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# Risk Management Organizational Placement: Assessing the Efficacy of Workers' Compensation Program Delivery in California Municipalities

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ABSTRACT

The organizational placement of the risk management function in California municipalities is typically within the city manager, city attorney, human resources, or finance departments. This study examined the effectiveness of that organizational placement within a sample size of cities combined with the phenomenological experiences of the incumbent practitioners utilizing a convergent mixed methods research design. The theoretical foundations of this research included both cost-benefit analysis theory (CBAT) and classical management theory (CMT). The literature review analyzed the history of workers' compensation in California and the seminal and catalytic literature related to the evolution of workers' compensation program administration. The existing body of research revealed a looming industry talent crisis and the importance of maintaining efficiency and effectiveness in succession planning while creating and recognizing public value as new public administration practitioners replace incumbents. This convergent mixed methods research study propounds conclusions in risk management best practices for efficacy in workers' compensation program delivery, recommendations for organizational placement of the risk management function, and a conceptual framework for public agency management of workers' compensation claims administration.

*Keywords*: risk management, best practices, claims administration, classical management

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As a child of the Living God, I would like to thank my Lord and Savior—Jesus Christ—for His eternal redemption, His daily grace, and His enduring love:

> For I am persuaded that neither death nor life, nor angels nor principalities nor powers, nor things present nor things to come, nor height nor depth, nor any other created thing, shall be able to separate us from the love of God which is in Christ Jesus our Lord.
>
> —Romans 8:38-39 NKJV

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> And He said to them, "*It is not for you to know times or seasons which the Father has put in His own authority. But you shall receive power when the Holy Spirit has come upon you; and you shall be witnesses to Me in Jerusalem, and in all Judea and Samaria, and to the end of the earth*."
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> —Acts 1:7-8 NKJV

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# CHAPTER 1: INTRODUCTION

## Background

The organizational placement of the risk management function in California municipalities is typically located in the city manager, city attorney, human resources, or finance departments. In some instances, the risk management function may reside within its own department. This research study sought to compare, contrast, and correlate risk management placement and to identify the best practices for the efficient and effective outcomes of workers' compensation program delivery by practitioners in various municipalities. Given the coming exodus of talent (Jacobson, 2019), the potential benefits of this study far outweigh the risks of not identifying industry best practices as new talent is identified, staffed, and trained.

In the state of California, there are 3,645 public agencies of all types that are active self-insurers who serve over 2 million California workers. Self-insured program compliance in the state, such as workers' compensation, falls under the purview of the California Department of Industrial Relations, and that compliance function is managed through the Office of Self-Insured Programs (DIR-OSIP). The state charges an annual fee to these self-insured agencies in order to recover the overhead associated with these compliance functions. Additionally, with an estimated $124 billion in self-insured payroll, $8.5 billion in estimated claims reserves, and disbursements in excess of $2.3 billion in annual medical and indemnity payments through workers' compensation programs, the fiduciary responsibility of risk management professionals in this public space is paramount to public administration practice (California Department of Industrial Relations [DIR], 2020).

Within this statewide self-insured population in California, there are 58 counties, 482 cities, and nearly 3,400 special local government districts, of which, 977 of those are school districts (California State Controller's Office [SCO], 2020). Conducting a research study with such a large sample population would be exceedingly cumbersome and would require several years and many researchers to complete. Therefore, this research study's sample population is more narrowly focused and consists of only a segmented population of the 482 municipalities in the state. Because many of these cities spread their workers' compensation risk within self-insured pools, this municipal agency sample population is narrowed in scope to the 139 municipal agencies that are members of Public Risk Innovation, Solutions, and Management (PRISM)—a California joint powers authority created under the Joint Exercise of Powers Act (JPA, 2012). PRISM is formerly known in the public agency risk management discipline as the California State Association of Counties (CSAC) Excess Insurance Authority (EIA). The JPA was recently renamed to PRISM effective July 1, 2020.

Resting within the entire state of California, this research sample population represents 29% of the municipalities in the state. Moreover, regardless of the size of the city by population, not all of these entities are what are known as full-service agencies. In particular, many of these municipal agencies contract out for various service deliveries, either through the county in which they are geographically located or through a public-private partnership. Additionally, many of these agencies do not employ a dedicated risk management professional in their respective organizations with the risk management function often assigned to, or performed by, another manager in a different professional discipline. Given this sample population landscape, it was imperative to

compare and contrast the same key risk indicators (KRIs) regardless of the population size of each city in the sample population.

In answering this study's overarching research questions and to ensure the credibility, validity, and reliability of this research, the study's sample population was limited to only those full service municipalities within this segmented sample population of the 139 cities in the PRISM joint powers authority. Therefore, the sample population for this research study is narrowed in scope to only those California municipal risk management professionals who are employed in cities that have full-service functions to include stand-alone public safety delivery and other service delivery functions such as power distribution, water and sewer services, and municipal airports. The study participants, sample size, instrumentation, and measurements of this mixed methodology are further detailed in Chapter 3.

The results of this study will be particularly beneficial to public agency executives in making risk management organizational placement decisions and as a research-based best practices study for various professional associations such as the Public Agency Risk Management Association (PARMA), the California Association of Joint Powers Authorities (CAJPA), the League of California Cities (LOCC), the International City/County Management Association (ICMA), and other California Workers' Compensation Risk Pools (WCRPs). Lastly, this study will contribute to the body of scholarly research and fill a gap missing in exigent literature in this field and, therefore, contribute to scholarly discourse in the public agency risk management profession.

