availability of operational resources – including tasking of officers who do not usually operate in a first response capacity, such as the Rapid Actions and Patrols (RAP) and Tactical Crime Squad (TCS) (QPS, 2013b).

The model specifies that in situations where no officers are available within a tasking officer's area of responsibility and an immediate response is required, the tasking officer should request a tasking officer in a neighbouring area, in accordance with relevant regional arrangements, to direct officers from that area to attend the call for service. Tasking officers receiving requests for assistance from tasking officers in other areas are to ensure that officers are directed to attend the call for service in accordance with the priority policing process and regional arrangements, this process is usually facilitated by the Police Communications Coordinator (QPS, 2013b).

The QPS Place and Case Management strategy (QPS, 2013c) provides structure and guidance to proactive policing operations through the targeting of problem cases and problem places. The objective of the Place and Case Management strategy is to drive service delivery improvement to the community by shifting the focus from primarily reactive policing to primarily proactive policing (QPS, 2013c). The strategy provides an intelligence-driven focus on those places, people and issues that pose the highest risk to the community in terms of offending and harm. Place and Case Management aims to prevent and resolve policing problems and direct QPS resources (staff, time, vehicles and other equipment, effort) towards prioritised threats in a way that "stops offending, increases community safety and reduces demand" (QPS, 2013c). The strategy is based on the theory, that while problems can occur anywhere, the majority are caused by a relatively small number of people in largely predictable locations (QPS, 2013c). This incorporates a concept that doing more about these particular problem cases and places in a proactive way will reduce the need for reactive policing if the problem is allowed to continue or escalate (QPS, 2013c).

From a policing perspective, the QPS (2013c) asserts that innovative, mobile and agile policing structures are needed to enable proactive resources to be directed quickly to target problematic places, cases and issues, without reducing the efficiency of resources responding to calls for service from the community (hence the change in structure to create the RAP and TCS). The Place and Case Management strategy suggests the identification of problem places, cases and issues offers three key opportunities for intervention: before (deterrence); during (detection); and after (disruption / dismantlement) using intelligence products to provide decision-makers with the analysis to fully exploit these opportunities (QPS, 2013c). In line with this,

the QPS (2013c) uses the strategy to describe a 'place' as the location where activity is occurring, or has the potential to occur, or be a precursor to the cause of significant harm to a particular community at a given time. The strategy equally focuses on problem cases, describing 'cases' as the offenders, victims, crime types and issues who cause, or are likely to cause or contribute significant harm to the community.

The concept of Place and Case Management is not new to the QPS, however, the QPS response has historically followed portfolio boundaries (geographical or functional). To address this, the current Place and Case Management Strategy: (i) ensures a consistent state-wide approach to proactively applying QPS resources in the most productive and efficient way to stop crime and make the community safer; (ii) embeds intelligence products as the key driver to deciding the places and cases to focus on; and (iii) identifies the policing approach most likely to get the best results based on objectives, thorough assessments and prioritisation. The extent of QPS resources allocated must be in proportion to the level of harm the problem presents or is likely to present to the community (QPS, 2013c).

Both the Priority Policing Model (reactive) and Place and Case Management strategy (proactive) align with Nagin's (2013) identification of the two main roles for police in crime deterrence: police acting as apprehension agents after an offence has been committed (reactive); and police presence in targeted places or around targeted persons in order to deter offending (proactive). Nagin (2013) and Nagin, Solow and Low (2015) provide further analysis to support the benefits of proactive police presence deterring and thereby reducing crime, as opposed to a strategic focus on the apprehension of offenders which has limited utility in terms of crime prevention.

Eck (2015) suggests that crime prevention strategies developed by policing organisations are often characterised by weak problem analysis and a lack of proactive-based initiatives. Braga and Weisburd (2010) assert that without a strategic approach to crime prevention, problem solving inevitably devolves to first response officers who have competing demands of responding to calls for service, and often have a lack of resources and support to develop effective and innovative solutions. This places significant weight on strategies like 'Place and Case Management' given its focus on crime prevention, and therefore crime reduction. Braga, Groff, Weisburd, & Wooditch (2017) draw a nexus between the increasing prevalence on police effectiveness being

measured on the prevention of crime through reduced rates of offending, as opposed to clearance or arrest rates. Tankebe (2013) highlights the benefits of reduced trauma and costs associated with victimisation as a key indicator of community perception of police effectiveness, which directly impacts on community confidence and subsequent cooperation with police.

Despite the mounting evidence in support of targeted proactive policing strategies, with many policing agencies trialing refinements to existing practices such as directed patrols based on patterns of offending, hot spot patrols in high crime areas, and differential responses to calls for services based on priority; Cordner (2016) and Eck (2015, p. 231) suggests that many police agencies do not appear capable of employing effective strategies to reduce crime due to the conflict between organisational structures and systems.

The current proactive policing structure in the Townsville metropolitan area provides a strong proactive policing platform in the form of two full-time work units (RAP and TCS). With around 60 officers working in both units, significant resources are available for proactive taskings as neither unit is assigned to attend routine calls for service (but can assist as a first response crew at a priority call for service, before handing the job back to local officers). Whilst Townsville is well-positioned in terms of resource allocation for proactive policing strategies, the question arises as to how effectively those resources are used in conjunction with other policing resources in the area. This is a critical junction at which an organisation must ensure their proactive strategy is complimented by a supporting organisational structure. (Andrews et al., 2009).

Given that the focus of this thesis is metropolitan Townsville, the challenge arises as to whether the organisational boundaries, the related disposition of resources, and the culture associated with 'owning a patch of area' is a structure that effectively compliments the QPS policing strategies of Place and Case Management and Priority Policing.

3.6 Policing in Townsville

The Police Statistical Information System (QPS, 2018a) shows the population of the Townsville metropolitan area has increased by 26% between 2001 (138,029) and 2016 (187,341), with a significant percentage of the growth occurring in the western, southern and northern corridors around the city. De Guzman (2016) highlights the influence local environmental variables such as urbanisation, have on policing models as command structures are primarily organised at the city or municipality level. In this regard, the metropolitan area of Townsville is serviced by three patrol groups incorporating five 24-hour police stations clustered into a very limited geographical area, with each being managed by an OIC operating with their own individual rosters.

Whilst officers assigned to police divisions are not 'locked' into the geographical boundaries around their divisions, they are responsible and accountable for service delivery within their division, and as such they are tasked by their respective OICs to undertake policing activities within their division. Cross-divisional policing activities usually occur through two process: planned proactive operations using resources from different divisions, which occur when OICs meet (usually once per month) to plan activities; and activities under the Priority Policing model, which generally occur as a result of a priority call for service in another division where the officers assigned to that division are unable to attend. These rosters form the primary component of a police deployment model. The deployment model, whilst not formally defined, encapsulates the broader organisational structure and how resources are managed through to the operational units that deliver policing services to the community.

In terms of distance, the five 24-hour divisions in metropolitan Townsville are situated as follows: Townsville City police station is 3.7 kilometres from Mundingburra police station, which is then 6.8 kilometres from Stuart police station and 8.9 kilometres from Kirwan police station, whilst Kirwan is 14.4 kilometres from Deeragun police station. In terms structure, the entire metropolitan area of Townsville is part of a single police district (Townsville), with the district containing two smaller police patrol groups (Eastern and Western). Eastern Patrol Group has two metropolitan based police divisions: Townsville City and

Mundingburra; whilst Western Patrol Group has three police divisions: Stuart, Kirwan and Deeragun. Each of these police divisions is responsible for service delivery within their own geographical boundaries, whilst two work units assigned to the district (the Tactical Crime Squad and the Rapid Action and Patrol unit) undertake proactive based patrols and operations across the entire metropolitan area.

3.7 QPS Systems Analysis

The combined impact of the environmental variables and the current organisational structure in metropolitan Townsville is reflected in the following information (see *Table 3*) from the Queensland Police Record and Information and Management Exchange (QPRIME), with all figures expressed as percentages (QPS, 2018b):

Work Unit/s	Number of Police Officers	Overall Crime	Calls for Service	Investigative Tasks
Townsville City Police Division	46%	30%	31%	26%
Remainder of Townsville metropolitan area (Kirwan, Stuart, Deeragun and Mundingburra Divisions)	54%	70%	69%	74%

Table 3: Percentage of officer numbers and demand factors in metropolitan Townsville.

Whilst this will be explored in more detail later in this thesis, the information presented in *Table 3* shows the disparity between staff allocation and demand in the Townsville metropolitan area, reflecting the challenges in having police in close, demarcated areas which do not necessarily align with current demand factors – this is one of the primary drivers behind this study. In this regard, the research of Wilson and Weiss (2014, p. 101) highlights the challenging and complex dynamics of staff allocation due to expanded law enforcement responsibilities and decreasing resources. The authors identify a broader approach to the issue that not only incorporates police-to-population ratios, workload analysis and report handling, but also the need for

alternate delivery systems. Whilst the existing literature provides a platform of considerations for the deployment of resources and the need to develop efficient and effective service delivery, current literature stops short of specifying deployment models, with nothing relevant to a specific location such as Townsville.

Central to the research is determining the effectiveness and efficiency of police service delivery in metropolitan Townsville. The online Oxford Dictionary (2018) defines effective as the "degree to which something is successful in producing a desired result" and efficient as "achieving maximum productivity with minimum wasted effort or expense". Determining the effectiveness and efficiency of police service delivery requires the application of relevant factors to establish context. In terms of effectiveness, the researcher will use levels of community confidence in police and data related to crime and calls for service against the disposition of resources. Efficiency will be determined from a review of current rostering practices to establish the scope of resources available for 'discretionary taskings' outside of those used for first response, and the volume of crews crossing divisional boundaries to attend calls for service.

What is the case for change? It starts with the PACSR *Final Report* (QPS, 2013, p. 25) where the QPS itself has listed the organisational reforms to be implemented were part of a '5-year vision', with 2018 marking the end of that period. The QPS has subsequently initiated a 'Service Alignment Program' with a view to enabling the organisation to meet contemporary challenges; this program is still in operation at the time of writing this thesis.

It is noted that PACSR *Final Report* (QPS, 2013) further espouses the concept of 'mobile policing', outlining that there may be changes to the number of officers based in local stations to ensure there are large numbers available for 'mobile policing'. The development of technology since 2013 has been exponential, with the QPS implementing 'tablet devices' as part of its mobility program. Whilst these changes enhance the mobility of police, the organisational structures, boundaries, and segregation of resources remains.

3.8 Borderless Policing

Crank, Irlbeck, Murray, and Sundermeier (2012, p. 104) suggest that traditional policing models are based on the permanent deployment of officers and associated resources to specific, defined geographical areas, with a small number of specialised officers targeting issues across the geographical boundaries; this description has particular relevance to the current structure in Townsville. Paasi (2019) identifies that internal boundaries (or borders) can be seen to act as a barrier to a focused, coordinated response as they signify territory/territoriality both materially and symbolically. Centralised commands and specialised operations are an attempt, in part, to address these types of issues, but the difficulty is developing an understanding of local issues to ensure centrally deployed staff and operations are effective.

Crank et al. (2012, p. 106) provide a mission-based approach as a strategy to address the issue. The strategy involves three stages: establishing missions that are realistic and measurable to reduce offending in high crime areas; deploying specific, proactive policing resources in a coordinated and controlled manner to identified hot spots within the high crime areas; and establishing a clear, centralised command structure to ensure all local organisational units operate in support of objectives, with limited 'discretion' available outside the scope of mission parameters. This structure focuses on a permanent 'split-force' arrangement that provides for a designated, centrally coordinated proactive policing element outside of officers assigned as first responders to calls for service from the community. It was on this basis, that the QPS moved to both the Tactical Crime Squads and the Rapid Action and Patrol units.

The concept of 'split-force' policing has been around for many years and applied to varying degrees. Tien, Simon, and Larson (1978) reviewed an initiative implemented in Wilmington, Delaware, in the United States in 1975 where officers were 'split' into two groups, with one group focussing on responses to calls for service, with the other on proactive policing. The initiative improved a number of different performance measures and was continued beyond the end of the trial period, but it also led to a perception that only the group of first responders were performing their duties to the adequate standard, with those tasked proactively being selective of tasks and poorly coordinated. Similarly, Dempsey, Forst, and Carter (2019) reviewed a 'split-force' trial in Houston, Texas in the United States where those officers tasked to

proactive patrols were instructed not to respond to any calls for service. Whilst the trial was found to produce positive operational results, the structure created a perception of those undertaking the proactive role as being the 'smile and wave' crew as they often drove past first response crews who were attending calls for service.

From an Australian policing perspective, in December 2014, a restructure of the West Australian Police Service (WAPOL) resulted in the organisation implementing a new operational model as part of their 'Frontline 2020' strategy (WAPOL, 2013). The strategy implemented a two-tiered approach that created a reduction in the number of demarcated boundaries in Perth to facilitate 'response teams' to deal with serious incidents, and 'local teams' to deal with community-based issues; all operating under a centralised command. The subsequent 12-months saw increases of up to 16% in crime, with O'Connor (2016) reporting significant criticism of the strategy from local communities and internally within WAPOL, resulting in modifications to the structure. In 2017, Clarke and Walsh (2017) reported the strategy was abandoned with the four 'Regions' decentralising back to their original structure of eight.

In line with the issues identified in the different studies, whilst organisational structure and systems are critical to how services are delivered to the community, it is also important to determine if these institutional variants impact the performance of officers and subsequently the achievement of outcomes.

3.9 Measuring Impact and Performance

Bartley, Anderson, Jagger, and Van Laerhoven (2008) assert that given centralisation and clustering encapsulate differing institutional and/or structural arrangements, these arrangements are likely to impact police performance and are therefore a critical component of the comparative analysis of policing systems. North (1990, p. 25) asserts that institutions have a clear impact on an individuals' behaviour as the institution exists to reduce the uncertainties involved in human interaction. In this regard, the information (structure and systems) provided by an institution reduce an individual's risk when undertaking an enterprise, resulting in an increase in their utility; as a result, the individual continues to rely on the institution and acts accordingly. Thus, institutions not only reduce an individuals'

uncertainties and risks, they also shape their behaviour and performance (North, 1990). In line with this, to address issues that arose around institutional influence on employee performance during the 'split-force' organisational changes made in Wilmington, Houston and Perth, any organisational change must also include effective systems and support mechanisms incorporating communication, coordination, operational integration and human resource management (North, 1990).

As with any government agency, the QPS is subject to performance assessment to determine their effectiveness and efficiency with public resources. Ayling, Grabosky, & Shearing (2009) highlight that reduced or stagnant budgets are requiring many police agencies to 'do more with less' and show how they have improved the value and effectiveness of service delivery. Den Heyer (2014) suggest that as a result of government and community expectation, there are three main performance requirements for police agencies: effective management of resources; development and implementation of programs and initiatives to achieve organisational objectives; and the application of appropriate performance measures around outputs and objectives, which must also inform future organisational decision making.

The focus on performance management and associated measurements in policing is a critical element of this thesis. In line with this, Sparrow (2015) suggests there are flaws in many traditional models that measure police performance, highlighting the narrow focus of indicators such as rates of offending, calls for service, arrests and response times. Sparrow (2015) argues that these statistics are focused on officer activity rather than outcomes, they only record measures of crime control and are subject to manipulation through suppression or miscalculation. Sparrow (2015) further suggests these types measures overlook unreported crime as they often produce short-term fluctuations, they do not allow for the variable impact of different crime types, and they do not provide any reflection on fairness or community perception in terms of safety or police satisfaction.

In order to address these types of issues, Willis and Mastrofski (2011, p. 325) call for use of a wide range of data from multiple sources that combines

qualitative and quantitative approaches to measure and understand both change and its associated outcomes. Sparrow (2015, p. 10) calls for "problem specific project accounts describing emerging crime patterns and what happened to each one" that go beyond standard measures to reveal outcomes rather than activities. Moore and Poethig (1999) suggest a number of 'dimensions' that police should be assessed against to encapsulate how emergencies have been handled, the level of assistance provided to local communities, and the quality of life of community members in terms of community safety.

The seven dimensions suggested by Moore and Poethig (1999) include: reducing community victimisation; calling offenders to account; reducing fear in the community; enhancing the personal security of the community; guaranteeing community safety in public places; using resources and authority fairly, efficiently and effectively; and maintaining community confidence and legitimacy. Given the broadness of these dimensions, their community focus, and their applicability to the strategic objectives of the QPS, these dimensions have been used to guide the analysis of factors in determining the outcome of the research questions.

3.10 Conclusion

The literature identifies that police organisational structures generally operate as either centralised or decentralised (clustered), with the success of the structure underpinned by complementary organisational systems measured using quantitative and qualitative based performance management processes. The literature suggests there are strengths and weaknesses to both clustered and centralised police deployment models. Reviews by Kurtz (1995) and Reiss' (1995) are comprehensive and identify a number of key points. Firstly, whilst centralisation promotes uniformity of services and service delivery, clustering promotes innovation whilst providing adaptive and flexible services to meet local community needs. Secondly, centralised policing reduces administrative duplication, whereas clustering allows enhanced local community involvement in policing. Thirdly, centralisation of training provides enhanced levels of training, whereas clustering facilitates customised training targeted at local needs. Finally, centralisation enables enhanced coordination of policing

activities across boundaries, whereas clustering focuses on local offending, often in isolation of broader considerations.

In this regard, given the current QPS systems in place (Priority Policing and Place and Case Management), the literature provides a clear argument for the application of both structures, thus supporting the current 'split force' model in place in Townsville. However, the literature does not provide any reference towards the extent of application of what a 'split-force' model should look like. The specifics of the current 'split-force' structure in Townsville will be explored later in this thesis, as the question remains as to whether the current structure, and resources allocated within that structure, are sufficient to adequately address offending in metropolitan Townsville.

The concept of law and order is critical to local communities and government, hence any changes to police organisational structure, particularly a move away from decentralisation, is challenging. Jacot-Descombes and Niklaus (2016, p. 348) identified that unlike other public policies, such as health or social security, reforms in policing towards centralisation are implemented with difficulty as policing is traditionally decentralised and represents a strong symbol of identity, values and powers for political figures and local communities. The literature also identifies the challenges associated with any police organisational change. In line with this, when implementing organisational change, emphasising the criticality of individual and organisational performance measures, an awareness of institutional impact on behaviour and performance, and the development of a workplace culture that supports any new structures and / or systems.

The information in the literature informs the research design used in this study, as it suggests that both quantitative and qualitative analysis is required to adequately assess police performance, due to the shortcomings of solely relying on traditional statistical measurement of activities, as opposed to outcomes. This aligns with the objectives of this research incorporating an assessment of the efficiency and effectiveness of the current deployment models in order to determine their impact on police service delivery in metropolitan Townsville. The scope of the research across broad operational and administrative areas of policing

is a key factor in addressing the gap in the literature and providing a contribution to knowledge whilst enabling practitioners to apply findings in support of community safety and public value.

CHAPTER 4: RESEARCH METHODOLOGY

This chapter discusses the methodology used in this thesis in order to connect the examination of relevant theory to the research questions. The chapter comprises of the following sections: 4.1 covers the objectives of the research and the research questions; 4.2 addresses the researchers' epistemological position; 4.3 and 4.4 discuss the mixed methods research design applied during the research; 4.5 relates to phase 1 quantitative data collection and analysis; 4.6 relates to phase 2 quantitative data collection and analysis; 4.7 relates to phase 2 qualitative data collection and analysis; whilst 4.8 discusses ethical considerations.

4.1 Research Objectives and Questions

The objective of this research is to determine how and to what extent the current clustered, station-based policing deployment models relate to service delivery in metropolitan Townsville, and what alternative model may be identified. This objective leads to a number of sub-research questions that are central to the research undertaken in this thesis. Outcomes to these questions, and any subsequent recommendations are critically dependent on the application of relevant literature and theory being applied to the area subject of the research, metropolitan Townsville.

In this regard, the literature provides that there are benefits and weaknesses to both centralisation and clustering, with elements of each being required for effective and efficient policing models that provide coordination across boundaries, whilst connecting with local community requirements. However, the literature also indicates that policing organisations require systems to support structures, as there is significant institutional influence on officers' behaviour as a result of organisational policy and associated requirements.

Metropolitan Townsville is in a sound position in terms of both structure and systems, with the creation of the RAP and TCS providing a proactive policing presence through centralisation, and the five local policing divisions operating in a clustered model to respond to calls for service. These structures are supported

by adequate systems through organisational policy such as 'Priority Policing' and 'Place and Case Management'.

What the literature does not address is the extent of application of either the centralised or clustered policing models for an organisational structure to be successful. There is no literature specific to metropolitan Townsville, and nothing that addresses any potential benefits or impacts of the existing structure in place. Critically, the literature does not address whether a change to the extent of centralisation or decentralisation could yield benefits for the Townsville community. What the literature does support is the need for both quantitative and qualitative analysis to be applied to any assessment of performance.

The research methodology employed henceforth is to analyse elements of the existing structure and determine if a change in structure would provide opportunities for the QPS to increase public safety in metropolitan Townsville. This provides the basis for the research questions and related sub-research questions to be addressed in this study:

Research Question 1:

How and to what extent do the existing clustered, station-based police deployment models relate to service delivery in metropolitan Townsville?

Sub-Research Question 1:

What is the current standard of police service delivery in metropolitan Townsville, and how has it been achieved?

Sub-Research Question 2:

What impacts are the current police deployment models having on efficient police service delivery in metropolitan Townsville?

Sub-Research Question 3:

How efficient and effective are the existing police deployment models to meet the needs of the Townsville community and the Strategic Objectives of the QPS?

Research Question 2:

What alternative model could be advanced as a result of this research?

4.2 Epistemological Position

Merriam (2009) and Creswell (2013) suggest it is crucial for the researcher to state their epistemological stance and background in order to maintain the criticality of the researcher in addition to that of the reader. This has significant relevance to this study as there may be a number of issues related to the author's background and epistemological stance that could impact on any related analysis and interpretation.

Given the focus on the subject matter and the potential implications that may arise from the analysis and recommendations in this study, the interpretive framework utilised to conduct the study is that of 'pragmatism'. Creswell (2013, p. 28) suggests that pragmatic researchers focus on applications and solutions to problems through the outcomes of research in terms of actions, situations, and consequences of inquiry as opposed to antecedent conditions. The pragmatist framework accommodates the current study as it allows the integration of theories from different domains and allows the author to use findings and personal experience to develop a practical model for operational policing in metropolitan Townsville.

The authors' study has fostered an understanding of quantitative, qualitative, and mixed methods approaches to enable a research issue to be viewed from differing methodological perspectives. The pragmatist framework complements the mixed methods approach due to its openness to differing analytical techniques that assist in addressing research questions. The author has been a police officer for over 26 years, working in a wide range of areas that facilitated exposure to various dimensions of police deployment models under differing structures and systems. Between 2015 and 2018, the author was the OIC of Townsville City division, with periods spent as the patrol group inspector of different areas and work units within the Townsville metropolitan area. During this time, the author implemented new police deployment

models for Townsville City Division and Brisbane City division, whilst developing and implementing an alternative patrol group structure for Townsville District. Given the authors experience in policing and police deployment models in Townsville, there could be a perception of bias in terms of the author favouring implementation of an alternate police deployment model. However, the author is aware of his insider researcher status and associated considerations, he has undergone formal training on the identification and management of unconscious bias and will apply these principals throughout all aspects of the research.

4.3 Mixed Methods Research and Design

The combination of the author's background and epistemological stance, along with the research objective and questions of this study, not only establish the framework for the current study, they require an appropriate research design and methodology. In general terms, Punch (1998) suggests that research design is essentially the structure in which the research is undertaken. Punch (1998) highlights the criticality of research design incorporating four main elements: strategy, conceptual framework, identification of related research topics and targets, and the adoption of appropriate data collection and analysis procedures. Holmes, Dahan and Ashari (2005) suggest that research design is divided into a number of methodologies including quantitative research and qualitative research, that can be applied individually or as mixed methods. Whilst Walliman (2011) suggests these methodologies are essentially tools that can be applied to different types of enquiry in order to conduct research or develop findings.

The methodology of mixed methods research aligns with this study as it enables the researcher collect and analyse both quantitative and qualitative data (Creswell and Plano Clark, 2011). In line with this, the following is provided to identify how the research methodology used in the study employs the relevant components of the mixed methods design.

4.4 Explanatory Mixed Methods Design

Mixed methods incorporate several research designs that serve differing purposes and generate different results (Creswell & Plano Clark, 2011). This

research study utilises an explanatory, two-phase sequential research design. Phase 1 is a quantitative investigation of data relevant to the study where the researcher will use his policing experience and knowledge to analyse secondary data from existing sources. Information from Phase 1 will be used to construct a questionnaire for use in Phase 2, with responses sourced from key informants to statements using both the Likert Scale and free text to open-ended questions. The researcher will conduct analysis of the responses using both quantitative and qualitative investigation to address the research questions.

Creswell and Plano Clark (2011) highlight the challenges associated with explanatory mixed-method design, incorporating the outcomes of quantitative-based findings for use in the qualitative phases of research involving data collection through use of a valid instrument, often resulting in extended implementation time. In line with this, Creswell & Plano Clarke (2011) assert that researchers must identify which quantitative results need further explanation, which can't be determined until the completion of the quantitative phase, and this leads into the selection criteria for participants in qualitative phases.

Use of the explanatory, sequential mixed methods design was highlighted in a study by Myers and Oetzel (2003); this study is referenced because it used research design related to investigating the public service. Myers and Oetzel (2003) had a research objective based around the creation of a valid measure of organisational assimilation in the public service, through an index of the acceptance of new members. During the first phase of research, analysis was conducted to formulate six dimensions of organisational assimilation. Phase two incorporated using the six dimensions to create an instrument that was used to administer a survey to over 300 staff members from different organisations. The researchers then conducted a confirmatory factor analysis to validate their findings from phases one of their research.

In terms of the current study, Creswell and Plano Clark (2011) provide a number of reasons for the use of explanatory mixed methods design that are applicable to this research study. The first relates to the lack of a guiding framework. The literature provides theory around the concepts of centralisation and clustering, without establishing the degree or range of structure applicable to

policing organisations. Whilst there is literature suggesting the need for both structures to maintain broader and local policing strategies, there is no theory or conceptual framework around how or to what extent this should be undertaken. In any case, the situation in the Townsville metropolitan area is unique given its size and geographical isolation, and there is no material whatsoever related to the Townsville metropolitan area. In this regard, analysis of material specific to Townsville is required.

This aspect also leads into the second reason provided by Creswell and Plano Clark (2011). The information in terms of definitions and measures from the literature, as they relate to centralisation and clustering, cannot be definitively compared to the situation in metropolitan Townsville due to the general nature of the literature and the specifics of the area. Thirdly, and finally, the literature does not provide significant guidance in terms of variables relative to the current research. Whilst there has been a limited number of quantitative-based studies of police centralisation and clustering, the variables relative to the situation in metropolitan Townsville can only be formulated through quantitative analysis of local data in conjunction with qualitative engagement with OICs and application by the author to propose an alternate model.

These reasons, as they apply to the current study, align with the example of Myers and Oetzel (2003) in terms of use of the explanatory mixed methods design of Creswell and Plano Clark (2011). More specifically, in the present study, phase 1 is quantitative and incorporates analysis of data to address sub-research questions 1, 2 and 3, and serves as a departure point for the subsequent quantitative and qualitative research in phase 2.

Figure 1 represents a procedural diagram for the methodology applied to the research.
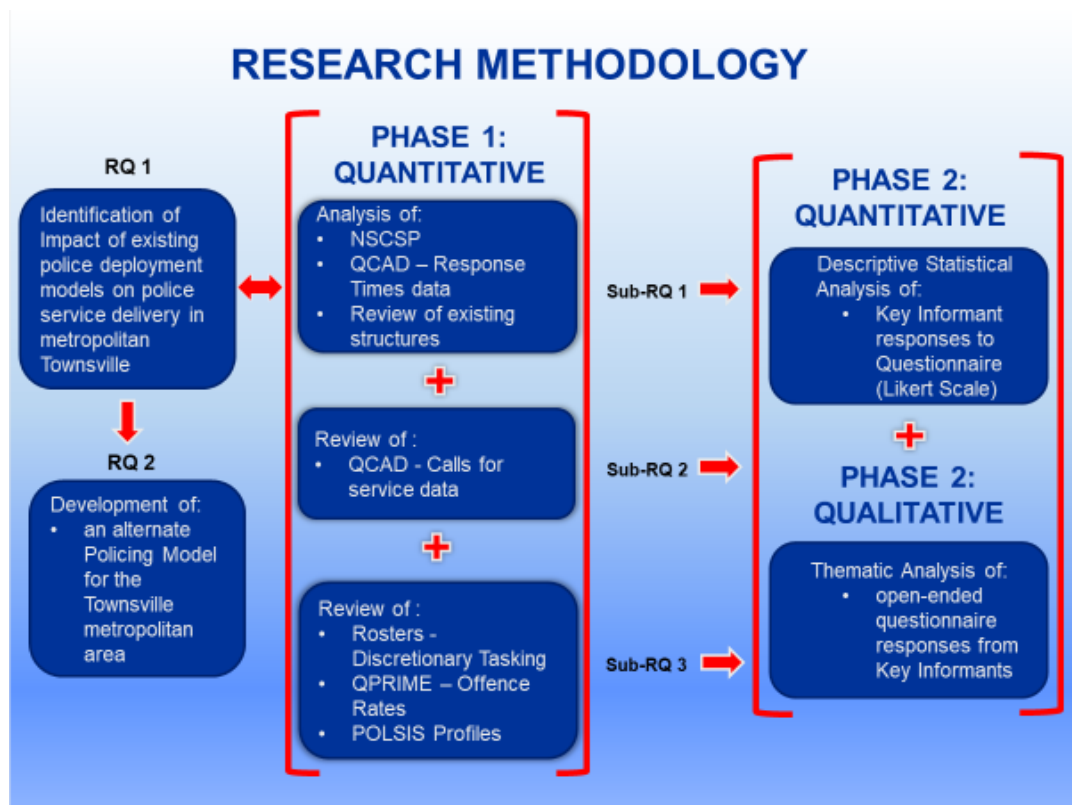
Figure 1: Research methodology used during the study.

4.5 Phase 1: Quantitative Data Collection

Data for Phase 1 will be sourced from a number of internal QPS sources: Police Statistical Information System (POLSIS); Queensland Police Record and Information Management Exchange (QPRIME); and the Queensland Computer Aided Dispatch (QCAD) system. The deployment models of the five policing Divisions in the Townsville metropolitan area will be subject to review in terms of officer numbers, rostering structure and the level of discretionary tasking. The National Survey of Community Satisfaction with Police (NSCSP) will be used as a measure of community perception of police due to the size and scope of engagement undertaken across policing jurisdictions throughout Australia.

Given the researcher's knowledge of the research topic, data collection will be undertaken by purposive sampling as it incorporates the researcher using personal judgement to identify information sets relevant to the study and those most likely to contribute to addressing the research questions (Palinkas, et al., 2015). The QPS surveys and systems, as listed above, have been selected due to

their applicability to this study, with (where possible) the same three-month period across 2017, 2018 and 2019 being subject to data sampling and analysis to ensure consistency. This is based on that period being outside of any major QPS or community events at a state level that may impact on police, community and offending behaviour. It is anticipated this volume of analysis will be sufficient given the repetition of patterns in findings, without new information (Ball, 2003). This guides the quantitative data collection in the current study, with a subsequent focus on frequency counting and quantification of content to address Phase 1 objectives of the research (Merriam, 2009).

4.5.1 Phase 1: Quantitative Data Analysis

Analysis of data from Phase 1 is aligned to specific sub-research questions. In terms of sub-research question 1 (what is the current standard of police service delivery in metropolitan Townsville and how has it been achieved), the current structure of police deployment models in metropolitan Townsville will be identified, and data from the QCAD system will be used to analyse response times to calls for service in the Townsville metropolitan area to determine if they align with other areas of Queensland.

Response times to calls for service are critical for the QPS and are reflected in the QPS Strategic Plan (QPS, 2020c). The QPS has established four priority 'codes' which dictate the urgency and nature of the policing response (QPS, 2013b). In line with this (QPS, 2013b), the first is 'Code 1' involving a situation described as 'very urgent' and assigned in the following circumstances: (i) when an officer or member of the public is in need of help in circumstances where life is actually and directly threatened and is in immediate danger of death; (ii) when shots are being fired or an explosion or bombing has occurred and danger to human life is imminent; (iii) at the time of a major incident or serious fire, or in the case of a robbery or any crime in progress where there is danger to human life; (iv) in instances of asphyxiation or electrocution where life may be saved or where a person is attempting suicide or other forms of self-harm likely to cause death or serious injury; or (v) in any other instance where it is known that danger to human life is imminent.

Code 2 is 'urgent' and can be assigned in the following circumstances: (i) incidents similar to those above and any other urgent situations without the element of imminent danger to human life being apparent; (ii) in any other urgent situation when it is known that danger to human life is not imminent; or (iii) incidents involving injury to a person or present threat of injury to a person or property.

Code 3 is 'routine' and may be assigned to all other matters which are considered to be routine and not requiring classification of Code 1 or 2. The final job code is Code 4, which is a 'negotiated response' where the response is undertaken in line with local policies, often by phone or through non-first response crews.

The QPS Strategic Plan 2020-2024 (QPS, 2020c) has committed to a performance indicator that specifies an increase in the percentage of Code 1 and 2 incidents attended within 12 minutes. This performance indicator is listed within the Strategic Value of 'Our Community' providing a nexus between response times and the community (primarily in terms of expectation and community confidence).

Data from the National Survey of Community Satisfaction with Police will be used as a measure of community perception of policing in Townsville. The Survey was conducted using Computer Assisted Telephone Interviewing. Interviewing was conducted each month, with eligible respondents required to be aged 18 years or over. Respondents were chosen from each contacted household by the next birthday method, which involves identifying the person who has the next birthday from the date of the call. People who work for the police or who live in a household with someone who works for the police were excluded from the Survey. A random sample of telephone numbers was generated for each police region within QLD. The random sampling method used, allowed interviews to be made to both listed and unlisted numbers in all active telephone exchanges across the state.

The overall sample was stratified by State and within each state by police region or district to ensure a significant sample was collected for each State and police region each quarter. Each police region/ district had a monthly quota of interviews to ensure interviewing was spread evenly across the full year. The sample size for each

district was 400, totalling 6,000 for the state. Survey results were presented at the state, region and district level.

The information provided represents community perceptions, not occurrences of crime. Care needs to be taken in interpreting Survey data. The statistical reliability of Survey data is highly dependent on the key elements of the survey method, including the survey instrument, survey design, survey collection method and the sample size. Attitudinal data can be influenced by rare, but significantly adverse or highly publicised, events (such as a mass murder or a police corruption incident). Point-in-time responses can vary from people's true underlying (or longer term) satisfaction with police and perceptions of safety and crime levels.

Collectively, the analysis of QPS data will show the impact of the current organisational structure on response times and community perception of policing and safety, in order to determine the standard of police service delivery, and how it was achieved.

Research into sub-research question 2 (the impacts of the current police deployment models on efficient police service delivery in metropolitan Townsville) will incorporate further data mining and analysis as part of preparatory desktop research. Data from QCAD will be sourced and reviewed to determine the volume of calls for service attended within the demarcated police divisions in metropolitan Townsville. This will incorporate analysis of data related to calls for service attended by units assigned to the division where the calls originated; with associated analysis of calls attended in each division by crews from neighbouring work units. The data will reflect the volume of 'borderless policing' undertaken in response to calls for service, providing a clear perspective of the impact of the current divisional boundaries on efficient service delivery.

Sub-research question 3 incorporates population data and police resource allocation to determine the level of 'discretionary tasking' by OICs. This relates to the numbers of officers available on shift and identifies how many officers were assigned to first response duties, and how many were assigned to proactive tasking's at the discretion of each divisional OIC. The volume and associated availability of officers for proactive taskings reflects the efficiency of rostering

when factored against their effective use in addressing crime. In this regard, data from QPRIME will be explored to identify the rates of offending in Townsville in order to determine the effectiveness of the current deployment models.

Derived from Phase 1 of the research, through use of frequency counting and quantification, is a comprehensive analysis of key data and perspectives addressing research question 1 to determine how and to what extend do the existing clustered policing deployment models relate to service delivery in metropolitan Townsville.

In line with the explanatory research design used in the study, the researcher will analyse results from phase 1 research, and identify what components require further investigation or clarification. This will form the basis of the development of the questionnaire to be applied in phase 2, requiring both quantitative and qualitative investigation (Creswell & Plano Clark, 2011).

4.6 Phase 2: Quantitative Data Collection

Phase 2 of the research incorporates both quantitative and qualitative investigation, with a focus on addressing research question 2. The first part of phase 2 involves the identification of results from phase 1 requiring further exploration. In this regard, the researcher used his experience and knowledge of policing to analyse the secondary data in phase 1, in order to identify relevant categories, statements and questions.

As a result, a questionnaire was developed and divided into six parts:

- Part A: Roster development – current state;

- Part B: Demand Analysis – current state;

- Part C: Roster Flexibility – current state;

- Part D: Supervision – current state;

- Part E: Use of Resources – current state; and

- Part F: Use of Resources – future state.

A central theme for the questionnaire was the disposition and supervision of rosters and associated resources. In this regard, there are approximately 555 sworn officers in the Townsville metropolitan area. The duties of these officers vary significantly but can be divided into a number of broader categories: officers who are equipped and available for first response tasking under the QPS Priority Policing model ($n = 330$); officers who are operational but primarily tasked to support or specialised roles ($n = 156$); and non-operational support officers ($n = 69$).

The researcher determined that the only officers who could provide information relevant to the identified categories were the OICs of the 330 officers available for first response tasking under the QPS Priority Policing model. This was not only due to their supervisory role, but also their expertise in developing and operationalising their deployment models (or rosters) and their knowledge of associated policing systems and structures. In this regard, these officers were purposively selected as Key Informants (KI) by the researcher to participate in the questionnaire as they were a select, small group of individuals who were likely to provide key information, ideas and insight around the research subject (Kumar, 1989).

Analysis of results from phase 1 of the research facilitated development of the questionnaire, with the first part focused on statements to be addressed by using the Likert Scale incorporating a 1 to 5 rating of strongly disagree, disagree, undecided, agree, or strongly agree:

Part A of the questionnaire asked key informants to indicate their perspective on the development of their roster, incorporating key factors that impact on the deployment of officers including minimum staffing requirements, operational and administrative planning requirements, and engagement with other OICs. Part A of the questionnaire incorporated the following statements:

- I formally meet with other OICs prior to developing the roster.
- I feel these meetings provide a good understanding of demand and resource factors in other work units in metropolitan Townsville.
- I discuss details of my intended proactive taskings with other OICs at these meetings.

Part B of the questionnaire focused on demand analysis in the current state, incorporating how tasks were set by OICs when developing their rosters. The following statements formed Part B of the questionnaire:

- I set taskings for non-first response crews prior to posting the roster.

- I change these taskings regularly.

Part C of the questionnaire related to flexibility and agility of rosters in their current state; including the capacity of the OICs to change rosters at short notice, where these staff maybe taken from, and the level of assistance sought from other OICs to perform certain operational functions. Part C incorporated the following statements:

- I consider my current rostering model to be flexible.

- My roster is flexible enough to change crew taskings at short notice.

- I regularly seek staffing assistance from other OICs to assist with proactive patrols in my Division.

Part D of the questionnaire related to supervision within the current rostering structure and looked at levels of operational supervision, who provided the supervision, and perspectives on the effectiveness of the current supervisory model. Statements in Part D include the following:

- I have a Sergeant working every shift in my work unit.

- I believe the current supervisory model in my work unit is an effective operational supervision model.

Part E of the questionnaire focussed on the use of resources within the deployment models in place through the respective units. Factors addressed in Part E included OIC perspectives on the current deployment models being used by work units in the Townsville metropolitan area, responses to calls for service within divisions, and the disposition of resources. The following statements were incorporated into Part E:

- Crews from my work unit regularly attend calls for service in other Divisions in the Townsville metropolitan area.

- Crews from other work units in the Townsville metropolitan area regularly attend calls for service in my Division.

- It would be operationally feasible to maintain expected levels of service delivery if crews in the metropolitan Townsville only attended calls for service within their own Divisional boundaries.

- I support the current rostering practices of the five Divisions operating in metropolitan Townsville.

- I support the current rostering practices being used by the Townsville Rapid Action and Patrol (RAP) and Townsville Tactical Crime Squad (TCS).

- I believe the RAP and TCS should continue to operate as separate work units.

- I believe the current disposition of officers across the five metropolitan Divisions, RAP and TCS is the most effective way to deploy policing resources in the Townsville metropolitan area.

Part F of the questionnaire looked at the potential future state and incorporated OIC perspectives on borderless policing, divisional boundaries, community perception, and alternative police deployment models. The following statements formed Part F of the questionnaire:

- I believe 'borderless policing' will work in the Townsville metropolitan area.

- I believe the disposition of policing resources in metropolitan Townsville needs to change in order to implement 'borderless policing'.

- A deployment model that 'splits' duties for officers where all officers remain in their current stations would work.

- I believe that some officers would be interested working in a large, co-located first response work unit on 10-hour shifts.

- I believe that some officers would be interested in working a 2-shift roster on full OSA conducting follow-up inquiries (not first response duties).

- I believe current rostering practices in the Townsville metropolitan area are an efficient use of police resources.

4.6.1 Phase 2: Quantitative Data Analysis

The concept of research has been described by Best (1981) as a process of identifying the relationship between variables through the systematic observation and description of the characteristics or properties of objects or events in order to contribute to the explanation of phenomena. Best (1981) further identified that the process of research can be facilitated though the assigning of quantifiable values to characteristics or properties of objects or events to create measurement, which enables accurate descriptions to be generated in order to convey meaning. In order to achieve this, this phase of the study used the statistical application highlighted by Best and Khan (2003) of descriptive statistical analysis.

Best and Khan (2003) describe descriptive analysis as the use of statistical measures to facilitate analysis within a specific or individual data group. Whilst Rea and Parker (2014) identify a number of statistical measures of descriptive analysis, in consideration of the limited number of key informants completing the questionnaire, the only applicable measures used in the research were frequency distribution and the measure of central tendency, incorporating the mean. Rea and Parker (2014) describe the mean as the average of all values in a distribution where the values are added and divided by the total number of values in the distribution; whilst describing frequency distribution as a representation of the number of observations within a data set. In this regard, the researcher will use his knowledge and experience of the research topic to provide comment on the frequency and consistency of responses relative to each questions' policing context.

4.7 Phase 2: Qualitative Data Collection

Given the extensive experience and associated perspectives of the key informants relative to the research topic, and the limited scope provided by responses using the Likert Scale, the researcher determined that key open-ended questions would be asked of the key informants to allow free text responses within the various parts of the questionnaire. In this regard, Hammarberg, Kirkman and De Lacey (2015) suggest that qualitative research methods are used to answer questions about experience, meaning and perspective, often from the standpoint of those involved

in the research (including participants), and generally in situations where the data is not amenable to counting or measuring.

This aligns with the key informants used in the questionnaire being all OICs (with the researcher also a former of OIC of Townsville City Division). This cohort is considered the most experienced officers in the QPS in terms of police deployment models as they represent the frontline managers who have direct line control of all operational officers. They develop their own deployment models, participate in meetings with other OICs and task officers with a significant degree of autonomy and discretion.

The information from the quantitative analysis in phases 1 and 2 was assessed, and a number of open-ended questions were developed to enable sufficient opportunity for the expression of experience and perspective by key informants. This enabled the key informants to elaborate on any of their initial responses, whilst enabling the researcher to further demonstrate how qualitative findings may apply.

In line with this, the following free text questions were asked to key informants:

- Given that jobs are allocated to operational crews through Police Communications or LCAD, what level of control do you have over your first response crews attending calls for service in other police divisions?

- Do you encourage your crews to attend calls for service in other police divisions?

- As an OIC, do you believe that having your crews attending jobs in another police division can have a negative impact in your own division?

- If yes, please explain your answer?

- Do you believe your staff give more assistance to other divisions than what you receive, in terms of (1) calls for service; and (2) proactive policing operations?

- What do you believe would happen, in terms of service delivery, if operational crews in the Townsville metropolitan area only attended calls for service in their own divisions?

- What impact does the current disposition of officers in the five metropolitan stations have on service delivery?

- Is there anything you would change about the disposition of staff?

- What impact do the current divisional boundaries have on service delivery in the Townsville metropolitan area in terms of (1) calls for service; and (2) proactive policing operations?

- What do you believe would happen, from a service delivery perspective, if there were no divisional boundaries in metropolitan Townsville?