## Statement of the Research Problem

Recent industry studies illustrate that an exodus of public agency risk management talent will occur in the next 5 to 6 years leaving an experience gap that will have negative fiscal impacts upon workers' compensation program delivery in municipal agencies in California (Jacobson, 2019). As mandated financial transparency increases, the solvency of California's 482 cities continues to deteriorate. Regulations by the state of California and the Governmental Accounting Standards Board (GASB) require municipal audited financial statements to include adequate reserves for workers' compensation liabilities, property and casualty liabilities, pension liabilities, and retiree medical liabilities. With the addition of these various costs of risk, more cities are seeing their unrestricted net positions (UNPs) dip further into the red and negatively impacting the ability to deliver municipal services to residents because of the rising liability costs of all types. The strategic organizational placement of the risk management function in California municipalities can positively or negatively impact municipal finances. This research focuses on the impact to workers' compensation liabilities and the contribution of the risk management function upon program delivery dependent on where that function is organizationally positioned.

## Purpose Statement

In examining the impact and contribution of the risk management profession, this study focused on the organizational placement of the risk management function in California municipalities and compared that placement to agency efficacy in workers' compensation program delivery. The specific aim of the study was to analyze, correlate, and identify risk management best practices for efficient and effective outcomes for

workers' compensation program delivery by practitioners in various municipalities (Dean, 2011). An expected outcome from this pragmatic, mixed methodology research, seeks to produce best practice outcomes that will inform and advise C-suite executive leadership, governing bodies, and workers' compensation risk pools in California in making the most effective placement of risk management professionals within their organization. In particular, Algire's (2014, 2015, 2016, 2017, 2018, 2019, 2020; Gillen-Algire, 2013) *Workers' Compensation Benchmarking Study* and the industry research contributions of Collie et al. (2019), Dunning et al. (2008), and Giles et al. (2019, 2020) all support further study in the area of risk management placement in California municipalities.

Municipal actuarial reports (MARs), comprehensive annual financial reports (CAFRs), and workers' compensation loss runs (WCLRs) reveal that the risk management assignment decision impacts the delivery of these services. Workers' compensation program costs can have a negative financial impact upon a municipal agency's general fund expenditures in any given fiscal year. The degree of program impact depends largely on which department the risk management function is assigned to, whether that is within the human resources, finance, city attorney, or city manager departments. This research study sought to identify those best practices to achieve more efficient and effective workers' compensation program delivery in order to contribute to the financial viability of California cities.

## Research Questions

The specific purpose of this study was to analyze, correlate, and identify risk management best practices for efficient and effective outcomes for workers'

compensation program delivery by practitioners in various municipalities (Dean, 2011). An expected outcome from this research was to produce risk management best practice outcomes to identify those elements of professional competence that will inform and advise executive leadership, governing bodies, and workers' compensation risk pools in California in making the most effective placement of risk management professionals within their organization. Therefore, following are the overarching research questions for this study topic:

Research Question 1 (RQ1). How does the organizational placement of the risk management function in the finance department impact the finances of a municipal agency?

Research Question 2 (RQ2). How does the organizational placement of the risk management function in the human resources department impact the claim closure ratio of a municipal agency?

Research Question 3 (RQ3). What are the management factors that contribute to these outcomes of workers' compensation program administration in a municipal agency?

These overarching research questions presented in this chapter are further characterized by the emergence of questions during the course of data collection and analysis and discussed further in Chapter 3.

## Significance of the Problem

Literature and previous research identify the conceptual basis for the stated problem in that length of experience, depth of training, and departmental assignment of agency risk management professionals causes a wide disparity in the efficacy of containing workers' compensation program costs for California municipalities (Algire,

2014, 2015, 2016, 2017, 2018, 2019, 2020). Grounded in cost-benefit analysis theory (Nas, 2016; Moore, 1995, 2013; Sandmo, 2011) and classical management theory (Fayol, 1949; Taylor, 1911/2014; Weber, 1958), this research study sought to compare, contrast, and correlate risk management best practices for efficient and effective outcomes for workers' compensation program delivery by practitioners in various municipalities.

The body of literature supports the need for further study on this topic as there is a gap in the research related to the impact to municipalities and the organizational placement of the risk management function, particularly in public agencies. An expected outcome from this pragmatic, mixed methodology sought to produce outcomes that will assist with filling this research gap and inform and advise executive leadership, governing bodies, and workers' compensation risk pools in California in making the most effective placement of risk management professionals within their organizations (Creswell & Creswell, 2018).

## Definitions

This section of the introduction chapter defines terms used in the study that are not commonly known and includes acronyms where appropriate.

**Actuary.** An actuary is a business professional who deals with the measurement and management of risk and uncertainty. The name of the corresponding field is actuarial science. These risks can affect both sides of the balance sheet and require asset management, liability management, and valuation skills.

**Actuarial Report.** The actuarial report is the product of an actuary's study of an organization's loss experience based on frequency and severity of claims using probability theory and other methods of statistical analysis.

**Actuarial Study.** Actuarial science is a discipline that assesses financial risks in the insurance and finance fields, using mathematical and statistical methods. Actuarial science applies the mathematics of probability and statistics to define, analyze, and solve the financial implications of uncertain future events.

**Administrative Science Theory.** A theory given by Henri Fayol (1949), who believed that more emphasis should be laid on organizational management and the human and behavioral factors in the management. The administrative theory follows the top-down approach while the scientific management theory follows the bottom-up approach.

**Associate in Insurance Services (AIS).** A risk management professional designation awarded by the Insurance Institute of America upon successful completion of four national examinations.

**Associate in Loss Control Management (ALCM).** A risk management professional designation awarded by the Insurance Institute of American upon successful completion of five national examinations.

**Associate in Risk Management (ARM).** A nationally recognized education and certification program for dedicated risk management professionals developed by the Insurance Institute of America.