- What do you consider when developing discretionary taskings for your proactive crews?

- How much emphasis do you apply to crime issues in other divisions when developing discretionary tasks for your crews?

- Is there anything else you'd like to add in relation to divisional boundaries and/or service delivery in metropolitan Townsville?

4.7.1 Phase 2: Qualitative Data Analysis

The development of the free text questions in the questionnaire was undertaken to align with key closed questions and results of phase 1 data analysis in order to provide enhanced understanding of the quantitative data (Creswell & Plano Clark, 2011). In line with this, responses to the free text questions were collated and subject to thematic analysis by the researcher. The analysis of qualitative research data is critical given that Drew, Hardman and Hosp (2008) suggest it carries more negative perceptions than other parts of the research process, largely due to the fact that the data is often recorded in descriptions, opinions and perceptions, as opposed to numbers.

The primary objective of thematic analysis is to identify significant patterns within data, known as themes, in order to address research or comment on an issue; the process is focussed on interpreting data as opposed to simply summarising it (Braun & Clarke, 2006). Relevant to the research in this study, Braun and Clarke (2006) distinguish between two levels of themes: semantic and latent. They describe

the semantic level as sitting within the explicit or surface meanings of the data, where the researcher is not looking for anything beyond what a particular participant has said or written. Alternatively, the latent level is described as where the researcher looks at what has been documented and "starts to identify or examine the underlying ideas, assumptions, and conceptualisations – and ideologies - that are theorised as shaping or informing the semantic content of the data" (p. 84). This provides a progression from simply describing information to interpreting or explaining the information.

In line with this, the authors emphasise that thematic analysis is a method rather than a methodology, meaning that it is not tied to any particular epistemological perspective, providing flexibility. This is critical given the researchers previously stated epistemological position and the anticipated lack of familiarity of related assumptions by readers with different backgrounds to the researcher.

To address the issue, it is imperative to have a usable framework to conduct the analysis and the researcher has followed Braun and Clarke's (2006) six-phase framework for thematic analysis, presented in Table 4. This enabled the researcher to avoid one of the most common errors in thematic analysis, where research or interview questions are used as themes, often resulting in data being summarised and organised, as opposed to analysed (Clarke & Braun, 2013).

Phase	Details of Applicable Process
Develop familiarisation with the data	Repeatedly read the free text responses, making notes of initial ideas.
Generate initial codes	Systematically organise data into small chunks, coding segments of relevance to the research.
Search for themes	Identify patterns of interest or significance regarding the data / research questions.
Review potential themes	Review, modify and develop themes; ensuring they are coherent, distinct and supported by data.
Define and name themes	Identify the essence of the theme; what is told by the theme and related analysis.
Develop written report	Document the analysis using compelling extracts, relating it back to research questions.

Table 4: 6-phase framework for thematic analysis (Braun & Clarke, 2006)

The research questions are realistic and determined subsequent questions asked of the key informants to elicit their experiences and perspectives. This aligns with the approach of Braun & Clarke (2006), where two approaches are provided to analysis: a top-down or theoretical thematic analysis underpinned by research questions and/or the researchers' focus; and a bottom-up or inductive analysis underpinned by the data itself. In line with the researchers' epistemological position and focus on analysing the data to address the specific research questions, the approach applied in this research is a theoretical/top-down thematic analysis as opposed to an inductive/bottom up analysis.

Whilst the responses subject to thematic analysis in this thesis are only from a limited data corpus of five OICs as key informants, they are 'information rich' participants who provide highly textured information relevant to the research topic in line with purposive sampling concepts, generating qualitative research focussed on small samples that support a depth of case-oriented analysis that's fundamental and research specific to this study (Luborsky & Rubinstein, 1995; Sandelowski, 1996; Marshall, 1996).

In line with Braun and Clarke (2006), the researcher began by repeatedly reading the relevant data, followed by developing codes, searching and reviewing themes, providing definitions, naming themes, and reporting on the analysis. By adhering to this process, the researcher ensured effective use of limited interview data, incorporating flexibility when analysing relevant text.

Responses from key informants were subject to analysis in line with Boyatzis (2004), who suggests the use of topics and themes, when aligned with relevant quantitative data, is an effective method of addressing perceptions associated with quantitative research. The researcher used outcomes from the literature review, quantitative investigation in phases 1 and 2, and qualitative outcomes from phases 2, with his personal knowledge and experience to develop the alternative police deployment model for metropolitan Townsville to address research question 2.

Given that a significant aspect of Phase 2 relates to the researcher creating an alternative police deployment model for metropolitan Townsville, the accuracy

and transparency of the research is critical. To enable verification of the accuracy of the qualitative findings in Phase 2 of the study, a number of verification strategies were applied, as suggested by Creswell (2013).

Peer review was utilised with the research supervisors (both the principal and associate supervisors) operating as peer reviewers throughout the entire study. This process aligns with Creswell (2013, p. 251) when he suggests the accuracy of a study can be enhanced by a colleague questioning methods, meanings and interpretations, whilst providing the researcher with a release by listening to the researchers' feelings.

Bias clarification has also been addressed. Creswell (2013) emphasises that a researchers' assumptions, experiences, prejudices and even their philosophical position can impact the analysis and interpretation of research. He suggests that accuracy can be maintained if the researcher clarifies any potential biases by documenting them within the thesis. In this regard, the author has provided details of his background, experience and epistemological stance, and provides details of his awareness and strategies to address any related issues that may arise. Ultimately, derived from Phase 2 were qualitative research outcomes that addressed the final aspect of research question 2 around what alternative police deployment model could be identified for metropolitan Townsville.

4.8 Ethics Consideration

In line with the associated research ethics approval, the questionnaire was facilitated using the USQ Survey Tool and key informants were emailed the link to the questionnaire which provided them with conditions relating to their participation in the questionnaire, incorporating the following:

- all information provided would be kept confidential;

- any information supplied would be used only for this project, and any potential subsequent academic publications; and

- the research results would be made available to participants upon request and any published reports of the questionnaire would preserve participant anonymity.

Key informants were further advised that their participation in the questionnaire was on the understanding that:

- there was no obligation for any participant to undertake the questionnaire;

- if participants chose not to take part, there would be no detriment to the participants career, status or personal life;

- if a participant chose to take part in the questionnaire, nothing in the type, content or scope of answers provided would impact the participants' career, status or personal life;

- Participants were free to withdraw from the questionnaire at any time, with no detriment to the participants career, status or personal life;

- Any questions about the research project would be answered to the participants satisfaction before participating; and

- If a participant had any additional questions about the research project, the research team could be contacted at any time to discuss.

The key informants were only facilitated access to the questionnaire after answering affirmatively that they had read and understood the above information and consented to participate in the questionnaire. At the conclusion of the questionnaire, key informants were provided with information that should they have any complaints or concerns about the ethical conduct of the project, they may contact the University of Southern Queensland Manager of Research Integrity and Ethics, as they are not connected with the research project and can facilitate a resolution to any concerns in an unbiased manner. Key informants were further advised that should they have any concern or complaint around any QPS related aspect of the research, they could have the matter addressed by following the existing QPS complainant management process, or alternatively contacting the QPS Research Committee.

CHAPTER 5: RESULTS

This chapter provides analysis of phase 1 and phase 2 research data. Section 5.1 provides context to phase 1 quantitative analysis of secondary data incorporating the following: 5.2 QPRIME; 5.3 NSCSP; 5.4 QCAD; and 5.5 Rostering and Tasking. Section 5.6 provides the quantitative analysis of questionnaire results and 5.7 details the qualitative analysis of free text responses in the questionnaire.

5.1 Results - Phase 1: Quantitative Analysis of Secondary Data

The following results incorporate quantitative analysis of secondary data from QPS systems (QCAD, QPRIME, POLSIS, NSCSP and rosters) by the researcher using his knowledge of the systems and their related application in the policing environment as it relates to the research questions.

5.2 QPRIME Analysis - Crime Data

Rates of reported crime are a critical measure of police effectiveness, with an organisation's ability to tackle crime, disorder and antisocial behaviour of great importance to local communities, directly impacting public confidence in police (Jackson & Bradford, 2010). The Townsville metropolitan area has been subject to significant and sustained media focus around rates of offending. This has generated a lot of community discussion and impacted community confidence and perspectives on police performance, whilst also fostering discussions around the effectiveness of the broader judicial system. Significant time, money and resources have been directed into different areas of the response by government and non-government agencies to try and address offending and causal factors.

The Queensland Police Records and Information Management Exchange (QPRIME) is the database that records reported offences within Queensland. The Townsville metropolitan area is not a reporting unit within the database, so relevant details can only be obtained from using data from the five 24-hour divisions in the metropolitan area. The below tables provide a three-year snapshot of reported offending across different crime categories between 2017 and 2019 for each division.
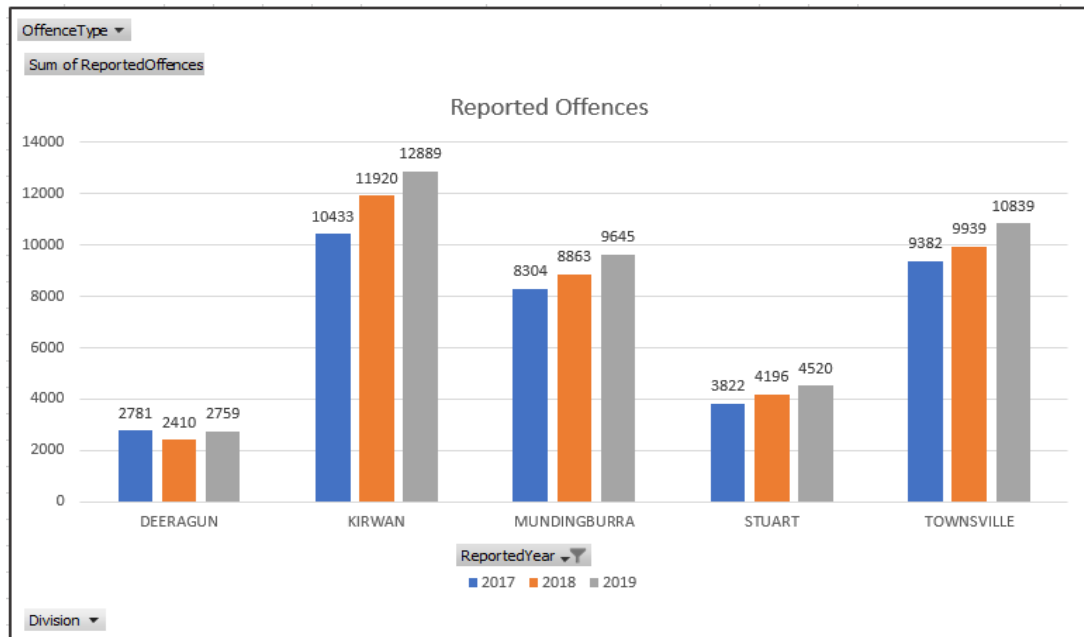
Table 5: Reported offences each of the 5 metropolitan police divisions in Townsville across the last 3 years.

Notes: 1. Data is based on the reported offences for the Divisions of Townsville City, Mundingburra, Kirwan, Stuart, and Deeragun and reported to police between 1 January 2017 and 31 December 2019. Only selected offence categories have been used, namely: Arson, Assault, Breach DV, Drug Offences, Fraud, Handling Stolen Goods, Homicide, Offences Against Property, Other Homicide, Other Property Damage, Other Theft, Robbery, Sexual Offences, Shop Stealing, Stalking, Steal from Dwelling, Unlawful Entry, Unlawful Entry with Intent - Dwelling, Unlawful Entry with Intent - Shop, Unlawful Use of Motor Vehicle, and Steal from Motor Vehicle.

Table 5 shows the cumulative totals of all reported offences across 2017, 2018 and 2019; graphs have been used to provide a visual representation of the information. The data indicates consistent increases in volumes of reported offences across each of the three years, with Kirwan having a total increase of 24% (*n=2,456*), Mundingburra at 16% (*n=1,341*), Stuart at 18% (*n=698*), and Townsville City at 16% (*1,457*), with a reduction of less than 1% (*n=22 offences*) in Deeragun. These figures represent a 14.6% increase in offending (*n=5,930 offences*) across the entire Townsville metropolitan area.

The significant increases in reported offences in four of the five 24-hour divisions shows a consistency in offending across the divisional boundaries in metropolitan Townsville, with the exception of Deeragun (which is geographically situated in the more sparsely populated area north of the metropolitan area). The rate of offending in Deeragun is significantly lower than

the other four divisions so its reduction does not have a significant impact on the statistical increase experienced by the metropolitan area. When this increase in offending is considered against the associated resourcing commitment of first responders, forensic analysis, investigative strategies and the prosecution process, it translates into a significant increase in work undertaken by police. This increased workload has an impact on the capacity for officers to undertake proactive crime prevention strategies, which can compound the issue by creating a cycle of offending and response, which orientates policing activities to a reactive approach (Nagin, 2013).

As a former OIC of Townsville City Division, the author can attest to the significant focus of property crime in metropolitan Townsville and the impact it has on community confidence. In line with this, Table 6 shows the cumulative totals of property offences in the Townsville metropolitan area.
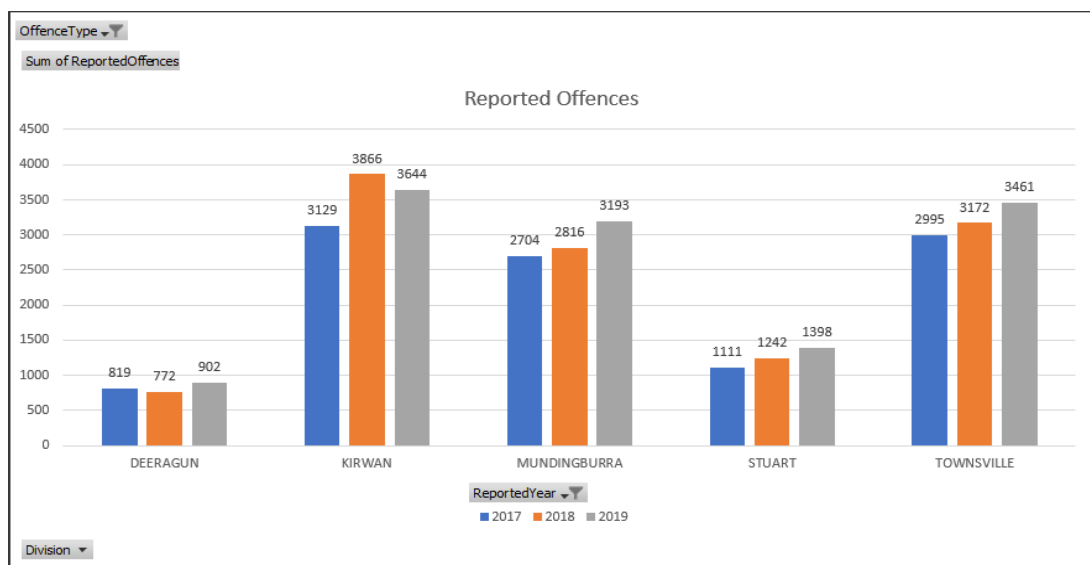
Table 6: Reported 'Property Offences for each of the 5 metropolitan police divisions in Townsville across the last 3 years.

Notes: 1. Data is based on the reported offences for the Divisions of Townsville City, Mundingburra, Kirwan, Stuart, and Deeragun and reported to police between 1 January 2017 and 31 December 2019. Only selected offence categories have been used, namely: Handling Stolen Goods, Other Offences Against Property, Other Property Damage, Other Theft, Robbery, Shop Stealing, Steal from Dwelling, Unlawful Entry, Unlawful Entry with Intent - Dwelling, Unlawful Entry with Intent - Shop, Unlawful Use of Motor Vehicle, and Steal from Motor Vehicle.

Table 6 indicates that from 2017 to 2019, property offences in metropolitan Townsville increased by 17% (*n=1,840 offences*). This included a 10% increase

for Deeragun (*n=83 offences*), 15% in Townsville (*n=466 offences*), 18% for Mundingburra (*n=489 offences*), 25% in Stuart (*n=287 offences*), with a 16% increase for Kirwan (although Kirwan had a 6% reduction from their 2018 total).

The figures reflect significant increases in the critical area of property crime for all the 24-hour police divisions in metropolitan Townsville. Given the geographical isolation of metropolitan Townsville to any other major population centre provides limited scope for external influence on offending behaviour, these results show a clear relationship with offending across police divisional boundaries. The concerning element with these increases is that they have occurred despite the volume of police in the RAP and TCS operating outside the scope of first response tasking; these officers are available for specific proactive operations targeting crime, mainly property crime. This will be explored further in the discussion chapter of this thesis.

Given that these figures are publicly available and referenced by media outlets, they have capacity shape community confidence, however there are limitations with the data that are not addressed in this thesis. Increases in offending can be shaped by a wide range of factors including community awareness and education programs, changes to police reporting requirements (from 'in-person' to online reporting), and changes in community confidence and/or willingness to report offending; also, these figures do not show police clearance rates for solved offences.

5.3 National Survey of Community Satisfaction with Policing

Whilst the objectives of police generally align with different elements of community safety, there can be differences between what police identify as a successful organisational objective, and whether the community feel the same way (Jackson & Bradford, 2010). Both authors further suggest that as any community member could find themselves in a situation where they might need or be able to help police, perception and community confidence in police is critical due to its link with the supply of information. The President's Task Force on 21st Century Policing (2015) found that strong relationships and mutual trust between police and the

communities they serve was critical in maintaining public safety and police effectiveness due to police reliance on community information.

The most direct method used by police organisations to measure community confidence and perception of police in Australia is through the National Survey of Community Satisfaction with Policing (NSCSP). The QPS has participated in the NSCSP (the Survey) since July 2001. Since 1 July 2010 the Survey has been conducted by the Social Research Centre. Results from survey questions are used within the QPS Annual Report (QPS, 2019). The Survey was designed to answer the following questions:

- What is the general level of satisfaction with services provided by police?

- How safe do residents feel, and where and when do they feel most at risk?

- What do they perceive are the major problems in their own neighbourhood?

- What is the level of satisfaction with contact with police, and the outcomes of contact, amongst those that have had contact with police?

The following survey results cover 2015 to 2019 inclusive, with comparative frequency (percentages) provided for Townsville District, Northern Region (which incorporates Townsville District, Mt Isa District, and Far Northern District), and the entire QPS.

Answer Options	Dissatisfied			Satisfied		
12M	District %	Region %	QLD %	District %	Region %	QLD %
Up to 2015/16 – Q1	3.10	4.40	5.60	76.20	77.90	77.30
Up to 2015/16 – Q2	2.60	3.70	4.80	79.80	79.70	78.60
Up to 2015/16 – Q3	3.00	4.20	5.50	79.40	77.90	77.70
Up to 2015/16 – Q4	2.30	3.40	6.20	79.80	69.60	75.60
Up to 2016/17 – Q1	2.10	5.40	5.80	79.00	67.20	77.30
Up to 2016/17 – Q2	4.80	7.00	6.10	72.50	63.60	77.20
Up to 2016/17 – Q3	9.20	8.90	5.50	68.90	62.70	77.70
Up to 2016/17 – Q4	9.30	10.90	5.40	69.70	68.90	78.50
Up to 2017/18 – Q1	10.90	9.40	5.20	68.60	71.20	79.00
Up to 2017/18 – Q2	8.60	7.80	4.50	75.10	75.70	80.00
Up to 2017/18 – Q3	4.40	5.90	4.10	74.40	76.70	79.80
Up to 2017/18 – Q4	4.60	4.90	3.70	75.70	79.30	80.30
Up to 2018/19 – Q1	3.30	4.20	3.50	76.40	79.30	80.10
Up to 2018/19 – Q2	5.40	5.50	4.10	74.00	78.30	80.40
Up to 2018/19 – Q3	5.90	5.60	4.70	77.90	80.30	80.50
Up to 2018/19 – Q4	7.80	5.90	5.00	74.60	79.70	81.40

Table 7 provides a snapshot of rates of community 'satisfaction with police'. The data indicates that in the first 3-months of 2015, rates of satisfaction with police in Townsville District was 76.2%, increasing to a high of 79% in the first quarter of 2016, before a period of significant fluctuation, with the final quarters result in the survey sitting at 74.6%. This represents a slight decrease in satisfaction with police across the 4-year survey period, with a proportionate increase in dissatisfaction with police across the same period. The same 4-year period returned an increase in satisfaction with police in both the Northern Region and the entire of Queensland. Given that the literature highlights the nexus community satisfaction and community confidence in police, the following table (Table 8) provides a snapshot of rates of community 'perception of police – I do have confidence in the police'.

Answer Options	Dissatisfied			Satisfied		
12M	District %	Region %	QLD %	District %	Region %	QLD %
Up to 2015/16 – Q1	90.80	89.90	88.20	2.10	3.80	4.20
Up to 2015/16 – Q2	93.40	90.30	88.00	2.00	3.60	3.50
Up to 2015/16 – Q3	92.40	88.60	87.40	1.80	3.90	4.00
Up to 2015/16 – Q4	87.60	87.80	87.30	2.90	3.30	4.10
Up to 2016/17 – Q1	85.30	87.00	88.20	4.60	4.50	4.40
Up to 2016/17 – Q2	83.80	87.20	89.70	4.90	4.80	4.50
Up to 2016/17 – Q3	82.60	86.80	90.00	6.10	6.00	4.10
Up to 2016/17 – Q4	82.70	84.10	88.90	7.10	7.60	5.30
Up to 2017/18 – Q1	83.80	85.00	87.70	5.70	6.40	5.70
Up to 2017/18 – Q2	84.00	83.90	86.30	6.90	6.80	5.90
Up to 2017/18 – Q3	75.70	80.30	84.90	6.40	5.60	6.10
Up to 2017/18 – Q4	78.40	81.90	84.30	5.2	4.30	5.70
Up to 2018/19 – Q1	77.10	79.80	84.30	5.20	4.30	5.70
Up to 2018/19 – Q2	76.70	80.00	84.60	5.00	4.80	5.30
Up to 2018/19 – Q3	85.30	83.10	84.70	5.00	4.80	5.50
Up to 2018/19 – Q4	83.80	82.30	84.80	5.30	5.50	5.20

Table 8: Rates of 'Perception of Police – I do have confidence in the police' across the last 5 years for Townsville District, Northern Region, and the entire QLD Police Service.