**Association of Governmental Risk Pools (AGRIP).** A national organization of joint powers authorities and public agency risk pools formed for education, information gathering, and political lobbying purposes on behalf of members.

**Audited Financial Statements.** A financial statement audit is the examination of an entity's financial statements and accompanying disclosures by an independent auditor.

The result of this examination is a report by the auditor, attesting to the fairness of presentation of the financial statements and related disclosures.

**Budget.** A self-correcting chart of accounts that includes a beginning balance plus revenues minus expenditures resulting in an ending balance.

**Bureaucracy.** Bureaucracy refers to both a body of nonelected government officials and an administrative policy-making group. Historically, a bureaucracy was a government administration managed by departments staffed with nonelected officials.

**Bureaucratic Management Theory.** A theory attributed to Max Weber (1958) that proposes that an ideally run organization consists of a group of people organized into a hierarchical structure and governed by rational-legal decision-making rules.

**California Association of Joint Powers Authorities (CAJPA).** The California Association of Joint Powers Authorities (CAJPA) was formed in 1981. The pooling concept for insurance purposes was relatively new and fairly obscure. JPAs ventured alone in unchartered waters as they wrestled new and perplexing problems. CAJPA was formed to meet the need for communication and cooperation among the newly formed JPAs. Its founders structured an association that serves as an information and educational network; one that has grown to also promote unique insurance and risk management concepts and services for its members.

**California Government Code (GC).** The California Codes are 29 legal codes enacted by the California State Legislature, which together form the general statutory law of California. The official codes are maintained by the California Office of Legislative Counsel for the Legislature.

**California Labor Code (LC).** The California Labor Code (LC), more formally known as "the Labor Code," is a collection of civil law statutes for the State of California. The code is made up of statutes that govern the general obligations and rights of persons within the jurisdiction of the State of California, including workers' compensation statutes.

**Claim Closure Ratio.** A claims adjuster calculation that divides the number of closed claims by the number of claims opened in a fixed period of time (e.g., 1 year). A claim ratio less than 100% means claim inventory is growing; a claim ratio greater than 100% means claim inventory is declining.

**Claim Frequency.** Frequency refers to the number of claims an insurer anticipates will occur over a given period of time (e.g., 1 year).

**Claim Severity.** Severity refers to the cost of a claim. A high-severity claim is more expensive than an average claim, and a low-severity claim is less expensive than the average claim. Average costs of claims are estimated based on historical data, while actual severity of claims is an historical cost of claims over a given period of time (e.g., 1 year).

**Classical Management Theory.** A theory, or set of subtheories, based on the belief that workers only have physical and economic needs. It does not take into account social needs or job satisfaction, but instead advocates a specialization of labor, centralized leadership and decision-making, and profit maximization. The founders of classical management theory include Max Weber (1958) , Frederick Taylor (1911/2014), and Henri Fayol (1949).

**Comprehensive Annual Financial Report (CAFR).** A Comprehensive Annual Financial Report (CAFR) is a set of U.S. government financial statements comprising the financial report of a state, municipal, or other governmental entity that complies with the accounting requirements promulgated by the Governmental Accounting Standards Board.

**Compromise and Release Settlement (C&R).** A legal and permanent settlement, which usually permanently closes all aspects of a workers' compensation claim file.

**Confidence Level.** In the insurance industry, confidence levels are developed by actuaries to determine the probability that funding will be sufficient over a fixed period of time in the future based upon historical loss development. For example, an 80% confidence level indicates that the funding rate identified with this should be adequate in 8 out of 10 years. The Government Accounting Standards Board (GASB) requires public agencies to reserve liabilities at an actuarially determined confidence level.

**Cost-Benefit Analysis Theory (CBAT).** Cost–benefit analysis, sometimes also called benefit–cost analysis or benefit costs analysis, is a systematic approach to estimating the strengths and weaknesses of alternatives used to determine options which provide the best approach to achieving benefits while preserving savings.

**Exclusive Remedy.** Exclusive remedy is a workers' comp provision that prohibits injured employees from suing their employer if they are receiving workers' comp benefits.

**Financial Transparency.** Financial transparency means making information as accessible as possible to the public and includes the timely, meaningful, and reliable disclosures about an agency's fiscal performance.

**Future Medical Care (FMC).** Future medical care (FMC) benefits are an injured worker's right to receive ongoing medical treatment after a workers' compensation injury claim has been approved. Because treatment for a long-term injury is expensive, future medical care is one of the most important benefits provided by workers' compensation insurance.

**Generally Accepted Accounting Principles (GAAP).** The generally accepted accounting principles (GAAP) is a combination of authoritative standards set by policy boards and the commonly accepted ways of recording and reporting accounting information. GAAP aims to improve the clarity, consistency, and comparability of the communication of financial information.

**Government Accounting Standards Board (GASB).** The Governmental Accounting Standards Board (GASB) is the source of generally accepted accounting principles (GAAP) used by state and local governments in the United States. As with most of the entities involved in creating GAAP in the United States, it is a private, nongovernmental organization.

**Industrial Injury.** An industrial injury is any incident that individuals face resulting in their suffering from a medical condition or need for medical treatment due to any exposure or incident at work.

**Insurance Captive.** Captive insurance is an alternative to self-insurance in which a parent group or groups create a licensed insurance corporation to provide coverage for itself and group members.

**International City/County Management Association (ICMA).** Officially formed in 1914, the International City/County Management Association, or ICMA as it is

commonly known, is the world's leading association of professional city and county managers and other employees who serve local governments.

**Joint Powers Authority (JPA).** Joint Powers Authorities (JPAs) are legally created entities that allow two or more public agencies to jointly exercise common powers under the California Constitution. The Joint Exercise of Powers Act, as codified in California Government Code section 6500, governs JPAs. Under the Act, JPAs are restricted to use by public agencies only.

**League of California Cities (LOCC).** The League of California Cities is an association of California city officials who work together to enhance their knowledge and skills, exchange information, and combine resources so that they may influence policy decisions that affect cities.

**Lost Time.** Lost time is an industry term used when work-related injuries and illnesses result in *Days Away and Restricted and Transferred* days (DART) and are entered and counted on an agency's OSHA 300 Log. These are the total number of days that an employee is away from work not performing the essential duties of their job classification.

**Northern California Cities Self Insurance Fund (NCCSIF).** The Northern California Cities Self Insurance Fund, or NCCSIF, is an association of municipalities joined to protect member resources by stabilizing risk costs in a reliable, economical and beneficial manner while providing members with broad coverage and quality services in risk management and claims management. NCCSIF is a joint powers authority under the California Government Code.

**Nurse Case Management (NCM).** Nurse case management (NCM) is a collaborative process of assessment, planning, facilitation, care coordination, evaluation and advocacy for options and services to meet an individual's and family's comprehensive health needs through communication and available resources to promote quality cost-effective treatment outcomes.

**Pareto Efficiency.** Pareto efficiency is an economic situation that cannot be modified so as to make any one individual or preference criterion better off without making at least one individual or preference criterion worse off.

**Pareto Improvement.** A Pareto improvement is an improvement to a system when a change in allocation of goods harms no one and benefits at least one person. Pareto improvement is not considered an ideal method to measure improvements because it does not ensure equitable distribution of resources.

**Pharmacy Benefit Management (PBM).** In the United States, pharmacy benefit management is typically a third-party administrator of prescription drug programs for commercial health plans, self-insured employer plans, Medicare Part D plans, the Federal Employees Health Benefits Program, and state government employee plans.

**Public Agency Risk Management Association (PARMA).** The Public Agency Risk Management Association was founded in 1974 by a group of eight risk managers. PARMA was the first organization of its kind and was formed to provide a forum for California public sector risk managers to share ideas on how to perform their duties in this emerging field. The association promotes, develops, and facilitates education and leadership in risk management.

**Redwood Empire Municipal Insurance Fund (REMIF).** Redwood Empire Municipal Insurance Fund (REMIF) is a self-insured joint powers authority established in 1976 to handle the insurance claims, benefit programs, and risk management needs of 15 member cities. The cities are located in the five Northwest counties of the state and REMIF headquarters is located in Sonoma, California.

**Reinsurance**. Reinsurance is insurance that an insurance company or self-insured employer purchases from another insurance company to insulate itself from the risk of a major claims event. With reinsurance, the company passes on some part of its own insurance liabilities to the other insurance company.

**Risk Financing.** In business economics, risk financing is concerned with providing funds to cover the financial effect of unexpected losses experienced by an entity. Traditional forms of finance include risk transfer, funded retention by way of reserves, and risk pooling. Nontraditional risk financing includes insurance captives.

**Risk Management.** Risk management is the identification, evaluation, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability or impact of unfortunate events or to maximize the realization of opportunities.

**Risk Pooling.** A risk pool is one of the forms of risk management mostly practiced by insurance companies in the private sector and various agencies in the public sector. Under this system, entities come together to form a pool that can provide protection against catastrophic risks such as floods or earthquakes, property and liability claims, workers' compensation benefits, health care benefits, and pension benefits.

**Scientific Management Theory.** A theory of management that analyzes and synthesizes workflows. Its main objective is improving economic efficiency, especially labor productivity. Scientific management is sometimes known as Taylorism after its founder, Frederick Winslow Taylor (1911/2014).

**Small Cities Organized Risk Effort (SCORE).** Small Cities Organized Risk Effort (SCORE) is an association of 18 California municipalities to protect member resources by stabilizing risk costs in a reliable, economical and beneficial manner while providing members with broad coverage and quality services in risk management and claims management. First formed in July of 1986, SCORE was created as a cooperative agreement between smaller rural Northern California cities to cost-effectively share risk.

**Self-Insured Retention (SIR).** A self-insured retention (SIR) is a dollar amount specified in a liability insurance policy that must be paid by the insured before the insurance policy will respond to a loss.

**Severity of Claims.** Severity refers to the costs of a claim. A high-severity claim is more expensive than an average claim and a low-severity claim is less expensive than an average claim.

**Stipulated Award (STIPS).** A stipulated award in workers' compensation does not give the injured worker a lump sum as a final settlement; instead, an agreement is reached for periodic permanent disability benefits (paid every 2 weeks) and future medical care (FMC).

**Temporary Total Disability (TTD).** Temporary total disability (TTD) is one of the types of benefits that injured employees may be eligible for under the state of

California's workers' compensation laws. With this benefit, a portion of an injured worker's salary is paid during the time that an employee cannot work due to their injury.

**Third Party Administrator (TPA).** A third-party administrator is an organization that processes insurance claims or certain aspects of employee benefit plans for a separate entity. Most typically, the TPA relationship is between a private sector entity performing a service for a public sector entity. It is also a term used to define organizations within the insurance industry which administer other services such as underwriting, customer service, and claims administration.

**Total Permanent Disability (PD).** Total permanent disability (TPD) is a phrase used in the insurance industry and in law. Generally speaking, it means that because of a sickness or injury, a person is unable to work in their own or any occupation for which they are suited by training, education, or experience.

**Unaudited Financial Statements.** An unaudited financial statement is one that you have not subjected to an independent verification and review process. Your financial statements remain unaudited until they are scrutinized and approved by a certified external auditor.