The data indicates that Townsville District has experienced a consistent decline in those who agree with the question, with a comparative increase in those who disagree. The Northern Region experience similar results as Townsville District; however, state-wide results for the QPS saw only a slight decrease with those who agreed and a slight increase in those who disagreed with the question. Given that the literature shows a link between community confidence in police

and the supply of information critical for effective policing, the data from Tables 7 and 8 does not reflect positively on current policing practices in Townsville, especially when considered against positive increases in neighbouring districts and the QPS.

Answer Options	Dissatisfied			Satisfied		
12M	District %	Region %	QLD %	District %	Region %	QLD %
Up to 2015/16 – Q1	91.00	91.90	90.80	4.70	4.00	3.60
Up to 2015/16 – Q2	91.10	91.20	90.50	4.90	4.60	3.80
Up to 2015/16 – Q3	91.00	90.90	90.10	4.60	4.80	4.20
Up to 2015/16 – Q4	89.90	91.30	88.90	5.30	4.70	4.90
Up to 2016/17 – Q1	85.30	87.50	89.20	8.40	7.70	4.30
Up to 2016/17 – Q2	81.20	85.80	89.30	11.70	8.70	4.30
Up to 2016/17 – Q3	76.80	82.80	88.30	16.60	11.60	5.20
Up to 2016/17 – Q4	71.70	78.30	88.20	17.30	13.90	5.20
Up to 2017/18 – Q1	70.70	79.50	88.40	16.80	12.20	5.40
Up to 2017/18 – Q2	70.80	79.90	88.40	16.60	12.00	5.40
Up to 2017/18 – Q3	67.50	78.90	88.40	20.10	13.20	5.00
Up to 2017/18 – Q4	72.30	82.10	89.20	19.40	12.00	4.90
Up to 2018/19 – Q1	72.00	82.20	89.30	21.90	12.80	5.00
Up to 2018/19 – Q2	71.90	81.20	88.80	21.10	13.10	5.30
Up to 2018/19 – Q3	77.10	84.00	90.00	14.70	9.80	4.80
Up to 2018/19 – Q4	76.60	83.90	89.90	14.10	9.00	4.80

Table 9: Rates of 'Perception of Safety – safety at home during the night' across the last 5 years for Townsville District, Northern Region, and the entire QLD Police Service.

Table 9 provides a snapshot of rates of community 'perception of safety - safety at home during the night'. The data indicates a very significant decrease in those who feel safe at home during the night in Townsville District, with a similarly significant increase in those who feel unsafe. Both the Northern Region and the QPS experienced decreases in feelings of safety and increases in feeling of unsafety, but not near the level of change in Townsville District results.

This data is extremely concerning considering the importance people place on being safe and secure within the confines of the family home. The explanation for these results can be found in other outcomes from the NSCSP for questions related to becoming a victim inside a person's residence. Rates of concern from community members in Townsville of becoming a victim of housebreaking dramatically increased by 14% since 2015, compared to a 4% increase for the rest of Queensland. A similar response was provided in relation to concerns about becoming a victim of vehicle theft (as a police officer, the researcher can support

that the vast majority of vehicles are now stolen from the victim's residence using keys taken from inside the residence).

Answer Options	Dissatisfied			Satisfied		
12M	District %	Region %	QLD %	District %	Region %	QLD %
Up to 2015/16 – Q1	45.50	49.70	52.60	29.20	22.50	18.40
Up to 2015/16 – Q2	51.90	53.00	53.00	21.60	18.80	17.50
Up to 2015/16 – Q3	49.60	51.90	51.40	21.70	20.50	18.70
Up to 2015/16 – Q4	49.40	50.40	51.30	21.80	23.60	19.70
Up to 2016/17 – Q1	48.70	49.60	52.60	23.30	26.30	18.60
Up to 2016/17 – Q2	45.00	45.70	52.70	27.90	31.40	18.20
Up to 2016/17 – Q3	42.30	42.00	51.20	33.20	34.20	18.50
Up to 2016/17 – Q4	39.00	40.80	51.00	36.30	32.60	18.00
Up to 2017/18 – Q1	37.80	41.10	50.80	38.10	32.20	18.00
Up to 2017/18 – Q2	37.80	43.60	51.20	36.60	30.00	19.30
Up to 2017/18 – Q3	34.90	44.40	52.50	39.30	31.20	20.30
Up to 2017/18 – Q4	38.40	46.30	53.20	36.00	30.70	20.90
Up to 2018/19 – Q1	38.20	45.70	52.60	37.40	30.90	21.60
Up to 2018/19 – Q2	38.90	46.20	52.40	36.80	30.90	21.40
Up to 2018/19 – Q3	43.90	48.60	53.50	30.70	28.30	20.40
Up to 2018/19 – Q4	40.40	47.10	53.40	32.60	28.90	20.70

Table 10: Rates of 'Perception of Safety – safety while jogging during the night' across the last 5 years for Townsville District, Northern Region, and the entire QLD Police Service.

Table 10 provides a snapshot of rates of community 'perception of safety - safety while jogging during the night'. This category is significant as it is designed to reflect feelings of personal safety when in public places away from the family home. Townsville District had a 5% reduction in feelings of safety, compared with a 2% reduction for the Northern Region, and a 1% increase for the QPS. These are reflected in increases in feelings of a lack of safety for Townsville District and Northern Region, but also an increase for the QPS.

Given the dramatic decreases in feelings of safety at home, the theme is now reflected in a reduction of feeling safe away from the home, with Townsville recording reductions at a greater rate than the rest of Queensland. This data provides a clear indicator of how the community feels about safety, and concerningly for local police in Townsville, it is not positive.

Collectively, the outcomes from all survey categories indicate a significant drop in both the community's confidence in police, and their perception of safety within Townsville District from 2015 through to the end of 2018. This occurred at rates disproportionate to the Queensland average. Jackson & Bradford (2010) reinforce the importance of police being responsive and accountable to the

community by addressing key community safety concerns. They highlight the criticality of this process in order to facilitate sufficient levels of community cooperation and support that contribute to a cycle of success. The Townsville community does not feel as safe as the rest of Queensland and this is reflected in their perception of and confidence in police. Given the vital link between community confidence and effective policing, Townsville District has significant challenges ahead to successfully facilitate the process highlighted by Jackson and Bradford (2010).

5.4 QCAD Analysis - Community Demand for Policing Services

The QPS uses the 'Queensland Computer Aided Dispatch' system (QCAD, QPS, 2020a) to manage the deployment of policing crews to calls for service and operational incidents. Responding to incidents and calls for service is a critical factor in policing and provides the key demand driver for service delivery to the community.

Call signs are allocated to police crews based on their area of responsibility. For crews attached to divisions (Townsville City, Kirwan, Mundingburra, Stuart and Deeragun), they are primarily assigned to attend calls for service within their own division. Under the Priority Policing model, crews can be tasked to calls outside of their division if the call for service is deemed to require an immediate or priority response, and crews assigned to the particular division where the call originated are unable to respond (usually as a result of their involvement in another task).

The below tables provide a three-month snapshot of calls for service for work units in the Townsville metropolitan area. The data incorporates cumulative totals for the 3-month period of 1 July to 30 September for the years 2017 to 2019 inclusive.

Police Division	Totals: 2017-2019			
	Calls for service	Calls attended	Attended by units in same division	Attended by units from other division
Townsville	15,907	12,028	9,198	4,317
Mundingburra	12,067	9,313	6,049	4,199
Stuart	5,471	3,863	2,565	1,738
Kirwan	16,627	12,730	10,031	4,024
Deeragun	4,202	3,122	2,526	911
Total	**54,274**	**41,056**	**30,369**	**15,189**

Table 11: 2017-2019 QCAD Calls for Service data for each of the 5 metropolitan Townsville police divisions.

Notes: 1. Data has been sourced from QCAD. 2. A call is considered to have been attended if there is at least one resource for the call, an on-scene time has been entered and there is a revised incident type. 3. A call can be attended by: I (units from the same division; (ii) units from other divisions; & (iii) units from both the same and other divisions. 4. As a result, calls attended by units in the same division and attended by other divisions will not equal calls attended. 5. For columns 'attended by units in same divisions' and 'attended by units in the other division', there is a count of 1 call recorded regardless of how many units attended. 6. Call signs have been classified as shown in the call sign classification sheet – see appendix. 7. The figures in the table are based on the classification of the call signs.

To provide further context to the data, the following relates:

- In Townsville City division, units assigned to Townsville City attended 76% (*n=9,198*) of calls where the incident location was within their division, whilst 36% (*n=4,317*) of calls were attended by crews not assigned to Townsville City (note: aggregate totals over 100% occur when multiple crews attend the same job).

- In Mundingburra division, units assigned to Mundingburra attended 64% (*n=6,049*) of calls where the incident location was within their division, whilst 45% (*n=4,199*) of calls were attended by crews not assigned to Mundingburra.

- In Stuart division, units assigned to Stuart attended 66% (*n=2,565*) of calls where the incident location was within their division, whilst 44% (*n=1,738*) of calls were attended by crews not assigned to Stuart.

- In Kirwan division, units assigned to Kirwan attended 79% (*n=10,031*) of calls where the incident location was within their

division, whilst 32% (*n=4,024*) of calls were attended by crews not assigned to Kirwan.

- In Deeragun division, units assigned to Deeragun attended 80% (*n=2,526*) of calls where the incident location was within their division, whilst 29% (*n=911*) of calls were attended by crews not assigned to Deeragun.

Critically, analysis of the total figures for the five divisions in the Townsville metropolitan area provides that 74% (*n=30,369*) of all calls for service were attended by crews assigned to the division of the calls for service; whilst 37% (*n=15,189*) were attended by crews from other areas. In this regard, analysis of the data identifies that the frequency of calls for service attended is quite consistent throughout the metropolitan area, with all divisions responding to between 71% and 80% of calls for service they receive. In terms of calls for service attended by crews assigned to the division where the call originated from, Townsville City, Kirwan and Deeragun attended similar percentage of calls within their divisions, whilst Mundingburra and Stuart attended lower volumes (*between 64% and 66%*). This pattern is also reflected in calls for service attended by crews from other divisions, where Townsville City, Kirwan and Deeragun received similar levels of assistance (*29% to 36%*), with Mundingburra and Stuart receiving higher levels of assistance (*44% to 45%*). Whilst factors related to these percentages will be explored during the discussion chapter of this thesis, given that 37% of jobs in metropolitan Townsville are attended by crews not from where the division where the incident occurred, the data suggests that crews must operate anywhere in the metropolitan area, regardless of the demarcated divisional boundaries, to ensure adequate standards of service delivery are maintained. The analysis provides evidence indicating the current organisational structure is not reflective of community demand for policing services in metropolitan Townsville.

The Tactical Crime Squad (TCS) and Rapid Action and Patrols (RAP) are considered a Townsville District resource and are therefore assigned district call signs. They can operate anywhere in the district (across divisional boundaries) and are not assigned to attend calls for service unless the incident is a high priority incident and/or divisional crews are unavailable. The QCAD data for the same 3-

month period (1 July to 20 September for 2017 to 2019 inclusive) reflecting calls for service attended by TCS and RAP crews is as follows:

| Work Unit | Division of call/incident: 2017-2019 totals | | | | | Total |
	Townsville Division	Mundingburra Division	Stuart Division	Kirwan Division	Deeragun Division	
Townsville RAP	404	666	222	781	125	2,198
Townsville TCS	116	177	43	195	36	567

Table 12: Full 2017 to 2019 QCAD Calls for Service data of jobs attended by Townsville RAP and Townsville TCS.

Notes: 1. Data has been sourced from QCAD. 2. A call is considered to have been attended if there is at least one resource for the call, an on-scene time has been entered and there is a revised incident type. 3. Only calls attended by call signs belonging to Townsville RAP (TX700 to TX709) and Townsville TCS (TX710 to TW719) have been included. 4. Due to call sign classification, Townsville RAP call signs could not be matched to the older TV call signs; as such, figures for 2017 and 2018 may not present an accurate comparison. 5. A call attended by both Townsville RAP and Townsville TCS is counted for both units. 6. A call attended by multiple Townsville RAP or Townsville TCS unit is only counted once against the work unit.

Analysis of the data reflects that Kirwan Division receives significantly higher levels of assistance from TCS and RAP regarding calls for service when compared to other areas in the Townsville metropolitan area. The contributing factors to this would certainly include Kirwan Divisions population size, volume of calls for service, and the proximity of the RAP and TCS work units (both are located in Kirwan's division).

5.4.1 Response Times

As a police officer with over 26 years-experience, the author can confidently state the vast majority of calls for service undertaken by police are classified as Code 3 jobs, with Code 2 jobs consisting of a much smaller, but reasonably significant number. These two classification codes have been subject to analysis within this thesis; Code 1 jobs are statistically insignificant, whilst Code 4 jobs are not attended (usually completed by phone).

The following table shows response times for the 3 months of July, August and September in 2017, 2018, and 2019 (QPS, 2020a). The data relates to the

'Townsville Metro Area', which incorporates the five 24-hour policing divisions in the Townsville metropolitan area: Townsville City, Kirwan, Mundingburra, Stuart and Deeragun. The response time provided for the 'Townsville Metro Area' are the average (mean) time taken from all five Divisions; the same process was applied to the Northern Region (Townsville District, Mt Isa District, and Far Northern District) and the entire QPS response across the state.

The response times incorporate the time the job was created by the QPS (usually when the information is received from a member of the public) until the time the QPS unit arrives at the incident scene.

Statistical Area	2017 (July/August/ September)		2018 (July/August/ September)		2019 (July/August/ September)	
	Code 2	Code 3	Code 2	Code 3	Code 2	Code 3
Townsville Metropolitan Area	00:06:08	00:20:52	00:05:55	00:23:44	00:05:51	00:24:42
Northern Region	00:07:50	00:20:21	00:07:47	00:21:37	00:07:35	00:21:47
Queensland	00:07:40	00:31:23	00:07:17	00:28:49	00:07:28	00:27:25

Table 13: 2017 to 2019 QCAD response times to Code 2 and 3 jobs for police units assigned to the Townsville metropolitan area, Northern Region and the entire QLD Police Service.

Analysis of the data shows that response times for both Code 2 and 3 jobs within the Townsville metropolitan area were significantly better than the QPS across every reporting period. The response to Code 2 jobs by crews in the Townsville metropolitan area was also significantly better than the Northern Region across each year, however responses to Code 3 jobs was longer than that of Northern Region for each of the 3 years. The 2018/19 QPS Annual Report (QPS, 2019) showed that 86% of Code 1 and 2 incidents were attended within 12 minutes by police; with the percentage up from 84% in 2017/18.

In terms of how this may impact on community confidence, the results are positive for the Townsville metropolitan area regarding the higher priority jobs. Response times to Code 2 jobs were well inside QPS objectives, and also reduced across each of the three years. Alternatively, increases in response times to Code 3 jobs across each year is concerning considering they contribute the bulk of calls for policing services.

Contributing factors to response times are difficult to determine, which is a limitation of the analysis in this paper. Factors such as distance, types and volumes of jobs, and the availability of crews all have an impact and vary from area to area; considerations of these factors fall outside the scope of this research. Whilst Townsville District has a significant volume of calls for service, considering they have one of only two RAPs in Queensland, in addition to a TCS (both of which are not directly tasked to first response duties), this ensures the availability of these crews for priority jobs (Code 2 jobs, but not necessarily Code 3 jobs) and is a likely factor in the response time data.

5.5 Police Deployment Rostering and Tasking

One of the key aspects of this thesis relates to identifying the scope of discretionary taskings by the OICs of the five 24-hour stations in the Townsville metropolitan area. To provide context, OICs, by virtue of the responsibilities assigned to their positions in QPS policy, have discretion and authority to roster and task officers as they deem appropriate based on local requirements. Each division is assigned a specific number of officers (as determined by the QPS), and OICs manage the deployment of these officers in support of set divisional performance requirements. The number of officers available for deployment can vary significantly, depending on factors such as transfers, vacancies, secondments to other areas, and long-term leave. In this regard, the two key elements when referring to the human resources assigned to a work unit are the allocated strength (the number of positions allocated by the QPS – very steady) and headcount (the number of officers in the work unit occupying positions at the time – fluctuates frequently).

As at 4th June 2020, work units in the Townsville metropolitan area had the following staffing allocation.

Work Unit	Total Allocated Strength	Senior Sergeant (OIC)	Sergeant	Constable/ Senior Constable	Headcount	General Comments
Townsville Station	111	1	14	96	117	20 FYCs
Mundingburra Station	39	1	4	34	48	13 FYCs
Stuart Station	23	1	2	20	30	7 FYCs
Kirwan Station	69	1	5	63	63	15 FYCs
Deeragun Station	21	1	3	17	25	6 FYCs
Townsville RAP	45	1	3	41	39	6 vacancies
Townsville TCS	22	1	4	17	22	

Table 14: Number of officers allocated to work units in the Townsville metropolitan area (QPS Establishment Reports as at 4th June 2020).

As discussed earlier, the five 24-hour divisions in the Townsville metropolitan area operate on their own deployment models. Townsville City uses a 6-team matrix, Kirwan has a 5-team matrix, whilst the remaining divisions, and the RAP and TCS, use flexible rostering based on OICs constructing rosters as they deem appropriate.

Within the different deployment models, OICs will deploy officers based on the head count in their work unit at the time, regardless of whether it's above or below their allocated strength. Whilst there are factors that impact the strength of the officers assigned to the work unit, there are also factors that influence the availability of staff in the work unit for deployment, these include all types of leave, training courses, court, and rostered days off. Given that OICs have no real discretion to avoid officers undertaken these activities, making them unavailable for tasking, for the purpose of this analysis, these types of shifts are referred to as 'other duties'.

For those officers available for operational duties, the primary requirement is for OICs to roster crews for first response duties. The number of crews required varies based on the size of the work units. The author can attest that there is an informal arrangement between OICs in Townsville that 10 first response crews are required each shift from the five metropolitan divisions. For the purpose of analysis in this thesis, any remaining officers available for operational use by OICs are referred to as 'discretionary taskings'.

It is critical that police organisations either have or develop capacity to proactively target known or anticipated crime hotspots, as opposed to a single focus of reactively responding to crime (Braga & Weisburd, 2010). In line with this approach, Townsville uses the RAP and TCS to undertake proactive policing strategies on a fulltime basis, whilst the OICs of the five 24-hour metropolitan divisions will often have additional officers available for proactive tasking. The availability of these officers presents a significant opportunity for proactive policing in the Townsville metropolitan area; providing they are deployed effectively.

The below table provides a three-month staffing and tasking snapshot for work units in the Townsville metropolitan area. The data incorporates cumulative totals for the 3-month roster periods of July, August and September for the years 2017 to 2019 inclusive. This period was chosen at it represents a block where resourcing and demand factors are consistent.

Work Unit	2017-2019 Totals			
	Total Rostered Staff	Shifts - First Response	Shifts - Other Duties	Shifts - Discretionary Taskings
Townsville Station	998	6,389	8,412	3,758
Mundingburra Station	318	2,357	2,400	1,103
Stuart Station	195	1,889	1,284	567
Kirwan Station	712	7,005	4,407	1,924
Deeragun Station	207	1,566	1,584	734
Townsville RAP	305	0	1,651	3,533
Townsville TCS	212	1,652	1,663	681

*Table 15: Full 2017 to 2019 Officer and Tasking
analysis for metropolitan Townsville work units.*

To provide further context to the data in Table 15, the following relates:

- Townsville City division had 18.599 shifts available and used a 6-team roster matrix to facilitate 35% of officers for first response

duties, 45% for other duties with the remaining 20% (*n=3,758*) available for discretionary tasking by the OIC.

- Mundingburra division had 5,860 shifts available and used a flexible roster to facilitate 40% of officers for first response duties, 41% for other duties with the remaining 19% (*n=1,103*) available for discretionary tasking by the OIC.

- Stuart division had 3,740 shifts available and used a flexible roster to facilitate 51% of officers for first response duties, 34% for other duties with the remaining 15% (*n=567*) available for discretionary tasking by the OIC.

- Kirwan division had 13,336 shifts available and used a 5-team roster matrix to facilitate 53% of officers for first response duties, 33% for other duties with the remaining 14% (*n=1,924*) available for discretionary tasking by the OIC.

- Deeragun division had 3,884 shifts available and used a flexible roster to facilitate 40% of officers for first response duties, 41% for other duties with the remaining 19% (*n=734*) available for discretionary tasking by the OIC.

In terms of the primarily proactive based work units, Townsville TCS had 17% (*n=681*) of their shifts available for discretionary tasking by the OIC, whilst the Townsville RAP had 68% (*n=3,553*) available. In total, the data identifies the availability of 12,300 shifts for discretionary tasking by individual OICs across the Townsville metropolitan area; which represents 23% of available staff. Given that this figure is just under a quarter of all staff available, it is a very significant amount of proactive policing capability.

In consideration of this data with the other data analysed in phase 1 provides a compelling evidence base to address the research questions. Analysis of the data shows that metropolitan Townsville experienced a significant increase in property crime across all five 24-hour divisions, which is reflected in increased community demand for policing services (calls for service). The response to over

one-third of these calls for service is undertaken be police crews from other police divisions. The situation has decreased community confidence in police, and suggest the current structure is not effective. Given that OICs have 23% of their staff available for discretionary tasking, and the data shows offending occurring across demarcated divisional boundaries, one of the key factors to be addressed in phase 2 of the research is the level of cross-divisional planning between OICs and their awareness of crime outside of their respective divisions.

The limitations of this aspect of the research include the absence of assessment around the impact of factors that may reduce the availability of 23% of officer's being available for discretionary tasks. The application of Priority Policing is certainly one factor that often redirects officers away from discretionary tasks when priority jobs arise – but this would be virtually impossible to measure. This research does not include assessment of the number of cross-divisional or combined metropolitan area operations that these officers may have been used for during shifts within the review period

It is noted that 39% of officers (*n=21,401*) were on other duties during the review period; this represents a higher percentage of officers than those used for either first response of discretionary tasking. Whilst the availability of a large part of this cohort is due to activities aligned with industrial-related provisions (leave, rest days, etc.), the sheer volume of officers is such that further investigation is recommended to determine whether efficiencies can be identified to reduce this number and redirect potential resources towards operationally-based duties. Such investigations are not part of this research.

5.6 Results – Phase 2: Quantitative Analysis

Phase 2 of the research relates to a questionnaire conducted with key informants, namely the OICs of the five 24-hour divisions in the Townsville metropolitan area. Phase 2 incorporates two parts, the first being responses to statements using the Likert Scale that are subject to quantitative descriptive statistical analysis, whilst the second part is free text responses to open ended questions that are subject qualitative thematic analysis.

5.6.1 Quantitative Analysis of Questionnaire Results

The questionnaire was undertaken using statements and questions. The statements subject to the below quantitative analysis were posed using the Likert Scale incorporating a response scale of Strongly Disagree (1), Disagree (2), Undecided (3), Agree (4), and Strongly Agree (5). Descriptive statistical analysis has been undertaken for each question to identify the mean, with the researcher using his knowledge and experience to draw inferences from the frequency and consistency of responses as they relate to the research topic. The outcomes of the analysis will be discussed later in the thesis in context with information from other components of the research to address the research questions. Key informant responses to open-ended questions are subject to thematic analysis later in this chapter.

The following responses to different statements were provided by key informants using the Likert Scale.

No.	Statement	KI 1	KI 2	KI 3	KI 4	KI 5	Mean
1	I formally meet with other OICs prior to developing the roster.	2	3	5	4	4	3.6
2	I feel these meetings provide a good understanding of demand and resource factors in other work units in metropolitan Townsville.	1	2	4	3	3	2.6
3	I discuss details of my intended proactive taskings with other OICs at these meetings.	2	2	5	4	4	3.4

Table 16: Statements for Roster Development – Current State

The analysis and reasonably limited deviation in response to statement one reflects support for OIC involvement in crucial roster planning meetings prior to posting the roster. The analysis and reasonably limited deviation in response to statement two indicates a concerning perspective from OICs about the lack of understanding of key operational issues in other divisions provided during roster planning meetings. The analysis, with a reasonably wide deviation in response to statement three indicates disparity between OICs as to whether they discuss proactive taskings amongst themselves prior to posting the roster.

The following responses were provided by key informants in relation to the category of Demand Analysis – Current State.

No.	Statement	KI 1	KI 2	KI 3	KI 4	KI 5	Mean
4	I set taskings for non-first response crews prior to posting the roster.	5	4	4	4	5	4.4
5	I change the taskings for non-first response crews regularly.	5	4	4	4	4	4.2

Table 17: Statements for Demand Analysis – Current State

The analysis, with very limited deviation in response to statement four reflects that discretionary taskings for proactive crews (taskings set at the discretion of individual OICs) occur prior to monthly rosters being posted. The analysis, with very limited deviation in response to statement five indicates that whilst OICs change these taskings regularly, the response is not at the same level of affirmation that they set their monthly taskings before rosters are posted; indicating a lesser degree of change of taskings.

The following responses were provided by key informants in relation to the category of Roster Flexibility – Current State.

No.	Statement	KI 1	KI 2	KI 3	KI 4	KI 5	Mean
6	I consider my current rostering model to be flexible.	4	4	4	5	5	4.4
7	My roster is flexible enough to change crew taskings at short notice.	4	4	4	5	5	4.4
8	I regularly seek staffing assistance from other OICs to assist with proactive patrols in my Division.	4	4	2	1	1	2.4

Table 18: Statements for Roster Flexibility – Current State

The analysis, with very limited deviation in response to statement six reflects that OICs consider their rosters to be flexible; this is a crucial part of rostering. Rosters using a matrix are inherently inflexible, whilst those that don't use a matrix (often referred to as intelligence-based rosters) generally have more flexibility as shifts are not tied to a set structure. The analysis, with very limited deviation in response to statement seven indicates that OICs believe their rosters are flexible enough to change taskings at short notice; this is critical for effective intelligence-based policing (policing that is based on addressing crime trends as they occur). The analysis, with a very wide deviation in response to statement eight indicates a mixed approach from OICs across the metropolitan area; some don't regularly ask for assistance, whilst others do. This is likely to be based on the size of the work units, with small work units experiencing an increase in crime likely to ask for assistance, whereas the larger stations are more self-sufficient.

The following responses were provided by key informants in relation to the category of Supervision – Current State.

No.	Statement	KI 1	KI 2	KI 3	KI 4	KI 5	Mean
9	I have a Sergeant working every shift in my work unit.	2	2	1	5	2	3.0
10	I believe the current supervisory model in my work unit is an effective operational supervision model.	2	3	1	5	5	3.2

Table 19: Statements for Supervision – Current State

The analysis, with a wide deviation in response to statement nine predominately reflects the different staffing allocations across Townsville metropolitan work units, where the majority of stations don't have sufficient sergeants to work every shift. The analysis, with a very wide deviation in response to statement ten indicates a wide range of perspectives from OICs about the effectiveness of the current supervision model, with those strongly supporting the model likely to agree based on either the number of supervisors (Sergeant's) allocated to their work units, or their workload/type not requiring an increase in supervisors.

The following responses were provided by key informants in relation to the category of Use of Resources – Current State.

No.	Statement	KI 1	KI 2	KI 3	KI 4	KI 5	Mean
11	Crews from my work unit regularly attend calls for service in other Divisions in the Townsville metropolitan area.	5	5	5	5	5	5.0
12	Crews from other work units in the Townsville metropolitan area regularly attend calls for service in my Division.	5	4	4	3	4	4.0
13	It would be operationally feasible to maintain expected levels of service delivery if crews in the metropolitan Townsville only attended calls for service within their own Divisional boundaries.	1	1	4	1	1	1.8
14	I support the current rostering practices of the five Divisions operating in metropolitan Townsville.	3	3	2	3	2	2.6
15	I support the current rostering practices being used by the Townsville RAP and Townsville TCS.	1	1	2	3	2	1.8
16	I believe the RAP and TCS should continue to operate as separate work units.	5	4	1	1	4	3.0
17	I believe the current disposition of officers across the five metropolitan Divisions, RAP and TCS is the most effective way to deploy policing resources in the Townsville metropolitan area.	1	2	2	3	2	2.0

Table 20: Statements for Use of Resources – Current State

With no deviation in response to statement eleven, this indicates that all OICs believe their crews regularly respond to calls for service in other policing divisions in the Townsville metropolitan area. With only a narrow deviation in response to statement twelve, the analysis indicates that OICs have a much stronger perspective of providing more assistance to other divisions that they receive in terms of crews responding to calls for service across divisional boundaries. Despite a reasonably wide deviation due to one response to statement thirteen, the analysis indicates the OICs predominantly believe that if crews did not cross divisional boundaries to assist with responding to calls for service, expected levels of service delivery would not be maintained. The analysis, with a narrow deviation in response to statement fourteen, represents a level of uncertainty from OICs around their perspectives on other rostering models, likely due to their lack of familiarity of the specifics of alternate rosters; however, there is also reasonably strong negative perspective. The analysis, with a reasonably narrow deviation in response to statement fifteen, reflects a significantly negative perception by OICs on the rostering practices of the RAP and TCS. The analysis, with a broad deviation in response to statement sixteen, indicates a wide range of perspectives from OICs about the organisational design of the RAP and TCS. This is likely due to perspectives on their taskings and deployment, and the fact that the only other RAP in the QPS (on the Gold Coast) operates as a combined unit with TCS. The analysis, with a reasonably narrow deviation in response to statement seventeen, indicates that OICs have a very negative perception of the disposition of policing resources across metropolitan Townsville; this is concerning given these officers are the frontline managers deploying those resources in support of service delivery.

The following responses were provided by key informants in relation to the category of Use of Resources – Future State.

No.	Statement	KI 1	KI 2	KI 3	KI 4	KI 5	Mean
18	I believe 'borderless policing' will work in the Townsville metropolitan area.	5	5	4	5	4	4.6
19	I believe the disposition of policing resources in metropolitan Townsville needs to change in order to implement 'borderless policing'.	5	3	3	3	4	3.6
20	I believe it is possible to split officers into separate groups undertaking either first response duties or related follow-up inquiries.	5	3	3	3	2	3.2
21	I believe that some officers would be interested working in a large, co-located first response work unit on 10-hour shifts.	4	4	3	4	4	3.8
22	I believe that some officers would be interested in working a 2-shift roster on full OSA conducting follow-up inquiries (not first response duties).	4	4	4	4	4	4.0
23	I believe current rostering practices in the Townsville metropolitan area are an efficient use of police resources.	2	2	1	2	4	2.2

Table 21: Statements for Use of Resources – Future State

The analysis, with a narrow deviation in response to statement eighteen, reflects the reality of the situation in metropolitan Townsville where crews are already crossing divisional boundaries to attend calls for service (which is a borderless policing approach). The analysis, with a reasonably narrow deviation in response to statement nineteen, indicates that whilst there is significant agreement that the disposition of resources need to change to implement borderless policing, far more information would need to be provided to OICs for them to have a clearer perspective on the issue. The analysis, with a wide deviation in response to statement twenty, reflects that the majority likely don't have enough information on the concept to form an opinion; whilst those who do have an opinion are split on their perspectives. The analysis, with narrow deviation in response to statement twenty-one, represents a consistent support by OICs that some of their staff would be interested in operating as part of a large, co-located work unit on 10-hour shifts. The analysis, with no deviation in response to statement twenty-two, indicates that all OICs believe that some of their staff would be interested in operating as part of a work unit operating on a 2-shift OSA roster, conducting follow up inquiries (not first response). Concerningly, the analysis, with a reasonably wide deviation in response to statement twenty-three, indicates that OICs predominantly believe that the current rostering practices in metropolitan Townsville are not an efficient use of police resources.

The responses provided by OICs provide insight into the deployment of resources and related factors in metropolitan Townsville. The responses expand on analysis of data from phase 1 of the research and clearly reflect the level of cross divisional work being undertaken by crews and the need for this to continue to meet service delivery requirements. OICs also identify inefficiencies with current rostering practices, support for an alternative roster, but concerningly, they indicate a lack of meaningful planning with other OICs during roster development. These responses, when analysed with phase 1 research, identify areas requiring further inquiry in order to address the research questions, and these form the basis of free text questions for the next phase of the research.

5.7 Results – Phase 2: Qualitative Thematic Analysis of Free Text Questionnaire Responses

The data subject to thematic analysis in this thesis was information provided by the key informants during their responses to free text questions in the questionnaire. The responses are verbatim and explored a number of concepts related to development of deployment models and supervision of police officers; and the following was identified.

5.7.1 Operational Control of Crews

Information provided by key informants produced a consistent theme around the relationship between accountability and the lack of control of operational crews assigned to the OICs of the Townsville metropolitan work units.

The QPS organisational structure places OICs within each policing division, with associated performance measures requiring OICs to be accountable for what occurs in their division. This was reflected in the comments from the key informants in terms of their perception of accountability.

> KI 1.   *I've always considered whatever happens in … is my problem. If crime spikes, it's my job to do something about it.*

> KI 2.   *Definitely accountable, but probably powerless to actually have any great impact on the crime that's occurring.*

> *KI 4.   The question comes back to me as to what I'm doing about crime in my division, and I go, well it's a bit hard when I don't control what my crew is doing once they drive out the driveway.*

In line with this, consistent themes emerged around the lack of control of OICs regarding crews attending jobs outside of their divisions, regardless of what taskings had been set by the OICs within their own divisions.

> *KI 2.   I can say that I have no control at all.*
>
> *KI 3.   Over my staff attending other divisions, I have no control over that.*
>
> *KI 4.   I have zero control.*
>
> *KI 5.   None. None.*

Therein lies the challenge for the QPS in terms of the effectiveness and efficiency of their organisational design. The literature emphasises the need for organisations to have systems that complement structures, however the QPS has a divisional-based organisational structure which places responsibilities on OICs for their demarcated areas. It is clear from their responses, that OICs believe they are held accountable for outcomes, but they have effectively no meaningful control over operational resources (crews) which provide the capability that is critical to achieving outcomes.

5.7.2 Cross-Divisional Work

Exploring this further, it appears cross-divisional work is a factor that contributes to the issues identified by OICs. In this regard, consistent themes arose around the impact of cross-divisional work, incorporating the level of assistance provided and received, and the associated impact of divisional boundaries on the issue.

With accountability for outcomes and a stated lack of control as to where the crews operate, OICs produced responses that identified themes related to the impact of cross-divisional work on their own divisions. When asked if crews operating outside of their division had a negative impact in their own division, responses aligned and included:

> *KI 1.*   *Absolutely, negative impact on the staff, their work load, and also calls for service in our division.*
>
> *KI 2.*   *It can have a negative impact, especially if they're crews I've got tasked to something else. I'd rather keep that crew doing what I need done and then get to that other job when we get to it.*
>
> *KI 3*   *It has a negative impact. When crews leave our division to attend jobs in another division, they may be out of our division for significant periods of time, which then prevents them from doing any proactive patrolling within our division and attending any of the tasks that we actually want them to do.*
>
> *KI 4.*   *We've had recent incidents where we've been required to have the division unattended, and during that time had numerous break and enters reported.*
>
> *KI 5.*   *We have our own priorities that need addressing, but with us doing the other stuff in other areas, it's very hard for us to do the tasks that we need to be doing.*

From these responses, OICs believe that cross-divisional work has a negative impact on their capacity to achieve divisional-based objectives. However, in order to assess the impact, it is reasonable to look at the level of support provided to OICs by crews from other divisions in the Townsville metropolitan area. In this regard, responses from OICs produced a number of consistencies.

> *KI 1.*   *More often than not, when other divisions come into my division, it's because my crew has already been detailed somewhere else and they're not available in my division.*
>
> *KI 2.*   *We seem to get sent to other divisions, and then when we're under the pump, we don't seem to get that support coming back in.*
>
> *KI 3.*   *We certainly do receive outside help, but we probably do more in other areas.*
>
> *KI 4.*   *Yes, definitely, we regularly provide more staff to them, that other divisions don't provide.*
>
> *KI 5.*   *Yes (we provide more support than we receive), but not through any intent of officers, only because of*

staffing numbers and where the calls for service are.

Analysis of these responses identifies a theme where a predominant number of OICs believe they supply more assistance than they receive, this has been explored through QCAD data and will be discussed later in this thesis.

Given the focus on cross-divisional work, the nature of divisional boundaries was a consistent theme, with responses incorporating perceptions around the impact of two factors: only operating within boundaries, or completely removing the divisional boundaries. In line with this, the following was provided for crews only operating within boundaries.

> *KI 1.   There would be time delays which would result in a less than adequate policing response. You would have people sitting in divisions where there were no jobs, and then you have other jobs (in other areas) that crews couldn't get to.*

> *KI 4.   You would eventually end up with a situation where you have complaints about taking too long (to attend jobs).*

> *KI 5.   It would have a very negative effect, service delivery would be heavily impacted.*

Analysis of these responses identifies that OICs believe there would be significant issues in terms of the quality of service delivery (responding to calls for service) if crews did not respond to jobs in other divisions, however previous responses also reflect the negative impact they believe this has on their capacity to achieve outcomes. This presents a conflict between what the OICs believe needs to happen to maintain the effective delivery of policing services to the community and the impact this has on their capacity to achieve performance outcomes for their specific geographical area of responsibility – another example of the lack of consistency between the systems and structures operating within the QPS.

As an alternative, OICs identified a number of consistent themes when posed a question about impact of the removal of operational borders within the Townsville metropolitan area.

> *KI 1.   People would be much more willing to go to where ever they needed to be at that particular point in time.*

> *KI 3.*   *It would probably improve service delivery, no one's worried about where they go. Someone would have to be responsible for it – crime, domestics, policing that area.*

> *KI 4.*   *The boundaries are largely ignored, they have to be for service delivery. We've got a structure that doesn't support our operating model.*

> *KI 5.*   *Some outlying divisional areas would not get patrolled and would be forgotten about because no one would have ownership of that area or division.*

These responses again reflect the perspective that operational crews must operate across boundaries to maintain standards of service delivery. The identification of responsibility/ownership in a borderless policing structure is a key theme and will be addresses in any proposed operating model put forth by the researcher when addressing research question 2.

Another relevant factor is whether the disposition of officers assigned to the different divisions in the Townsville metropolitan area has any impact on service delivery. Given the significant difference in officer numbers assigned to the different stations, this has the potential to affect the availability of officers to attend calls for service within a particular area. When questioned, OICs provided a number of consistent responses.

> *KI 1.*   *It's half the problem; we have enough staff in the metro area, I just don't agree with the distribution. I think there could be a definite realignment of the boundaries; you'd almost turn it into two super divisions.*

> *KI 2.*   *It has a negative impact because people work within borders, and that's not reflective of where the calls for service are. The only thing that makes it work is the agreement that people need to go where the calls are. I think we should have two major first response centre on a single or two roster system.*

> *KI 3.*   *It has a major impact. The allocation is not done on calls for service, a lot of it's done on population. We need more permanent staff rather than First Year Constables.*

> *KI 5.   I do think it has an impact. Every time an officer leaves*
> *they just put a First Year into that position.*

Analysis of these responses identifies a number of consistencies: OICs believe the disposition of staff has as an impact on service delivery; they feel that permanent staff are replaced by First Year Constables (officers in training who have come straight from the police academy); and there is support for a more centralised form of deployment, with two work units (or deployment models) as opposed to the current five. This aligns with the literature and the experience of the researcher and will be discussed later in this paper.

5.7.3 Task Development

The development of tasks for operational crews is also a key factor in the research, as crime consistently occurs across policing boundaries, and OICs have expressed their frustration that operational crews get directed to other jobs away from initial taskings sets by OICs in support of local priorities. In line with this, OICs were asked how much emphasis they placed on crime issues in other divisions when developing tasks for their operational crews; the following was consistently provided.

> *KI 2.   Probably none. I certainly don't look at crime trends,*
> *stats, or figures from other divisions.*

> *KI 3.   I don't look too much at the other areas. I do look at*
> *the impact their crime may have on me.*

> *KI 4.   I put a certain amount in that, but I wouldn't spend*
> *a lot of time worrying about what other divisions are*
> *doing until the District Officer told me.*

> *KI 5.   I don't look at other divisions when I'm tasking my*
> *staff. I only worry about my own.*

The consistent theme from OICs is one that is focussed on their local divisional requirements when developing proactive taskings and it can certainly be argued that this aligns with the requirements of a divisional OIC and associated performance measures applied by the QPS under the current organisational structure. The challenge arises when this approach is factored against the transient nature of criminal activity

and the impact offending may have in a large metropolitan area where offences are generally not consigned to a single geographical point.

The themes identified provide an insightful look into the perspectives of OICs in their critical role as front line managers of operational officers in metropolitan Townsville. The identified themes, when considered with outcomes to the quantitative investigation of data in phases 1 and 2 provides compelling evidence to address both research questions. This will be further discussed and explored in the following chapter.

CHAPTER 6: DISCUSSIONS

This chapter discusses the summary of findings for research question 1 (6.1) and sub-research questions one (1), two (2) and three (3); and findings for research question 2 (6.2) in terms of the proposed alternative police deployment model.

6.1 Summary of Findings: Research Question 1

In order to address the different components of research question 1, analysis of results have been applied to the three related sub-research questions, with details provided in the below sections.

6.1.1 Sub-Research Question 1

In terms of identifying the current standard of police service delivery in metropolitan Townsville, and how it has been achieved (sub-research question 1), there are a number of key factors addressed in the research including organisational structure, policing systems, and related operational outcomes.

The primary drivers behind how policing services are delivered in metropolitan Townsville are the structure and systems currently in place. The Townsville metropolitan area is a large and relatively isolated population centre in terms of proximity to other regional cities. The area operates with five 24-hour police divisions situated less than 20 kilometres from the city's central business district. Each police division is managed by an OIC, who is accountable under current QPS policy for performance outcomes in their respective division; OICs are also empowered through policy to manage their division and associated resources as they deem appropriate. Proactive policing strategies across the Townsville metropolitan area are supported by two district-based work units: the RAP and TCS.

Each division operates using different deployment or rostering models, with two divisions using matrixes and the remaining 3 applying flexible rostering at the discretion of the OICs. In terms of the level of engagement between OICs

around their roster development, there was limited consensus amongst OICs in terms of meetings and their benefits, with only 60% agreeing they formally meet prior to developing their rosters, and 60% disagreeing that these meetings provided a good understanding of demand and resource factors in other work units in metropolitan Townsville. This aspect is further reinforced by OICs during their free text responses where a consistent theme was identified that OICs don't meaningfully look at crime in other areas when developing their own divisional taskings, and only 40% agreed that they seek staffing assistance from other OICs for proactive patrols in their divisions.

In terms of policing systems, the main QPS policy that facilitates responses to calls for service within the community is the Priority Policing model. Priority Policing has police communication operators operating in independent police communications centres allocating respective operational crews to attend calls for service based on the urgency of the incident and the location and availability of crews – regardless of the division or work unit where the crews are formally based. During their questionnaire responses, OICs unanimously stated they had no control over their operational crews being deployed to jobs outside of their allocated division once the crews commenced operational duties, regardless of what proactive taskings they were assigned to. These crews were often absent from their own division for extended periods, with crews coming from other areas to attend jobs in the respective divisions during their absence.

The hub policing system used by the RAP, and in-principle by TCS, has specific officers operating from these units in a primarily proactive capacity; these officers are assigned at a district, not divisional level and operate anywhere in the district as tasked (meaning they are not bound by divisional boundaries). Both the RAP and TCS have OICs applying their own deployment models around the deployment and tasking of their officers. When questioned, not one OIC agreed with the current rostering practices of the RAP and TCS. The RAP and TCS crews are not available for routine job tasking by police communications operators, but they are subject to redeployment under the Priority Policing model when priority calls are received.

In consideration of these points, it is reasonable to suggest that the standard of police service delivery in metropolitan Townsville has been achieved through little cross divisional engagement and planning by OICs in terms of tasking and resource deployment, with the police communication centre having primary control over the deployment of operational units once they commence duty and move out into the community. Complexity and competing interests arise, in terms of OIC priorities and the Priority Policing model, when crews tasked to proactive or non-first response duties are diverted away to attend calls for service. This creates a situation where OICs, who have responsibility for outcomes in their respective division, have little capacity to see those taskings fulfilled in situations where police communication operators, who are not accountable for any geographic area, have primary control over when and where crews are deployed when calls for service arise.

Looking at the actual standards of standards of service delivery that these structures and systems have generated, response times to priority jobs, rates of offending, and ultimately the levels of community satisfaction are critical. Response times to priority code 2 jobs in the Townsville metropolitan area are outstanding. Data analysis across three years from 2017 to 2019 show that response times in the metropolitan area were well below the Northern Region and overall QPS average, and well within the strategic objectives of the QPS. It's reasonable to suggest a significant factor in this figure is the availability of proactive crews (through RAP and TCS) given that Townsville is one of only two policing districts in QLD that have a RAP, which provides significant resources that are not tasked to routine (Code 3) jobs.