**Unrestricted Net Position (UNP).** The unrestricted net position (UNP) is the residual amount of the net position not included in the net investment in capital assets or the restricted net position.

**Utilization Review (UR).** Utilization review (UR) is the use of managed care techniques such as prior authorization that allow payers, particularly health insurance companies to manage the cost of health care benefits by assessing its appropriateness before it is provided using evidence-based criteria or guidelines.

**Workers' Compensation Liabilities.** When an employee experiences a work-related injury or illness, workers' compensation insurance will typically pay for the employee's medical bills, temporary and partial lost wages, permanent and partial lost wages, and employer's legal expenses that can include attorney's fees, court costs, claim settlements, and judgements. The collective total of these expenses is referred to as workers' compensation liabilities.

**Workers' Compensation Loss Run (WCLR).** A workers' compensation loss run—or "Loss Run" is an insurance term referring to an employer's official workers' compensation claims report. This loss run report is obtained from all the employer's workers' compensation insurance carriers that have insured the employer over a defined period of time, typically the last 3 years. Insurance carriers are legally required to give the employer their Loss Run Report.

**Workers' Compensation.** A defined statutory benefit program to all public and private sector workers that include payment of temporary and permanent disability, medical treatment benefits, life pension payments, and Medicare set aside payments for workers over the age of 60. Workers' compensation is an exclusive remedy under the law in the state of California.

**Yolo County Public Agency Risk Management Insurance Authority (YCPARMIA).** The Yolo County Public Agency Risk Management Insurance Authority (YCPARMIA) is a special district agency formed through an exercise of joint powers by participating members. SCORE provides non-profit risk management, insurance, and safety services to their members within Yolo County.

## Organization of the Study

This study is organized as a convergent mixed methods design to integrate and interpret overall efficacy of data related to workers' compensation program delivery based upon where the risk management function is placed in the organization (Creswell & Creswell, 2018). A sample selection from the 139 municipalities within the segmented California JPA will require two key distinctions to be made: the size of the city determined by population and selection of only those cities that have their own public safety employees (law enforcement and fire services). These two factors are critical to the analysis to properly compare data. Secondly, many cities contract public safety with the county in which the city resides. Therefore, a research design must compare like municipalities by population and public safety delivery. This method enhances validity in addressing the overarching research question because the quantitative data analytics of workers' compensation is standard throughout the risk management profession and is used as a key financial measurement. The qualitative portion of the design probes municipal risk managers regarding organizational placement of their roles in the agency as well as other factors germane to program delivery. The analysis seeks to examine selected risk manager participants in the foregoing comparable municipalities.

## Chapter Conclusion

This chapter articulated and identified a gap in existing literature and propounds research related to the organizational placement of the risk management function in California municipalities and the subsequent impact to workers' compensation program administration. In that regard, this research study seeks to fill that research gap by conducting research in this area and drawing conclusions based upon that scholarly

research. While a plethora of literature exists within the workers' compensation discipline on the macro scale, there is an absence of literature and research that specifically narrows the focus for the public agency practitioner which the overarching research questions seek to achieve. The next chapter clarifies the foundational and seminal literature in this area and also specifically addresses literature with respect to cost-benefit analysis theory and classical management theory in this public administration research area.

# CHAPTER 2: REVIEW OF THE LITERATURE

Literature and previous research identify the conceptual basis for the stated problem in the municipal risk management industry. There is a plethora of scholarly literature that propounds the technical aspects of workers' compensation claims administration (Algire, 2014, 2015, 2016, 2017, 2018, 2019, 2020; Butler, 2009; Collie et al., 2019; Paduda, 2019). However, this same research has identified a gap, or a missing link, in scholarly discourse, specifically as it relates to the organizational placement of the risk management function in municipalities and its impact on delivering an efficient and effective workers' compensation program. There are tangential references in some literature, but the specific scope, purpose, and problem identified are not addressed in the literature. Rather than a chronological style review, in framing the literature for this study, the works cited in this section are presented topically to support the research topic and the foundational theories of the study.

## History of Workers' Compensation in California

Workers' compensation programs in California were an outcome of the Progressive Era, when reformers responded to both labor and employer concerns about high rates of work-related injuries, insufficient compensation to injured workers, and continuing employer uncertainty about how to predict the costs related to these injuries (Stern et al., 1997). California's workers' compensation system was established in 1911 with the passage of the Roseberry Act, which established a voluntary participation system between employee and employer. Subsequent to this act, additional legislation was passed in 1913 and 1917 respectively, with each piece of subsequent legislation redefining the duty and obligation of the employer to provide benefits to employees

injured on the job. Between 1911 and 1917, the workers' compensation system went from being a voluntary benefit, to a compulsory benefit, and then was solidified in the California Labor Code as a statutory benefit. Each of these pieces of legislation is briefly outlined in this historical background section because they have a substantial connection to this research topic.

**Roseberry Act, 1911**

In 1911, the California legislature enacted what was called the Roseberry Act. This act established a voluntary system of workers' compensation. The liability of a participating employer for employee accidents was no longer governed by common law tort doctrines. Rather, the act imposed limited liability for compensation without regard to negligence for injuries accidentally sustained by an employee while performing service growing out of and incidental to his or her employment. However, the employer was not liable for compensation if the injury was caused by the employee's own willful misconduct. Where the injury resulted from the employer's personal gross negligence, willful misconduct, or violation of any statute designed for the protection of the employee from bodily injury, the injured employee was permitted to choose between statutory compensation and a common law action for damages. Under this voluntary plan, compensation was available without regard to negligence of either the employer or the employee but was still denied to an employee whose injury was caused by the employee's willful misconduct. The injured employee was awarded for his or her loss based upon set monetary recoveries, and the employee could not recover full damages.