Rates of reported offending are an accurate reflection of crime within a community, which often shape community confidence. From 2017 to 2019, rates of reported offences across all offence categories increased in four of the five police divisions in metropolitan Townsville, only Deeragun had a decrease (of 1%). This represents a significant increase in offending rates, and therefore rates of victimisation. The impact of these increases is reflected in the results provided by Townsville residents in the National Survey of Community Satisfaction with Policing. Between 2015 and 2019, Townsville District had a reduction in rates of

satisfaction with police compared to increases for the Northern Region and the QPS. In terms of confidence in the police, Townsville District had consistent decreases that significantly exceeded those for the overall QPS.

From a safety perspective, Townsville District had a significant decrease in the community's perception of safety at home during the night, compared to much smaller decreases for Northern region and the QPS. The community perception of safety whilst jogging at night also saw Townsville District have a greater reduction in feelings of safety compared to the Northern Region, with the QPS experiencing an increase. The key property crime areas of house-breaking and vehicle theft saw community concerns around becoming a victim increase dramatically in Townsville District at a rate far higher than the overall QPS. Results from the NSCSP reflect a poor community perception of current policing strategies in metropolitan Townsville.

In terms of addressing sub-research question 1, analysis of all the research data shows that the current standard of police service delivery in metropolitan Townsville is poor, given that it is one of increasing crime and decreasing community confidence and perceptions of safety. It has been achieved through an organisational structure that has OICs managing staff in demarcated areas who gain little value from planning meetings with other OICs and have little awareness of specific issues outside their own divisions, whilst they are held accountable for their respective divisions but, due to QPS systems, they have little control over their operational crews once they leave the police station. These findings suggest change is required to improve service delivery, but the scope of change is dependent on the impact of the issue; this is addressed in sub-research question 2.

6.1.2 Sub-Research Question 2

In terms of identifying the impact of the current police deployment models on the efficiency of service delivery in metropolitan Townsville (sub-research question 2), a number of relevant factors have been addressed in this research. There is a wide disparity in the resourcing allocation (number of officers) assigned to each of the five 24-hour divisions in metropolitan Townsville. Townsville City Division, using a team roster matrix, has (as at 4th June 2020) an allocated strength

of 111 officers for a population of 33,357, with a current annual population growth rate of 1.4%, and a similar projected growth rate through to 2041. Kirwan Division, using a team roster matrix, has (as at 4th June 2020) an allocated strength of 69 officers for a population of 59,996, with a current annual population growth rate of 0.4%, and a similar projected growth rate through to 2041. Mundingburra Division, using a flexible roster, has (as at 4th June 2020) an allocated strength of 39 officers for a population of 27,023, with a current annual population rate of -0.4%, and a projected growth rate of -0.2% through to 2041. Stuart Division, using a flexible roster, has (as at 4th June 2020) an allocated strength of 22 officers for a population of 35,227, with a current annual population growth rate of 1.4%, and a projected growth rate of 2.8% through to 2041. Whilst Deeragun Division, on a flexible roster, has (as at 4th June 2020) an allocated strength of 21 officers for a population of 33,481, with a current annual population growth rate of 6.8%, and a projected growth rate of 2.9% through to 2041.

Whilst the allocated strength of the five divisions does not closely align with population, including projected population, in order to address the sub-research question, it is imperative to identify whether the resource allocation and associated divisional boundaries impact on the delivery of policing services. In this regard, the volume and nature of responses to calls for service is critical. Analysis of calls for service in the Townsville metropolitan area during the review period between 2017 and 2019 indicates that Townsville City Division received 29% (*n=15,907*) of the calls for service, Kirwan Division received 31% (*n=16,627*), Mundingburra Division received 22% (*n=12,067*), Stuart Division received 10% (*n=5,471*) and Deeragun Division received 8% (*4,402*).

In terms of responses to the calls for service attended, of the 41,056 calls for service attended in the Townsville metropolitan area during the review period, 37% (*n=15,189*) were attended by crews from divisions outside the division of the calls for service. From a divisional perspective, Townsville City, Kirwan and Deeragun Divisions received similar levels of assistance, with between 29% and 36% of calls for service in their Divisions being attended by crews from other divisions, whilst Mundingburra and Stuart Divisions received higher levels of assistance at 45% and 44% respectively.

This information reflects the very significant levels of cross-divisional work being undertaken by crews responding to calls for service. In determining whether the divisional boundaries impact on this, it is important to note that operational crews regularly deploy to calls for service from their assigned station (or division). QCAD data from the review period in 2017 to 2019 indicates that the vast majority (over 90%) of calls for service attended are classified as priority code 3. Further analysis of the QCAD data indicates that during the review period, not only did the volume of calls for service and priority code 3 jobs in the Townsville metropolitan area increase each year, the response times to priority code 3 jobs, whilst still under the overall Queensland average, increased by 18.3% whereas the Queensland response time decreased by 15.8%.

OICs consistently felt their crews (from their own divisions) provided more assistance to other areas than they received. Given this is not accurately reflected in the data, it does reflect the negative perception created by the divisional boundaries and the application of Priority Policing. However, 80% of OICs indicated it would not be operationally feasible to maintain expected levels of service delivery if crews in the Townsville metropolitan area only attended calls for service in their own divisional boundaries.

In terms of the deployment models used by OICs in Townsville metropolitan area, there are currently a range of matrix and flexible rostering models used at the discretion of individual OICs. It is noted, that when asked if they supported the rostering practices of the five metropolitan divisions in Townsville, not one OIC agreed; whilst 80% indicated the rostering practices were not an efficient use of police resources.

In terms of addressing sub-research question 2, analysis of all the research data indicates that the divisional allocation of officers is not closely aligned to population, calls for service, or rates of offending. Furthermore, just under 40% of calls for service in the Townsville metropolitan are attended by crews that are not from that division, with increasing response times to most jobs, likely as a result of the volume of jobs and the distances being travelled by crews to get there. All OICs hold a negative perception of the rostering practices of the five police divisions, and believe they provide more assistance than they receive. In this

regard, analysis of the research data suggests the current deployment models are having a negative impact on the efficiency of police service delivery in metropolitan Townsville.

The analysis of sub-research questions 1 and 2 is significant as it focusses on the standard and impact the current deployment models have on service delivery by the QPS. The findings are specific and unique to this research in Townsville and provide a platform for analysis of factors aligned with sub-research question 3 around community needs and organisational strategy.

6.1.3 Sub-Research Question 3

In order to determine how efficient and effective the existing police deployment models have been at meeting the needs of the Townsville community and strategic objectives of the QPS (sub-research question 3), this thesis analysed a number of different factors.

The identification of community needs from a policing perspective is reasonably consistent in western democracies, with a strong focus on safety in private and public domains, provided by police organisations that are responsive and accountable to community needs (Jackson & Bradford, 2010). This aligns with the strategic objectives of the QPS that include: Our Community – together with our community, build a safer Queensland; and Our Relationships – create a safer community and provide better services through connected and engaged relationships (QPS, 2020c). The Strategic Objectives of the QPS filter down to divisional level through the QPS, Regional and District Operational Plans; this pathway provides the performance management framework from an organisational level, right through to individual performance agreements for officers working in local divisions.

In terms of the Townsville metropolitan area and the effectiveness of current police deployment models meeting community and QPS organisational needs, during the review period from 2017 to 2019, the metropolitan area had an increase of 14.6% for all reported offences, and an increase of 17% for the key area of property offending. Given that effectively all divisions in the Townsville

metropolitan area experienced reasonably similar rates of increase, there appears to be a level of consistency in offending that reflects a relationship between crime across divisional boundaries in the metropolitan area. It is also noted that whilst the volume of calls for service increased and response times to the majority of calls for service increased, community confidence in police decreased at a rate in Townsville that was far greater than the Northern Region and the QPS. This also highlights the consistency in these figures and shows a clear relationship between the different data sets, which collectively, reflects a lack of effectiveness in addressing these critical service delivery factors.

In terms of efficiency, the literature reflects the criticality of police responsiveness to crime trends, with flexibility and the need to be proactive as crucial elements in the effective management of crime and offending (Jackson & Bradford, 2010). In this regard, with five police divisions where OICs are accountable and have autonomy with their rostering and officer tasking, the use of resources to manage crime is a key factor. Due to the volume of calls for service, there is little scope for OICs to use their first response crews for proactive patrolling; however, analysis of the deployment models for the review period between 2017 and 2019 identifies the availability of 12,300 shifts for discretionary tasking by individual OICs across the metropolitan area; representing 23% of available staff. The coordinated use and operational supervision of these officers is crucial to reducing crime, as is the responsiveness to emerging trends through roster flexibility; and given the relationship of crime occurring across divisional boundaries, collective OIC engagement around roster planning and tasking is essential from the OICs of the five 24-hour stations.

In this regard, whilst all OICs agreed their rosters were flexible enough to change crew taskings at short notice, only 60% agreed they formally meet prior to developing their rosters, with OICs also stating they don't look at crime in other areas when developing their own divisional taskings. In terms of operational supervision, 80% of OICs stated they didn't have a sergeant working every shift, whilst only 40% agreed that the current supervisory model in their work units was an effective operational supervision model.

In consideration of these factors, it is clear that with such large numbers of officers available for discretionary tasking, and the limited cross-divisional engagement between OICs in terms of planning and tasking, there are significant inefficiencies in the deployment models and their capacity to meet objectives. This is further compounded by QPS policy around performance management and the accountability of OICs for rates of offending in their divisions. Whilst acknowledging that cross-divisional work is essential to maintain standards of service delivery, OICs also acknowledged the lack of control they have over their crews when they leave the station (as a result of Priority Policing), and the negative impact the absence of crews from their own division has on their ability to achieve their performance objectives. In this regard, there is a significant disconnect between the current organisational structure and the operating systems used within that structure.

In terms of addressing sub-research question 3, analysis of all the research data, as described above, shows the current deployment models are not effective or efficient in meeting the needs of the Townsville community and the strategic objectives of the QPS. This is a significant finding when considered against analysis of sub-research questions 1 and 2 as the weight of evidence suggests a negative outcome to the overall components of research question 1, as discussed below.

6.1.4 Research Question 1

Analysis and outcomes from each of the three sub-research questions contributes to addressing research question 1: How and to what extent do the existing clustered, station-based policing deployment models relate to service delivery in metropolitan Townsville. It is clear from the evidence, that the organisational structures and systems in metropolitan Townsville have a significant impact on police service delivery. Relationships between cross-divisional crime, the lack of coordinated discretionary tasking by OICs, the consistent requirement for crews to operate outside their divisional boundaries, increasing crime and reduced rates of community satisfaction with police all reflect the extent and negative impact the current deployment models have on service delivery in metropolitan Townsville. These

outcomes are both significant and original as they incorporate a broad range of administrative and operational factors specific to regional Townsville and provide a strong evidence base for consideration of an alternative policing deployment model.

6.2 Summary of Findings: Research Question 2

In consideration of the challenges and outcomes associated with the existing systems and structure, it is reasonable to determine what alternative deployment model could be advanced in metropolitan Townsville as a result of the research (Research Question 2). In order to determine the type of deployment model applicable to the Townsville metropolitan area, a number of key factors must be considered. Given the extent of calls for services undertaken by crews from divisions external to the location of the incident, and perspectives from OICs about the need for this type of 'borderless' approach to continue to maintain expected standards of service delivery, it is reasonable to suggest any alternative deployment model must encapsulate crews attending jobs across the entire metropolitan area.

Further to this, the current structure of demarcated police divisions with OICs accountable for areas in close proximity, where they have limited operational control of operational resources, is inefficient. This is compounded by the relationship of crime across divisional boundaries, factored with the significant proactive capacity of each OIC and their limited engagement (in terms of planning and tasking) and awareness of metro-wide crime. Collectively, this has proved ineffective in meeting the needs of the community and QPS organisational objectives. With this in mind, and in consideration of the literature, a structure with related deployment models incorporating elements of centralisation and clustering is deemed to be the most appropriate for metropolitan Townsville.

6.2.1 Proposal of an Alternative Police Deployment Model.

Collectively, the literature, the data analysed in this thesis, and the perspectives of OICs support the notion that divisional boundaries (or borders) in metropolitan Townsville predominantly act as a barrier to a focused, coordinated response as they signify territory/territoriality, both materially and symbolically (Paasi, 2019, p. 5). The

multitude of deployment models in metropolitan Townsville, incorporating individual OIC discretionary tasking that involves significant amounts of resources, is both segregated and inefficient; and given the relationship of crime across divisional boundaries in the metropolitan area, the lack of engagement and planning between OICs is extremely limited and has proven ineffective, resulting in escalating crime and reduced community confidence.

In line with this, the assessment of any future policing model must address the issue of divisional boundaries and identify whether there is scope to operate effectively and efficiently across boundaries with complementary supporting organisational structures and systems. When asked about borderless policing concepts, all OICs agreed the concept would work in metropolitan Townsville, but the majority expressed a level of uncertainty around how it could work and whether officers could be 'split' in order to undertake different duties; which is understandable given they have not been provided with information around it at this stage. To address the issue, OICs were asked if they believe officers would be interested in working in a large, co-located first response unit on 10-hour shifts, with 80% agreeing; whilst all OICs agreed that some officers would be interested in working a two-shift OSA roster conducting following-up inquiries (not first response duties).

Centralised commands and specialised operations are an attempt, in part, to address these types of issues. McCluskey et al. (2014, p. 254) stipulate the success of centralisation incorporates the extent small work units "engage only the partial services of individuals whose spare time would not be devoted to other tasks if the structure was centralised." The authors emphasise that "small, related units are brought under single supervision to reduce lost motion", with the associated administrative focus providing a channelling effect on activities. It was on this basis, that the QPS moved to both the Tactical Crime Squads and the Rapid Action and Patrol units; however, District centralisation of these functions occurred without modification of associated systems. The systems maintain the accountability of OICs for their geographical-based division, whilst reducing the effectiveness their proactive taskings through the consistent redeployment of crews (often to priority code 3 jobs) without consultation or consideration of localised priorities.

The QPS Place and Case Management policy attempts to, in part, address the targeting of cross divisional crime, providing the policy platform for OICs to request district assistance (through RAP and TCS) where crime is too significant to be handled locally. However, the rates and frequency of offending across divisional boundaries in the Townsville metropolitan area is such that it is reasonable to suggest the organisational posture needs to shift permanently to a district-level response in order to be operationally effective. In this regard, the researcher suggests the move towards district level centralisation through the RAP and TCS initiatives has not gone far enough to create an effective and efficient model. The alternative model proposed in this thesis focusses on a move towards further centralisation. However; in line with the literature that suggests local engagement is a critical part of effective community-based policing (Crank et al., 2012), the challenge remains as to how this can be addressed in a centralised model to ensure centrally deployed staff and operations are effective at a local level.

Crank et al. (2012, p. 106) suggest a mission-based approach as a strategy to address the issue. The strategy involves three stages: establishing missions that are realistic and measurable to reduce offending in high crime areas; deploying specific, proactive policing resources in a coordinated and controlled manner to identified hot spots within the high crime areas; and establishing a clear, centralised command structure to ensure all local organisational units operate in support of objectives, with limited 'discretion' available outside the scope of mission parameters.

6.2.2 Proposed Model

In line with this, the proposed model is 'split force' based, concentrating on the establishment of a major, centralised policing complex which will host the vast majority of operational units in metropolitan Townsville, whilst still maintaining OICs in local areas to ensure there is focussed, localised engagement. The proposal incorporates a mobile first response general duties detachment, which will absorb the majority of the operational workforce within a single work unit housed centrally in the metropolitan area. This unit will undertake all first response and proactive taskings across the entire Townsville metropolitan area.

The centralised work unit will be highly mobile and provide 24-hour front-line response to calls for service; performing extensive proactive and highly visible patrols under the direction of a single Officer in Charge, assisted by an Operations Leader; with both these positions drawn from the existing OIC positions at the RAP and TCS. The administrative burden on these first response officers will be limited as the emphasis will be on their immediate operational deployment upon commencement of their shift, with officers only attending the police complex where it involves the processing of offenders or urgent administrative matters that cannot be addressed in a mobile capacity. Follow-up investigative inquires will be conducted by separate 'Crime Management Units' based in the original five police divisions to ensure there is a localised footprint for each area. To address the supervisory element in the centralised unit, the operational staff will be supported by a cohort of mobile shift supervisors on every shift, who will respond to incidents to provide the necessary leadership and support which comes with their experience.

Initial concepts on how the centralised policing model could operate using the current resource allocations in metropolitan Townsville are as follows:

- Approximately 270 staff operating from the building (or 340 if Investigative Units such as the Criminal Investigation Branch [CIB] or Child Protection Investigation Unit [CPIU] move into the building).

- District Duty Officers (DDOs) to be assigned to each team but will operate independently of the team. This would provide enhanced supervision as there would generally be two DDOs from Thursday to Sunday where one could operate in the Safe Night Precinct on Friday and Saturday nights.

- The Townsville metropolitan area has 32 Sergeant's; 17 of these would be allocated to centralised unit, with 15 to Crime Management Units.

- 3 x Sergeant's in each team at the centralised unit; one would operate as a team leader, the other two as mobile shift supervisors.

The specific operational staff breakdown of the centralised work unit would be as follows:

- 206 – Uniform general duties officers including officers from the RAP and TCS;

- 5 – District Duty Officers;

- 11 – Intelligence Officers;

- 1 – OIC;

- 1 – Operations Leader;

- 1 – Crime Manager;

- 2 – Inspectors;

- 6 Teams of 35 Officers – with a possible shift breakdown as follows:

    - 1 x Duty Officer (S/Sgt);
    - 1 x Mobile Supervisor (Sgt);
    - 2 x Team Leaders (Sgt);
    - 6 x Recreation Leave;
    - 26 x Uniform staff per team (including 4 TCS officers per team) forming 13 x Operational Crews.

- Approximately 34 vehicles are assigned to the first response units in the Townsville metropolitan area; with 19 vehicles to the allocated to the centralised unit, and the remaining 15 to the crime management units.

- Officers attached to the centralised unit will operate on a 10-hour, six team deployment model that will enable over 20 crews to operate from Thursday to Sunday nights.

A concept Townsville District centralised policing unit organisational chart is as follows:
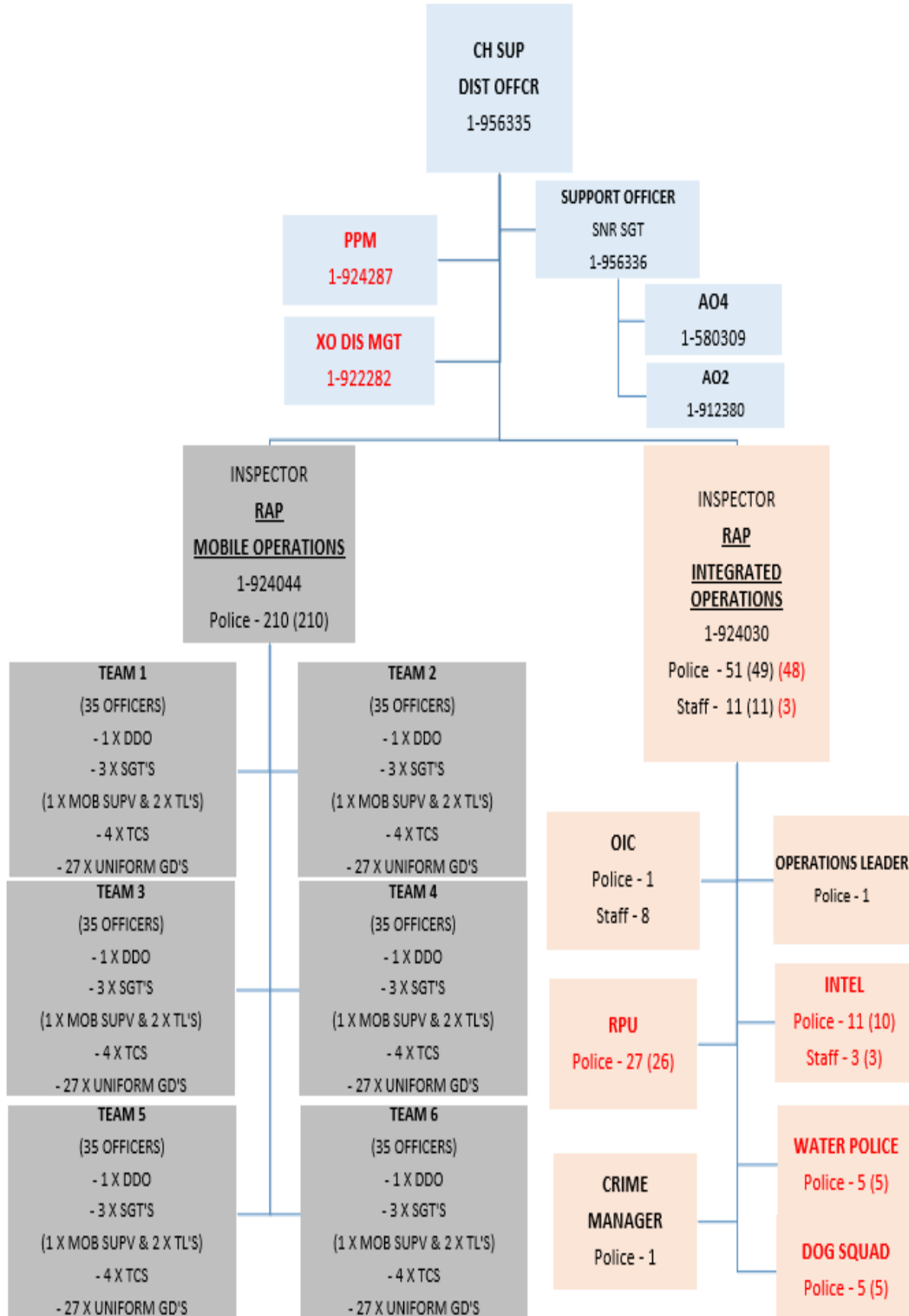

Figure 2: Concept Organisational Chart for a proposed Townsville District Centralised Policing Hub.