**Boynton Act, 1913**

In response to employers who had chosen coverage under the voluntary plan established by the Roseberry Act, in 1913, the California legislature enacted a compulsory scheme of workers' compensation for all industrial accidents which became effective January 1, 1914. Officially titled the Workmen's Compensation Insurance and Safety Act, the new act became popularly known as the Boynton Act (1913) and also created the State Compensation Insurance Fund. Aside from changing workers' compensation from a voluntary to a compulsory system, the act strengthened the powers of the California Industrial Accident Commission (1915), which was a state agency established to administer the program and extended greater control over workers' compensation insurers. It also gave the commission power to prescribe safety regulations. The Boynton Act carried forward the provisions of the Roseberry Act, imposing liability for compensation without regard to negligence. An employee injured by his or her own willful misconduct was still denied compensation. Similar to the Roseberry Act, an employee was permitted to choose a civil damage action rather than statutory compensation benefits if his or her injuries were caused by the employer's gross negligence or willful misconduct indicating a willful disregard of the life, limb, or bodily safety of employees or if the employer was uninsured. The most important aspect of this new act was that it removed jurisdiction over industrial accidents, except for the situations noted above from the civil court system and placed such jurisdiction exclusively with the Industrial Accident Commission (Stern et al., 1997).

### 1917 Workman's Compensation Insurance and Safety Act

In 1917, the legislature substantially revised the existing law to meet problems that had arisen under the Boynton Act. The revised Workmen's Compensation Insurance and Safety Act of 1917 represented the full evolution of the workers' compensation system and became effective January 1, 1918. Once again liability for compensation was imposed on employers without regard to negligence. Under this new act, civil court actions against employers were eliminated even in cases of the employer's gross negligence. In the same month that the 1917 act was approved, the California legislature, by joint resolution, recommended to the voters an amendment to California Constitution, Article XX, Section 21. On November 5, 1918, the amendment was approved by the voters of California. Since 1918, while there have been many amendments to the workers' compensation law, the evolution of the system from voluntary to compulsory to statutory was complete and workers' compensation became an exclusive remedy under the California Constitution (Stern et al., 1997).

With this historical foundation and evolution of workers' compensation as a statutory benefit and an exclusive remedy under the law for employees injured on the job, the next section of the historical literature review examines the theoretical foundations of this research topic.

## Theoretical Foundations

### Cost-Benefits Analysis Theory (CBAT)

One of two foundational theories of this research study is the cost-benefit analysis (CBA) theory (T), or CBAT. The pioneering founder of CBAT was French engineer and economist Jules Dupuis when he first analyzed the social profitability of a project like the

construction of a road or bridge (Sandmo, 2011). As this theoretical concept developed and gained ground in scholarly discourse, the Corps of Engineers initiated the use of CBAT in the United States after the passage of the Federal Navigation Act of 1936, which mandated CBA for proposed federal waterway infrastructure. Additionally, the Flood Control Act of 1939 was instrumental in establishing CBA as federal policy, requiring that "the benefits to whomever they accrue be in excess of the estimated costs" (Guess & Farnham, 2000, pp. 304-308). Since that time period, CBAT has been used to rebuild the U.S. economy coming out of World War II and has been used by several subsequent presidential administrations to examine, effect, and implement public policy. The foundational CBAT applications of these past federal laws remain relevant in today's use of CBAT, the theoretical application by the public agency practitioner, and in reviewing public policies, programs, and processes through welfare economics and public finance.

**Classical Management Theory (CMT)**

The second of two foundational theories of this study is related to classical management theory. Classical management theory (CMT) is attributed to Max Weber (1958), Frederick Taylor (1911/2014), and Henri Fayol (1949). The overlying management theories of these classical theorists have broad differences in terms of organizational focus and approach, but they also have distinctive and complimentary goals. Combined, these three management theories came together to form what scholars generally refer to as classical management theory (Lyon, 2017). Each of these is briefly examined in the following paragraphs.

### *Bureaucratic Management Theory*

Max Weber's (1958) bureaucratic theory is defined as a system for controlling or managing a country, company, or organization that is operated by a large number of officials employed to follow the rules carefully. At the heart of Weber's bureaucratic theory are two legal and rational foundations. The first foundation, legal-rational authority, means that authority resides within the position and not the person. The second foundation, rational-legal decision-making rules, means that organizations should be governed by rules (Weber, 1958).

### *Scientific Management Theory*

Frederick Taylor's (1911/2014) theory takes a more narrow approach than Weber's (1958). Taylorism, as this theory is also known, propounds an approach to management where time and motion studies of people and processes are analyzed to achieve the one right way to perform a task that is most efficient and effective (Taylor, 1911/2014). Taylorism led to productivity increases, meaning fewer workers or working hours were needed to produce the same amount of goods or services outputted. It could be argued that Taylorism gave rise to the modern use of the term *process improvement*. This theory states that if a process can be measured, it can be improved upon to achieve the desired level of efficiency and effectiveness (W. Wilson, 1887).

### *Administrative Science Theory*

In comparison to Weber (1958) and Taylor (1911/2014), Henri Fayol (1949) approached management through a midlevel, macro lens. While Taylor (1911/2014) favored a scientific approach and Weber (1958) favored a legal-rational authority approach, Fayol (1949) sought to theorize a more systematic principle within an

organization, particularly as it applied to the training of managers. Fayol propounded that all management must be able to plan, organize, command, coordinate, and control general activities to achieve compliance and desired efficient and effective outcomes.