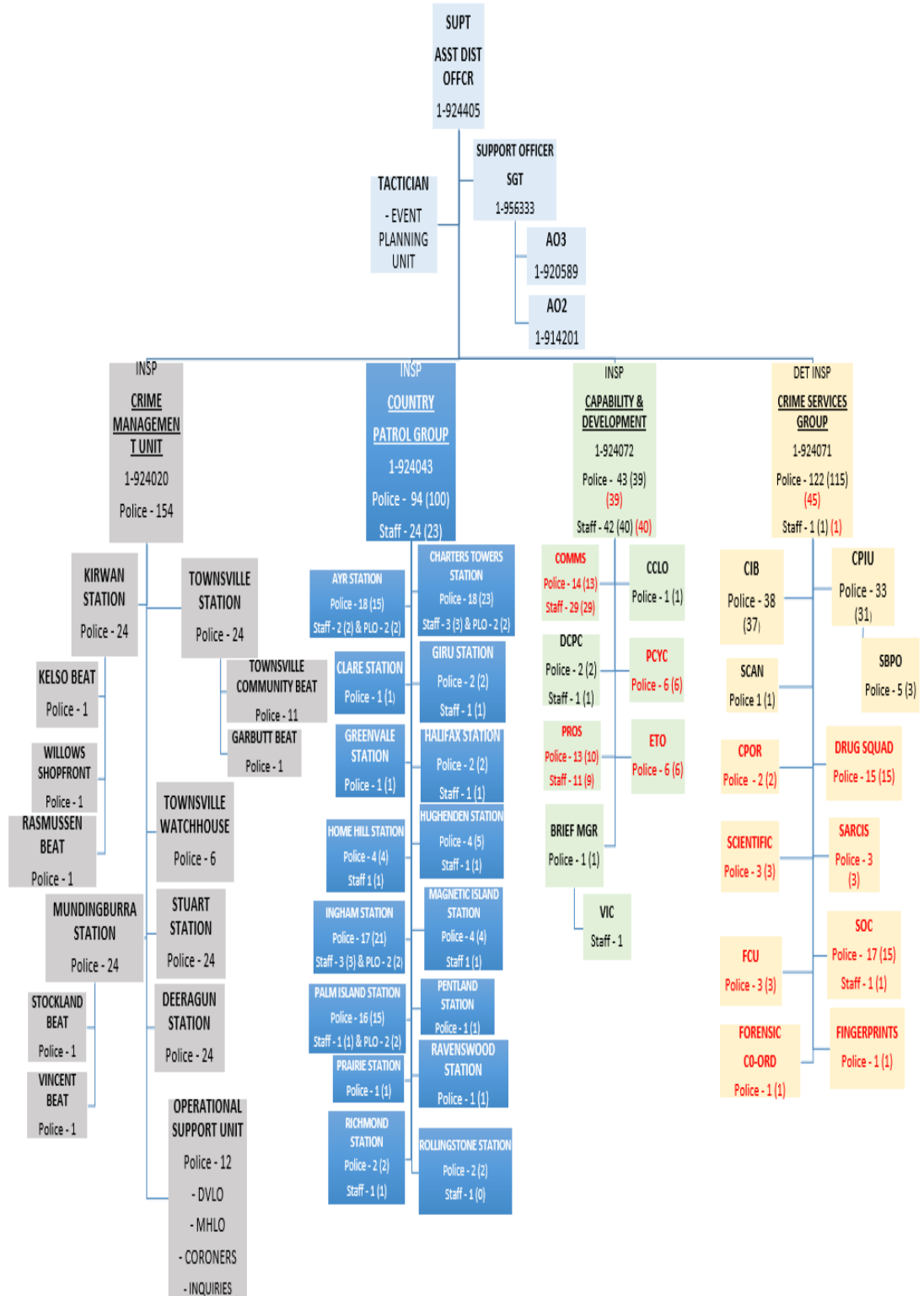The proposed organisational chart for the remainder of Townsville District is as follows:

Figure 3: Concept Organisational Chart for the proposed Townsville District Work Units external to the Centralised Policing Hub.

A concept Commissioned Officer portfolio transition into the centralised policing hub is as follows:

Townsville District – District Officer		
Chief Superintendent		
Townsville District – Assistant District Officer		
Superintendent		
Current Portfolio	**Centralised Portfolio**	**Portfolio Details**
Eastern Patrol Group (1-924044) Inspector	RAP Mobile Operations (1-924044) Inspector	Reports to D.O. Operational position in support of mobile units and the planning / execution of all operations.
Tactical Services Group (1-924030) Inspector	RAP Integrated Operations (1-924030) Inspector	Reports to D.O. Responsible for stakeholder liaison (similar to existing RAP Inspector's portfolio) and work unit administration.
Western Patrol Group (1-924020) Inspector	Crime Management Unit (1-924020) Inspector	Reports to A.D.O. Manages the District OICs and Crime Management Units.
Country Patrol Group (1-924043) Inspector	Country Patrol Group (1-924043) Inspector	Patrol Inspector for Country Patrol Group – no change to existing portfolio.
Capability & Development Group (1-924072) Inspector	Capability & Development Group (1-924072) Inspector	Capability and Development Inspector – no change to existing portfolio.
Crime Services Group (1-924071) Detective Inspector	Crime Services Group (1-924071) Detective Inspector	Crime Services Inspector – no change to existing portfolio.

Table 22: Concept Commissioned Officer portfolio transition under the proposed Townsville District Centralised Policing Hub model.

To ensure a policing footprint is maintained in existing police station locations (in existing or smaller establishments – commensurate with the numbers of officers working from the establishments), Crime Management Units will operate from the five metropolitan policing locations of Townsville City, Kirwan, Mundingburra, Stuart and Deeragun.

These units will operate on a two-shift Operational Shift Allowance (OSA) roster and will focus on the follow up of non-urgent or administrative tasks generated by the centralised unit, at times and location more suitable to members of the community. This structure will also provide greater options for facilitating flexible work practices, with enhanced opportunities for broader community engagement strategies and management of major community events in conjunction with other specialist work units.

Initial concepts on how the Crime Management Units could operate is as follows:

- All stations and OICs to remain in their work units in order to manage issues in their respective areas, incorporating localised stakeholder engagement and identification of local community needs. Any issues requiring an operational response can be escalated to the centralised unit for actioning.

- Staff Breakdown for teams of officers (three teams) at each location (to maintain OSA compliance) is as follows:

  - 1 – Sergeant as supervisor and team leader;
  - 1 – Recreation Leave;
  - 1 – Counter Officer; and
  - 5 officers forming 3 crews, as the Sergeant can be mobile as part of one of the crews.

- 15 vehicles required (three for each station).

- Officers from the centralised unit can maintain the counters at Townsville City and Kirwan Stations on nightshift, with an operational crew to stage from both stations.

6.2.3 System Changes

Critical to the success of the proposed model will be changes to key systems that support the new structure. Specifically, the Priority Policing model needs to be managed in a more balanced way that legitimises the criticality of proactive policing capacity and related taskings. In this regard, the tasking of proactive crews to priority code 3 jobs is problematic; whilst the practice ensures response times are impressive and well inside organisational objectives, the practice of using a wide range of proactive crews for non-urgent tasks is likely a contributing factor to increased rates of offending by reducing or removing strategies that may reduce the actual demand drivers that generate calls for service. At the time of writing this thesis, the QPS is attempting to address this through District Tasking and Coordination strategies.

Under current policy, divisional OICs are accountable for many functions within their allocated division. Whilst this can remain under the model proposed in this thesis, in order to ensure appropriate and achievable performance management practices are implemented, the responsibility of OICs should be changed to align with their proposed role of enhanced localised engagement, subsequent identification of community needs and proactive policing requirements, and immediate escalation of tasking requests through to the centralised unit. From the perspective of the centralised unit, the Inspectors, OIC and Operations Leader should have their responsibilities identified (whilst not covered in this research, these would be Townsville metro-wide), for which they should be held accountable through associated performance measures.

6.2.4 Benefits and Risks of Proposed Model

There are a number of benefits and risks associated with the proposed deployment model. Potential and anticipated benefits include:

- Greater response capability through the efficient use and enhanced coordination of existing resources;

- Reduced reporting and duplication of processes; i.e., the same things being done the same way by five 24-hour divisions operating in close proximity;

- Enhanced efficiency of operational resources through the use of a single, centralised deployment model as opposed to the existing five 24-hour first response units all operating on individual (and different) rosters;

- Greater flexibility to provide a more supportive workplace for people who may need alternate working arrangements due to recovery from illness, change in circumstances etc.;

- Better utilisation of experience and skills through enhanced mobile supervisory capacity and use of an ageing workforce to provide a response to less dynamic workplace requirements (investigations);

- Provision of more time for officers in 'support stations' to better engage with the community through reducing the demand of the current 'job-to-job' requirements; and

- Reductions in crime through increased coordination of proactive policing operations and a reduction in first response officer hours being directed towards administrative tasks.

Risks and challenges that can be reasonably associated with the proposed deployment model include the following:

- Funding - Initial costs associated with a new policing facility for the centralised unit, to ensure it can adequately accommodate the significant numbers of officers and equipment;

- Human Resource - Transition of staff from divisional-based position numbers to the new centralised unit associated with industrial relations provisions (although many officers in the Townsville metropolitan area are already on district, not divisional position numbers);

- Change Management – Significant levels of support would be required to assist officers (particularly long-serving officers) into the new roles associated with the new operating model;

- Organisational Systems – The QPS must be prepared to amend several organisational systems to ensure they support the new operating

structure. This includes Priority Policing and OIC position-based accountability and performance management provisions; and

- Political and Community – Significant consultation and messaging would be required to establish and control the narrative of the proposed change in structure given there would be a shift of officers away from existing divisions into the centralised unit, which may generate concern from local communities and politicians.

The literature identifies that issues arose in previous trials of 'split force' models due to a lack of effective systems and support mechanisms incorporating communication, coordination, operational integration and human resource management (North, 1990). In consideration of these elements, the data from research in metropolitan Townsville, and the perspectives of OICs, the proposed model has been developed in detail to emphasise the enhanced supervision, how it operates within the broader organisational framework, how the two distinct work functions (centralised first response unit, and the crime management units) operate on their deployment models, and how senior management positions transition into the new structure. Whilst not covered in this thesis, there would need to be extensive internal and external consultation, industrial relations consideration, and detailed communications and change management support plans.

6.2.5 Limitations of Research

There are a number of limitations to the study. One of the catalysts of this study was a review undertaken by the QPS in 2013 that recommended a further review after five years of implementation. The end of this five-year period not only coincided with the commencement of this thesis but also a broader QPS review. It is likely that some of the issues identified within this thesis will be addressed in some capacity by the QPS during this review.

The area of study within this thesis is broad, and despite the fact the researcher has addressed what is believed to be the vast majority of considerations, some issues may be impacted by factors not addressed in this study including general environmental factors within the community and the QPS, such as

legislation and policy changes, or subsequent changes to the strength or operating models of the work units discussed.

The researcher used purposive sampling to identify the critical informants used during the questionnaire phase. The limited group of officers who could provide related information was small for applying descriptive statistical and thematic analysis. Nevertheless, the processes were applied to the data; however, outcomes from the analysis were used in support of empirical data sourced from QPS and related databases. The researcher notes that outcomes from the empirical and questionnaire data closely aligned in most instances.

CHAPTER 7: CONCLUSION

This chapter concludes the current study by summarising the literature, research objectives, methods applied and findings of the research (7.1); followed by discussions of the contributions of the research (7.2) and areas for future study (7.3).

7.1 Summary

In 2003, UNAFEI provided a classification of two predominant policing models: centralised and decentralised. The application of either model is a critical issue for police; a point emphasised by Kurtz (1995, p. 90) when he emphasised that the "question of centralised versus decentralised police organisation is perhaps the most important police decision facing the nations of the world."

A summary of the historical literature (Webber 1947; Mackenzie, 1978; and Hall, 2002) provides that in organisational theory, centralisation and decentralisation focus on the two key components of function and decision-making authority. In terms of centralisation, the authors have described functional centralisation as each geographical unit doing only one part of the business and they are often unable to carry on the business without the integrated cooperation of other units. The authors describe centralised decision making as the retention of decision-making authority in the hands of headquarters.

Whilst this definition sounds restrictive, Mackenzie (1978, p. 201) provided a more balanced perspective by asserting that "no organisation of any appreciable size is perfectly centralised or decentralised: the key question is the choice of which functions or activities are to be performed or controlled by headquarters and which are to be delegated to subunits." This view is consistent with the current situation in metropolitan Townsville, which operates with elements of both centralisation through district-based functions, such the RAP and TCS, and clustering through the five 24-hour divisions.

The current structure in metropolitan Townsville incorporates functional decentralisation given that tasks are allocated to the five 24-hours division and

undertaken in totality within the restricted domain of the Patrol Group and District structures (RAP and TCS). Decentralised decision making occurs through the Officers in Charge of each of the first response units using their delegated authority to operate within the overall coordination of the Patrol Inspector and District Officer.

The need for review and consideration of change originated in reports compiled by the Queensland government and the QPS. The *Final Report* by the Queensland Commission of Audit (QLD Government, 2013, p. 11) identified that the QPS must "support the application of police service models that are flexible and efficient in managing demand; and achieve better integration of workforce and infrastructure needs"; emphasising that the QPS "adopts alternative models for service delivery; and adopt a broader infrastructure strategy that is more responsive to modern police service delivery needs."

The direction of this thesis was guided by the PACRS Final Report (QPS, 2013a, p. 31), which recommended the organisation "ensure policing services are effective and efficient, with police less restricted by boundaries" with a focus on "meeting the communities needs without being inappropriately restricted by boundaries." In line with this, and given the five 24-hour police stations in metropolitan Townsville operate within less than 20 kilometres of the central business district, research question 1 was developed to identify 'how and to what extent do the existing clustered, station-based policing deployment models relate to service delivery in metropolitan Townsville'; outcomes to this question provided the platform for research question 2: 'what alternative models may be identified?'

It was determined that to sufficiently address the RQs, and number of sub-research questions (S-RQ) were required for RQ 1 that related to different, but very specific aspects of the area of study. In this regard, S-RQ 1 determined 'the current standard of police service delivery in metropolitan Townsville, and how has it been achieved?' S-RQ 2 focussed on 'what impacts the current police deployment models have on efficient police service delivery in metropolitan Townsville?' Whilst S-RQ 3 assessed 'how efficient and effective are the existing police deployment models to meet the needs of the Townsville community and the Strategic Objectives of the QPS?'

The research questions not only established the agenda of the study, they required a specific research methodology. In this regard, a mixed methods approach within a pragmatist paradigm was used, consisting of a two-phase explanatory sequential approach (Creswell, 2018, p. 221), adopting both quantitative and qualitative data collection methods to address the research question; notated as: QUAN > QUAL.

The research undertaken within this study incorporated identification and analysis of key operational and administrative factors including: rates of reported offences; calls for service in terms of volume and attendance; the disposition and use of human resources; population data; and results from the National Survey of Community Satisfaction with Police. This was complemented by a questionnaire incorporating Likert Scale and free text responses by OICs of the first response units in the Townsville metropolitan area.

The research identified that collectively, the current standard of police service delivery in metropolitan Townsville is one of increasing crime and decreasing community confidence and perceptions of safety. This has been achieved through an organisational structure that has OICs using individual deployment models within their divisions, who gain little value from planning meetings with other OICs and have little awareness of specific issues outside their own divisions. This is despite the fact that there is a clear relationship between crime across divisional boundaries, and OICs having significant levels of staff available for proactive tasking, which is undertaken with little coordination between OICs. There are very significant numbers of operational crews being tasked by police communications to attend calls for service in other divisions in the metropolitan area, regardless of the proactive tasks they were assigned by OICs; and despite having no control over this process (which affects the achievement of performance objectives), OICs are still being held accountable for broad outcomes in their respective divisions.

Accordingly, it is reasonable to suggest the current structure and related deployment models are inefficient and ineffective in meeting the needs of the Townsville community and the organisational objectives of the QPS. As a result, the researcher used the analysis of research data to propose an alternative police

deployment model for metropolitan Townsville, incorporating aspects of both centralisation and decentralisation. Specific detail was provided around the transition into and operating structure of the deployment model, and a number of recommendations were made in relation to changes to police systems to ensure they complemented and aligned with the new operating structure.

7.2 Contributions

This study has facilitated original contributions of knowledge for the researcher, the Queensland Police Service, and the broader knowledge base of policing literature.

7.2.1 Contributions to the Researcher

As a lifelong learner with over 26 years' experience in policing, the concept of professional studies appealed to the researcher as a pathway for self-reflection to identify opportunities for personal and professional development, whilst undertaking learner-driven research of a topic of interest with capacity to contribute to policing practice and related literature.

Prior to commencing the professional studies program, the researcher undertook self-reflection to identify his strengths and weaknesses of prior learning and reflect on his practice-based knowledge. During this process, the researcher identified his least prolific areas as: technology adoption; creativity and innovation; work methods/process logic; critical judgement; and information management and dissemination.

The researcher subsequently created the following five learning objectives for his professional studies program.

1. *Develop high level research skills and knowledge by conducting quantitative and qualitative research investigating policing deployment models in metropolitan Townsville and documenting these in a research article.*

The researcher achieved this objective through study of relevant theory to learn research methodologies and their application to different research. This was

demonstrated with identification and application of the research design used in this paper. This learning addressed the areas of limited development from the researchers' self-reflection relating to work methods / process logic, and information management and dissemination.

2. *Enhance my critical thinking skills by critically evaluating research studies associated with practice in policing in order to assess their quality and applicability in improving the functions of policing deployment models.*

The researcher achieved this objective through extensive review of related literature and evaluating associated evidence to determine their applicability to the current study. An extensive literature review was included in this paper, with outcomes contributing to the methodology and subsequent analysis to address the research questions around policing deployment models. This learning addressed the areas of limited development from the researchers' self-reflection relating to critical judgement.

3. *Make significant intellectual contributions to the body of knowledge in policing by creating innovations in practice in order to develop strategic solutions for the deployment of police.*

The researcher achieved this objective through the identification and subsequent analysis of environmental factors related to policing in metropolitan Townsville. The outcomes of this analysis, when aligned with the literature review and applied methodology, delivered recommendations for policing in a manner that withstands scrutiny, whilst providing contributions to both professional practice and literature. This learning addressed the areas of limited development from the researchers' self-reflection relating to creativity, innovation and adopts technology.

4. *Demonstrate superior communications skills appropriate to advanced policing professionals by using high level communication strategies to compose and support my research.*

The researcher achieved this objective through engagement with senior management in the QPS to source related material, whilst following a clear, structured process throughout all stages of the thesis to provide strong evidence in support of the

research questions. This learning developed the researchers' communications skills to a higher level to enable enhanced engagement with stakeholders.

7.2.2 Contributions to Professional Practice

With over 26 years' experience in policing, the researcher is well-placed to support the concept that the deployment of resources in support of service delivery to uphold the rule of law is one of the most significant functions of policing. With current QPS deployment models having police stations clustered in locations set geographically, a number of factors have arisen that challenge this structure.

This thesis aligned the outcomes of a number of government reports (PACSR, 2013 and Commissions of Audit, 2013) and academic literature to identify consistent themes and relationships between efficiency and effectiveness, service delivery models, and the application of appropriate systems and structures. The thesis used the literature to develop a research design that facilitated analysis of environmental factors relevant to police service delivery in the largest city outside of south-east Queensland, Townsville. The outcome is a comprehensive analysis of original and secondary data to assess efficiency and effectiveness of police related clustering in Townsville. The evidence base was then used to develop an alternative model incorporating both centralisation and clustering. The model, and process used to develop it can be applied to any area, leaving a practice-based legacy for policing in Queensland and the broader policing community.

7.2.3 Contributions to Academic Knowledge

This study has contributed a number of key findings to academic knowledge around the deployment of police in an isolated, regional metropolitan area.

Every OIC in the QPS is empowered to manage their allocated staff and task them to first response and proactive duties at their discretion. The researcher has not identified any literature that has reviewed the extent, effectiveness and efficiency of proactive taskings undertaken by OICs. These 'discretionary tasks' form a critical component of police capability to proactively target crime, and the

researcher has further identified the lack of engagement between OICs to use these resources in a coordinated and targeted way across divisional boundaries. Given the data sets, it is reasonable to extrapolate and use the findings as a basis for review and application of policing strategies in locations with geographical or organisational similarities to Townsville.

The study has also assessed relevant demand factors including rates of reported offences and calls for service and identified consistent increases across the five 24-hour divisions in the Townsville metropolitan area. This suggests a relationship where crime transcends divisional boundaries, which is a key factor that should drive subsequent policing reviews and strategies, as the increases in these demand factors are reflected in decreases in community confidence and community perceptions of safety.

The study also identified the extent of cross-divisional work undertaken by divisional crews when responding to calls for service, primarily as a result of application of the Priority Policing model by police communications. This provides a clear evidence-base that lends support to 'borderless policing' concepts for use in future policing reviews.

The collective impact of these factors highlights the limitations of the current organisational structure and its negative impact on police service delivery. These factors were used to contribute to the development of an alternative deployment model that aligns with the literature and addresses key demand drivers for police. The information and suggested deployment model provide future researchers and practitioners with a basis for further study or application of findings.

7.3 Areas of Future Study

There are a number of areas where further research could be undertaken to identify risks or opportunities associated with centralised and clustered police deployment models. Given the identified impact of police communications on the allocation of crews to attend calls for service, regardless of their capacity to complete proactive taskings set by their OICs, there is scope to review this process

in order to determine the most optimal way to manage the competing interests in consideration of broader QPS organisational objectives.

Performance management is a significant area of interest for the QPS. Further research into factors related to performance management should be undertaken, including the alignment of outcomes-based measures of performance incorporating provisions of the QPS policy framework including position descriptions and responsibilities, and OIC delegations and authorities.

REFERENCES

Ahmad, J., Devarajan, S., Khemani, S., & Shah, S. 2006. Decentralisation and service delivery. *Handbook of Fiscal Federalism.* pp. 240-268. Northampton MA: Edward Elgar.

Andrews, R., Boyne, G.A., Law, J., & Walker, R.M. 2009. Centralisation, Organisational Strategy, and Public Service Performance. *Journal of Public Administration Research and Theory: J-PART.* 19(1), pp. 57-80. Retrieved on 6 July 2020, from DOI:139.86.7.217.

Armsby, P. 2000, *"Methodologies of work-based learning",* Birmingham, West Midlands, Staff and Educational Development Association.

Asselin, M.E. 2003. Insider Research: Issue to Consider When Doing Qualitative Research in Your Own Setting. *Journal for Nurses in Professional Development*, 19(2), pp. 99-103. Retreived on July 9, 2021 from http://journals.lww.com/jnsdonline/Fulltext/2003/03000/Insider_Research _Issues_to_consider_When_Doing.8.aspx

Australian Qualifications Framework Council, (2013). *Australian Qualifications Framework*, 2nd edn, https://www.aqf.edu.au/sites/aqf/files/aqf-2nd-edition-january-2013.pdf.