### *Complimentary Theories*

The common, overlapping elements of Weber (1958), Taylor (1911/2014), and Fayol (1949) have some striking similarities. Each theorist advocated that an organization must have the following: a defined hierarchy, a division of labor, standardized approaches, centralized management authority, a separation of personal and work life of employees, and a desire to select the best employees for specified tasks, and they even wanted employees to be paid fairly for the work performed, in particular, Fayol (Lyon, 2017). Combined, these three theories formed the basis for the classical management theory and all gave rise to more modern theory that include change management, total quality management, systems management, and operations management.

## Theory Nexus in Practice

CBAT is grounded in the principles of welfare economics and public finance, which analyze which costs and benefits are identified and assessed from society's perspective. The field of public finance justifies government's involvement in the economy and its influence upon the private sector (Nas, 2016). Government uses taxes and borrowing and employs these funds to implement public policy by delivering a variety of public services and goods. In this manner, CBAT is a relevant theoretical construct that applies critical methods to analyze public policy and its efficacy. CBA is a methodology that provides guidance for resource allocation that best suits society's

efficiency and equity objectives which are seminal in modern public administration (W. Wilson, 1887). As with other connections mentioned, there is a strong nexus of CBAT to Mark H. Moore's classic concepts of creating public value (1995) and recognizing public value (2013).

Intertwined with CBAT is the CMT of Weber (1958), Taylor (1911/2014), and Fayol (1949). In the modern-day realm of municipal administration, practitioners must be concerned with delivering the most efficient and effective municipal services with ever challenging and austere fiscal resources and often with conflicting priorities. Therefore, public agency practitioners must be able to plan, organize, command, coordinate, and control activities to achieve the desired efficient and effective outcomes for the stakeholders they are charged with serving (Fayol, 1949). Therefore, the nexus of CBAT and CMT foundations and their impacts to municipal service delivery strike at the heart of Woodrow Wilson's (1887) *The Study of Administration*, particularly where efficiency and effectiveness are of utmost concern to the public agency practitioner.

As articulated in Chapter 1, Jacobson (2019) sounded the alarm regarding an exodus of risk management talent; however, this is not a new revelation. Scott Lazenby (2009) expounded upon the retirement of the baby boomer generation after a 30-year career in municipal administration in a dissertation entitled *City Management Theory and Practice: A Foundation for Education the Next Generation of Local Government Administrators*. Lazenby stated that "while the first baby boomers are only now reaching retirement age, the exodus of these individuals from local government is already being experienced" and their replacements "will need to be trained and educated to step into local government senior leadership positions" (p. 2). The education and training of

employees, particularly risk management practitioners, speak to the need to identify best practices and performance indicators and speak to the convergence of these theoretical constructs in practice.

**Pareto Efficiency**

The basic principle underlying CBAT is the Kaldor-Hicks criterion, which states that a policy should be adopted or implemented if those who will gain could fully compensate losers and still be better off (Weimer & Vining, 2017). Such compensation is possible if the policy would produce positive net benefits. In other words, when efficiency is the only relevant goal, a necessary condition for adopting policy is that it offers positive net benefits and therefore has the potential to be Pareto improving and not merely efficient (Weimer & Vining, 2017). While Pareto efficiency concerns itself with the economic impacts of a public policy, it also has applicability within the construct of this research study in terms of organizational efficiency and effectiveness and managing a public agency program that delivers prudent fiscal benefit to internal and external agency stakeholders. Therefore, assuming accurate theoretical application of CBA, changing the status quo by implementing the alternative with the lowest cost–benefit ratio can improve Pareto efficiency.

The foregoing review presented the catalyst for this study, amplified the need to fill a void in the existing literature, connected the foundational theories of CBAT and CMT and their complimentary nexus to administrative practice in the public space, and reinforced the importance of adopting public policy that achieves the most Pareto-efficient outcomes in delivering services to all agency stakeholders. With an historical background of the research topic and foundational theories for this study presented, the

next section of the literature review examines additional literature related to this research field of study.

## Supporting Literature

### Seminal Literature

The seminal research that is prevalent in the risk management industry today, particularly in workers' compensation administration and claims management, involves a now 7-year annual research study commissioned by Rising Medical Solutions, Chicago, Illinois, and principal researcher and study report author Denise Zoe Gillen-Algire (2013; Algire, 2014, 2015, 2016, 2017, 2018, 2019, 2020). The title of this ongoing annual study is *Workers' Compensation Benchmarking Study* and presents 8 years of quantitative and qualitative data that focuses on the following specific areas:

- Workers' Compensation Benchmarking Study (Gillen-Algire, 2013)
- Claims Management Operational Study (Algire, 2014)
- Insights Report--Qualitative (Algire, 2015)
- Differentiators of High Performing Organizations (Algire, 2016)
- Qualifying 3-Year Progress, Expanding Claims Differentiators (Algire, 2017)
- Advancing Medical Performance Management—Qualitative (Algire, 2018)
- Comparing Claims Leader and Frontline Staff Perspectives (Algire, 2019)
- Claims Management Operational Study (Algire, 2020)

The impetus of this seminal body of research evolved from various conversations with industry executives about a gap in available research that focuses on how workers' compensation claims organizations are dealing with operational challenges. Recognizing the need for unbiased research, the study has been guided by a principal researcher and

more than a dozen industry executives who sit on the study's advisory council. However, while the *Workers' Compensation Benchmarking Study* (Algire, 2014, 2015, 2016, 2017, 2018, 2019, 2020; Gillen-Algire, 2013) addresses other critical areas of delivering this statutory benefit across multiple organizations and disciplines, the study does not address the efficacy of the organizational placement of the risk management function in municipalities. Moreover, the average governmental agency participation in this study over the last 8 years has only averaged 3% (Algire, 2014, 2015, 2016, 2017, 2018, 2019, 2020; Gillen-Algire, 2013).