Ayling, J., Grabosky, P., & Shearing, C. 2009. *Lengthening the arm of the law: Enhancing police resources in the 21st century.* Cambridge: University Press.

Ball, A.L. 2013. *Analysis and Interpretation*. New York, NY: Columbia University.

Bartley, T., Anderson, K., Jagger, P., & Van Laerhoven, F. 2008. The contribution of institutional theories to explaining decentralisation of natural resource governance. *Society and natural resources.* 21, pp. 160-174.

Bayley, D.H. 1985. *Patterns of policing: A comparative international analysis.* New Brunswick, NJ: Rutgers University Press.

Best, J.W. 1981. *Research in Education. (*4th edn), New Delhi, Prentice Hall of India Pvt Ltd.

Best, J.W. & Khan, J.V. 2003. *Research in Education.* (9th edn), New
    Delhi, Prentice-Hall of India Pvt Ltd.

Bloom, B. (1965). *Taxonomy of Education Objectives: The classification of
    Educational Goal*, New York: David McKay Company, Inc.

Bezanson, L. (2003). "Connecting Career Development and Lifelong Learning:
    A background paper on the contribution of career development to a
    productive learning and working force", *Food for Thought*, Canadian
    Career Development Foundation, Ottawa, Ontario, pp. 1-6.

Boyatzis, R.E. 1998. *Transforming Qualitative Information: Thematic
    Analysis and Code Development.* Thousand Oaks, CA: Sage Publications.

Braga, A.A., Groff, E.R., Weisburd, D.L., & Wooditch, A. 2017. Can
    Hotspot Policing Reduce Crime in Urban Areas? An Agent Based
    Simulation. *Criminology.* 55(1), pp. 137-173. Retrieved 4 May 2020 from
    https://doi.org/10.1111/1745-9125.12131.

Braga, A.A., & Weisburd, D.L. 2010. *Policing Problem Places: Crime
    Hotspots and Effective Prevention*. Oxford Scholarship Online.
    DOI:10.1093/acprof:oso/9780195341966.001.0001.

Braun, V., & Clarke, V. 2006. Using thematic analysis in psychology.
    Qualitative Research in Psychology. 3, pp. 77-101.

Carrington, P.J., & Schulenberg, J.L. 2016. *Police Discretion with Young
    Offenders.* Retrieved 6 July 2020, from https://www.justice.gc.ca/eng/rp-
    pr/cj-jp/yj-jj/discre/org/centr.html.

Carter, N.M., & Cullen, J.B. 1984. A comparison of
    centralisation/decentralisation of decision-making concepts and measures.
    Journal of Management. 10, pp. 259-268.

Cheema, G.S., & Rondinelli, D.A. 2007. From government decentralisation
    to decentralised government. *Decentralising governance: Emerging
    concepts and practices*. pp. 1-20. Washington DC: Brookings Institution
    Press.

Clark, D. (1999). *Learning Domains of Blooms Taxonomy*. Retrieved June
    27, 2018, from https://www.nwlink.com/~donclark/hrd/bloom.html.

Clark, T., & Walsh, R. 2017, December 5. Back to the drawing board for WA cops. *The West Australian.* Retrieved December 10, 2018, from https://thewest.com.au/news/wa/back-to-the-drawing-board-for-wa-cops-ng-b88680264z.

Clark, V., & Braun, V. 2013. Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*. 26(2), pp. 120-123.

Cohen, J.M., & Peterson, S.B 1997. *Administrative Decentralisation: A new framework for improved governance, accountability and performance.* Retrieved from Cambridge, MA.

Cordner, G. 2016. *Reducing Fear of Crime: Strategies for Police*. Kutztown University. US Dept. of Justice, Office of Community Orientated Policing Services. Washington D.C.

Crank, J., Irlbeck, D., Murray, R., & Sundermeier, M. 2012. Mission-based policing: rethinking the relationship of police to crime. *Police Practice and Research*, 13 (2), pp. 103-120. doi:10.1080/15614263.2011.596682.

Creswell, J.W. 2013. *Qualitative inquiry & research design: Choosing among five approaches* (3rd end.). Thousand Oaks, CA: Sage Publications.

Creswell, J.W., & Creswell, J.D. 2018. *Research design: Qualitative, quantitative and mixed methods approaches*, (5th edn.), Thousand Oaks, CA: Sage Publications.

Creswell, J.W., & Plano Clark, V.L. 2011. *Designing and conducting mixed methods research*, (2nd edn.), Thousand Oaks, CA: Sage Publications.

Daft, R.L. 2007. *Organisation theory and design*, (9th edn.), South Western, Mason, Ohio, pp. 374-388.

Dalton, D.R., Todor, D., Spendolini, M.J, Fielding, G.J, & Porter, L.W. 1980. Organisational Structure and Performance: A critical Review. *Academy of Management Review.* 5, pp. 49-64.

Daudelin, M.W. 1996. Learning from experience through reflection. *Organisational Dynamics*, pp. 36-48. doi:10.1016/S0090-2616(96)90004-2.

De Guzman, M.C. 2016. Community hierarchy of needs and policing models. *Police Practice and Research*, 18 (4), pp. 352-355. doi:10.1080/15614263.2016.1242425.

Dempsey, J.S., Forst, L.S., & Carter, S.B. 2019. *An Introduction to Policing*, 9th edn. Boston, MA, USA: Cengage Learning.

Den Heyer, G. 2014. Examining police strategic resource allocation in a time of austerity. *Salus Journal*, 2(1), 63.

Doncaster, K., & Thorne, L. (2000). *Reflection and Planning: Essential elements of professional doctorates, Reflective Practice: International and Multidisciplinary Perspectives*, 1:3, 391-399, https://doi-org.ezproxy.usq.edu.au/10.1080/713693159.

Drew, C.J., Hardman, M.L., & Hosp, J.L. 2008. *Designing and conducting research in education.* Thousand Oaks, CA: Sage Publications.

Dweck, C. (2002). "Beliefs that make smart people dumb" in RJ Stenburg (ed.), *Why smart people can be so stupid*, Yale University Press, New Haven, Connecticut, pp. 24-41.

Eck, J.E. 2015. Who should prevent crime at places? The advantages of regulating police managers and challenges to police services. *Policing.* 9(3), pp. 223-233.

Effective. 2018. In *online Oxford Dictionaries. Retrieved December 15, 2018, from https://en.oxforddictionaries.com/definition/effective*.

Efficient. 2018. In *online Oxford Dictionaries. Retrieved December 15, 2018, from https://en.oxforddictionaries.com/definition/efficient*.

Esparza, D. 2012. *Police Centralisation and public security in Mexico.* Paper presented at the Western Political Science Association 2012 Annual Meeting. Portland, OR.

Feeley, M.M. 1973. Two models of the criminal justice system. *Law & Society Review.* 7, pp. 407-425.

Fergusson, L., Allred, T., Dux, T., & Mulanga, H. 2018. Work-based learning

and research for mid-career professionals: Two project examples from Australia. *Interdisciplinary Journal of E-skills and Lifelong Learning.* 14, pp. 19-40 [Crossref], [Google Scholar].

Fergusson, L., van der Laan, L., & Baker, S. 2019. Reflective practice and work-based research: a description of micro and macro-reflective cycles. *Reflective Practice,* Vol. 20 No. 2, pp. 289-303.

Gregory, M. (1994). "Accrediting Work-based Learning: Action Learning – A Model for Empowerment", *Journal of Management Development*, Vol. 13 Issue: 4, pp.41-52 https://doi-org.ezproxy.usq.edu.au/10.1108/02621719410057069.

Gulick, L., & Urwick, L. (1937). *Papers on the science of administration.* New York, NY: Columbia University.

Hall, R.H. 2002. *Organisations. Structures, Processes, and Outcomes.* 8th ed. Upper Saddle River, N.J.: Prentice-Hall.

Hammarberg, K., Kirkman, M., & De Lacey, S. 2015. Qualitative research methods: when to use them and how to judge them. *Human Reproduction.* Vol. 31 (3), pp. 496-501. DOI:10.1093/humrep/dev334.

Holden, J. 2015. *A Guide to Developing Cognitive Learning Objectives*, (5th edn.), http://docplayer.net/23168680-A-guide-to-developing-cognitive-learning-objectives-jolly-t-holden-ed-d.html.

Holmes, R., Dahan, H.M., & Ashari, H. 2005. *A guide to research in the social sciences.* Petaling Jaya, Selangor, Pearson/Prentice Hall.

Illeris, K. (2004). "A model for learning in working life", *Journal of Workplace Learning*, Vol. 16, Issue 8, pp. 431-441.

Jackson, J. & Bradford, B. 2010. What is trust and confidence in the police? *Policing: a journal of policy and practice.* Vol. 4(3). Pp. 241-248. DOI:10.1093/police/paq020.

Jacot-Descombes, C., & Niklaus, J. 2016. Is centralisation the right way to go? The case of internal security policy reforms in Switzerland in light of community policing. *International Review of Administrative Sciences,* 82(2), pp. 335-353. DOI:10.1177/0020852315581806.

Jennings, C., Cross, J., Casebow, P., & Freguson, O. (2012). "Workplace Learning: New Thinking and Practice", *Global Focus: The EFMD Business Magazine*, Vol. 6, Issue:1, pp. 1-11.

Johnson, D. (2010). "The Opportunities, Benefits and Barriers to the Introduction of Work-Based Learning in Higher Education"*, Innovations in Education and Teaching International*, 38:4, 364-368, https://doi-org.ezproxy.usq.edu.au/10.1080/14703290110074948.

Joyce, N.M., Ramsey, C.H., & Stewart, J.K. 2013. Commentary of Smart Policing. *Police Quarterly*, 16 (3), pp. 358-368. doi:10.1177/1098611113497043.

Kumar, K. 1989. Conducting Key Informant Interviews in Developing Countries. *A.I.D Program Design and Evaluation Methodology Report No. 13.* Agency for International Development, Washington D.C.

Kurtz, H.A. 1995. Criminal justice centralisation versus decentralisation in the Republic of China. *Journal of the Oklahoma Criminal Justice Research Consortium.* 2,7.

Lester, S., & Costley, C. (2010). "Work-based learning at higher education level: value, practice and critique", *Studies in Higher Education*, 35:5, 561-575, https://doi-org.ezproxy.usq.edu.au/10.1080/03075070903216635.

Lincoln, Y. S., & Guba, E.G. 1985. *Naturalistic Inquiry.* London: Sage Publications.

Luborsky, M.R., & Rubinstein, R.L. 1997. Sampling in qualitative research: rationale, issues and methods. *Research in Ageing.* 17(1), pp. 89-113. Doi:10.1177/0164027595171005.

Lum, C., & Nagin, D. 2017. Reinventing American Policing. *Crime and Justice.*46, pp. 339-393. The University of Chicago.

Mackenzie, K.D. 1978. *Organisational Structures.* Arlington Heights, Illinois: AHM Publishing.

Marshall, M.N. 1996. Sampling for qualitative research. *The Journal of Family Practice.* 13(6), pp. 522-526. Doi: 10.1093/fampra/13.6.522.

Mawby, R.I. 2008. Models of policing. *The handbook of policing,* (2nd

edn.), pp. 17-46. Cullompton, Devon: Willan Publishing.

McCluskey, J.D., Cancino, J.M., Tillyer, M.S., & Tillyer, R. 2014. Does Organisational Structure Matter? Investigation, Centralisation, Case Clearances, and Robberies. *Police Quarterly*. 17 (3), pp. 250-275.

Merriam, S.B. 2009. *Qualitative research: A guide to design and implementation (2nd edn.). San Francisco, CA: Jossey-Bass.*

Miles, R., Snow, C., Meyer, A., & Coleman, H. 1978. Organisational Strategy, Structure, and Process. *The Academy of Management Review.* 3(3), pp. 546-562. Doi:10.2307/257544.

Moore, M.H., & Poethig, M. 1999. The police as an agency of municipal government: Implications for measuring police effectiveness. *Proceedings from the Policing Research Institute meetings.* Washington DC: National Institute of Justice.

Myers, K.K., & Oetzel, J.G. 2003. Exploring the dimensions of organisational assimilation: Creating and validating a measure. *Communication Quarterley*. 51(4), pp. 438-451.

Nagin, D.S. 2013. Deterrence in the twenty-first century. *Crime and Justice.* 42(1), pp. 199-263.

Nagin, D.S., Solow, R.M., & Lum, C. 2015. Deterrence, criminal opportunities, and police. *Criminology.* 53(10), pp. 47-100.

Nesbit, P.L. (2012). "The Role of Self-Reflection, Emotional Management of Feedback, and Self-Regulation Processes in Self-Directed Leadership Development", *Human Resource Development Review,* Vol 11, Issue 2, pp. 203 – 226. doi-org.ezproxy.usq.edu.au/10.1177/1534484312439196.

New South Wales Government. 2012. Final Report, *NSW Commission of Audit. Retrieved October 25, 2018, from* https://www.treasury.nsw.gov.au/sites/default/files/pdf/NSW_Commission_of_Audit_Final_Report.pdf.

Nilsen, P., Nordstrom, G., & Ellstrom, P.E. 2012. Integrating research-

based and practice-based knowledge through workplace reflection. *Journal of Workplace Learning*, 24 (6), pp. 403-415. doi:10.1108/13665621211250306.

Norris, P. 2008. *Driving Democracy: Do power-institutions work?* New York, NY: Cambridge University Press.

Oates, W.E 1972. *Fiscal Federalism.* New York: Harcourt, Brace, Jovanovich.

Oates, W.E. 1999. An essay on fiscal federalism. *Journal of Economic Literature.* 37(3), pp. 1120-1149.

Oates, W.E. 2006. The many faces of the Tiebout model. *The Tiebout model at fifty.* pp. 21-45. Cambridge MA: Lincoln Institute of Land Policy.

O'Connor, A. 2016, February 11. Analysis: Police take a back-to-the-future approach to crime with Frontline 2020 backflip. *ABC News*. Retrieved December 10, 2018 from https://www.abc.net.au/news/2016-02-11/analysis-of-revamped-wa-policing-model/7160992.

O'Toole, L.J., & Meier, K.J. 1999. Modelling the impact of public management: implications of structural context. *Journal of Public Administration Research and Theory.* 9, pp. 505-526.

Paasi, A. 2019. Borderless Worlds and Beyond: Challenging the State-Centric Cartographies. *Environment and Planning.* 48(1), pp.1-22.

Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N., & Hoagwood, K. 2015. Purposeful Sampling of Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and policy in mental health*, 42(5), pp. 533-544.DOI:10.1007/s10488-013-0528-y.

Pollitt, C. 2005. Decentralisation: a central concept in contemporary public management. *The Oxford Handbook of Public Management.* Pp. 371-397. New York, NY: Oxford University Press.

President's Task Force on 21st Century Policing. 2015. *Final Report of the President's Task Force on 21st Century Policing.* Office of Community Orientated Policing Services, Washington D.C. Retrieved July 8, 2021, from http://www.cops.usdoj.gov/pdf/taskforce/TaskForce_FinalReport.pdf.

Punch, K.F. 1998. *Introduction to Social Research: Quantitative and Qualitative Approaches*. London: Sage Publications.

Queensland Government. 2012. Interim Report. *QLD Commission of Audit.* Retrieved August 27, 2018, from http://resources.news.com.au/files/2012/06/15/1226396/333070-queensland-budget-audit.pdf.

Queensland Government. 2013. Final Report. *Commission of Audit*. Retrieved August 27, 2018, from http://www.parliament.qld.gov.au/documents/tableOffice/TabledPapers/2013/5413T2498.pdf.

Queensland Police Service. 2012. *Police and Community Safety Review*. Retrieved August 25, 2018, from https://qpsnet.qldpol/spp/PACSRReview/Pages/PACSR-Review.aspx.

Queensland Police Service. 2013a. Final Report. *Police and Community Safety Review*. Retrieved August 25, 2018, from https://www.police.qld.gov.au/corporatedocs/reportsPublications/Documents/SummaryStructuralChangesQPS.pdf.

Queensland Police Service. 2013b. *Priority Policing.* Retrieved January 15, 2020, from https://qpsnet.qldpol/spp/occ/cd/opi/Documents/Service%20Manuals/OPM%20Current.pdf.

Queensland Police Service. 2013c. *Place and Case Management.* Retrieved January 20, 2020, from https://qpsnet.qldpol/specialist/ccc/ceg/cpe/cppu/cpb/Documents/QPS%20Place%20and%20Case%20Strategy%20v2.0.pdf#search=place%20and%20case.

Queensland Police Service. 2017. *Strategic Plan 2017-2021*. Retrieved August 26, 2018, from https://qpsnet.qldpol/spp/policy-performance/planning/Documents/QPS_Strategic_Plan_2017-2021.pdf#search=strategic%20plan.

Queensland Police Service. 2018a. *POLSIS Profile Townsville*. Retrieved August 25, 2018, from http://statistics.govnet.qld.gov.au/polsis/profiles.

Queensland Police Service. 2018b. *Queensland Police Records and Information Management Exchange*. Retrieved October 18, 2018, from https://qpsnet.qldpol/spp/opcap/business-improvement/frontline-systems/qprime/pages/default.aspx.

Queensland Police Service, 2019. *Annual Report 2018-2019.* Retrieved on April 3, 2020, from https://www.police.qld.gov.au/sites/default/files/2019-09/AR_18.19_08_Performance.pdf.

Queensland Police Service. 2020a. *Queensland computer Aided Dispatch System.* Retrieved August 7, 2020, from \\prds.qldpol\corporatedata\CCC\Guest\Brisbane PCC\PCC Statewide Support Unit\PAINE GRAEME STATS SWSU 3655

Queensland Police Service. 2020b. *Queensland Police Records and Information Management Exchange*. Retrieved May 11, 2020, from https://qpsnet.qldpol/spp/opcap/business-improvement/frontline-systems/qprime/pages/default.aspx.

Queensland Police Service. 2020c. *Strategic Plan 2020-2024*. Retrieved May 20, 2020, from https://qpsnet.qldpol/spp/policy-performance/planning/Documents/QPS_Strategic_Plan_2020-2024.pdf#search=strategic%20plan.

Rea, L. M., & Parker, R.A. 2014. *Designing and conducting survey research: A comprehensive guide*. John Wiley & Sons.

Reichel, P.L. 2013. *Comparative criminal justice systems: A topical approach, (*6th edn.). Upper Saddle River, NJ: Pearson.

Rondinelli, D.A., Nellis, J.R., & Cheema, G.S. 1983. *Decentralisation in developing countries: A Review of recent experience.* Retrieved on 7 July 2020 from http://documents1.worldbank.org/curated/en/868391468740679709/pdf/multi0page.pdf

Sandelowski, M. 1996. One is the liveliest number: the case orientation of qualitative research. *Research in Nursing and Health.* 19(6), pp. 525-529. Doi: 1002/(SICI)1098-240X19:6<525:AID-NUR8>3.0CO.;2-Q.

Schneider, A. 2003. Decentralisation: Conceptualisation and measurement. *Studies in Comparative International Development.* 38(3), pp. 32-56.

Schulz, K.P. (2005). "Learning in complex organizations as practicing and reflecting: A model development and application from a theory of practice perspective", *Journal of Workplace Learning*, Vol. 17 Issue: 8, pp.493-507, https://doi-org.ezproxy.usq.edu.au/10.1108/13665620510625363.

Smith, B.C. 1985. *Decentralisation: The territorial dimensions of the state.* London: George Allen & Unwin.

Sparrow, M.K. 2015. *Measuring Performance in a Modern Police Organisation. New Perspectives in Policing.* Harvard Executive Session on Policing and Public Safety. Washington DC: National Institute of Justice.

Starbuck, W.H., & Nystrom, P.C. 1981. *Handbook of Organisational Design: Volume 1: Adapting organisations to their environments.* Oxford, NY: Oxford University Press.

Tankebe, Justice. 2013. Viewing things differently. The dimensions of public perception of police legitimacy. *Criminology.* 55(1), pp. 103-135. https://doi.org/10.1111/j.1745-9125.2012.00291.x.

Tiebout, C.M 1956. A pure theory of local expenditures. *Journal of Political Economy.*64(5).

Tiebout, C.M. 1961. An economic theory of fiscal decentralisation. *Public finances: Needs, sources and utilisation*. pp. 79-96. New York, NY: Princeton University Press.

Tien, J.M., Simon, J.W., Larson, R.C. 1978. *An alternative approach in police patrol: The Wilmington split-force experiment.* Washington DC: US Government Printing Office.

Tsegaye, S., Missimer, T.M., Kim, J.Y., & Hock, J. 2020. A Clustered, Decentralised Approach to Urban Water Management. *Water*, 185 (12), pp. 1-21, DOI:10.3390/w12010185.

UNAFEI. 2003. *Annual Report for 2001 and resource material series No. 60*.

(K Saki Ed.) Tokyo, Japan: Asia and Far East Institute for the Prevention and Treatment of Offenders.

Walliman, N. 2018. *Research Methods: the basics,* (2nd end.), New York, NY: Routledge.

Webber, M. 1947. *The Theory of Social and Economic Organisation*. Trans. A.M Henderson and Talcott Parsons. New York. Free Press.

Weisbud, D., & Eck, J.E. 2004. What can police do to reduce crime, disorder and fear? *The Annals of the American Academy of Political and Social Science*, 593 (1), pp.42-65, doi:10.1177/0002716203262548.

West Australian Police Service 2013. *Frontline 2020*. Retrieved December 10, 2018, from https://www.nhw.wa.gov.au/~/media/Files/Police/Crime/Frontline-2020/Frontline-2020.pdf?la=en.

Willis, J.J., & Mastrofski, S.D. 2011. Compstat and The New Penology: A Paradigm Shift in Policing. *British Journal of Criminology.* 52(1), pp.73-92. Retrieved on 5 October 2019, https://doi.org/10.1093/bcj/azr063.

Wilson, J.M., & Weiss, A. 2014. Police Staffing Allocation and Managing Workload Demand: A Critical Assessment of Exiting Practices. *Policing: A Journal of Policy and Practice*, 8 (2), pp. 96–108, doi:10.1093/police/pau002.

World Bank. 2001. Intergovernmental fiscal relations. Retrieved on 8 July 2020 from http://www1.worldbank.org/publicsector/decentralisation/fiscal.htm.