For the public administration scholar-practitioner in the risk management profession, the *de minimis* considerations of public agencies within Algire's (Algire, 2014, 2015, 2016, 2017, 2018, 2019, 2020; Gillen-Algire, 2013) research is exactly what this research study sought to achieve by filling in the gap in a body of existing research. An overview of catalytic literature related to this research topic is presented next.

**Catalytic Literature**

Public agency risk management practitioners with experiences in municipalities, school districts, and county governments have articulated the disparities in organizational placement within the profession. In 2019 and 2020, the researcher, along with fellow risk management colleagues—Anthony Giles, General Manager, California Joint Powers Risk Management Authority (CJPRMA) and Steve Robles, Assistant County Executive Officer of Los Angeles County—delivered a breakout panel discussion at both the 2020 PARMA conference in Monterey and the 2019 California Association of Joint Powers Authorities (CAJPA) Litigation and Liability Sub-Committee in Sacramento, California (Giles et al., 2019, 2020). The title of the conference panel discussion was *Abstract*

*Expressions of Risk: The Art of the Org Chart* (Giles et al., 2019, 2020). The purpose of these presentations to industry peers was to advance the concepts of succession planning in the risk management profession as a vast body of experiential and institutional knowledge begins to transition into retirement and other professional endeavors.

In these panel sessions to professional associations, the presenters articulated the pros and cons of organizational placement of the risk management function in cities, school districts, special districts, and counties, and presented best practice strategies on how the agency risk professional can succeed no matter where the function is organizationally placed. Both presentations were well received by peer groups and have contributed to alleviating the concerns over losing experience in the risk profession over the current decade. This research study built upon those concepts and sought to quantitatively and qualitatively analyze the efficacy of workers' compensation program delivery based upon where the risk management function is organizationally placed.

**Efficiency in Program Delivery**

In an article written for the Rand Corporation, Christine Baker's (2012) *Improving Workers' Compensation Policies for Workers, Businesses and Government*, responds to the California Commission on Health and Safety and Workers' Compensation (CHSWC) adopted policies that are intended to control payments while improving program efficiency. Baker (2012) opined that after the CHSWC changes were implemented, average medical expenses decreased, but after 2005, the system experienced annual double-digit increases. This high rate of growth prompted concerns about whether further policy changes were needed to create better incentives for the efficient delivery of high-quality care under California's workers' compensation

program. California Governor Jerry Brown is quoted in this article stating that "we have the chance to make the Workers' Compensation System better—much better—for workers and cheaper for business" (Rand Social and Economic Well-Being, 2012, n.p.). Rand Social and Economic Well-Being (2012) researchers analyzed the available data and conducted interviews with myriad stakeholders in the workers' compensation medical-treatment system with two research questions in mind:

1. How did payment control reforms affect workers' compensation medical expenditures?
2. What changes could increase the quality and efficiency of care delivered under the workers' compensation system? ("Project Description," para. 5)

Rand Social and Economic Well-Being's (2012) findings and research study was directly applicable to the research outcomes presented in this study.

**Ethics in Program Delivery**

In a 2009 article entitled "Ethics of the Workplace Injury," Gordon Butler, writing for the Workers' Compensation Training Center, discusses workers' compensation injury management ethics that revolve around three concepts—time, money, and risk. This ethical discussion surrounds a workers' compensation system that includes a "princip[le] of right or good behavior, … moral principles or values, … ethics and the specific moral choices an individual makes in relating to others, … and the rules or standards of conduct governing the members of a profession" (Butler, 2009, para. 4). Butler propounded that these "four definitions used singly and incorporated together give [the risk management profession] a framework by which to judge the ethical behavior of a number of entities involved in the workplace injury scenario" (para. 4).

**Public Administration (PA) Pillars of Efficiency and Effectiveness**

In addition to Butler's (2009) ethical considerations, to examine the efficacy of PA concepts within the framework of this study, the dimensions of efficiency and effectiveness were scrutinized as part of this research. In complementing Butler's (2009) ethical positions, B. Wilson (2017) addressed the dimension of integrity, Paduda (2019) addressed the dimension of transparency, Rand (2012) addressed the dimension of efficiency, and Schnieder (2015) addressed the dimension of effectiveness.

In W. Wilson's (1887) *The Study of Administration*, he laid the theoretical foundation for all practitioners who serve the public space charged with responsibilities to the general public in delivering services related to government. The PA dimensions of efficiency and effectiveness must be achieved with integrity, ethical behaviors, and transparency in order to foster the public trust of the policy makers and administrators in delivery service expectations to the public. In support of the overarching research questions of this study, an important distinction to articulate at this point is that government can be effective, and often is. However, government is not always the most efficient, hence the discussion on Pareto efficiency and Pareto improving in the foregoing sections.

In Jim Collins's (2001, 2005, 2019) *Good to Great* trilogy, he speaks to the heart of efficiency and effectiveness in the business and social sectors and, in particular, as it relates to efficiency and effectiveness in public administration, the book *Good to Great in the Social Sectors: Why Business Thinking Is Not the Answer*. In this literature, Collins (2005) propounded the concept of the flywheel effect. The flywheel effect is a concept that holds no matter how dramatic the end result, good-to-great transformations never

happen all at once. In building a great social sector enterprise, there is "no single defining action, no grand program, no one killer innovation, no solitary lucky break, no miracle moment" (Collins, 2005, p. 14). Rather, the process resembles a collaborative effort that is relentlessly pushing a giant, heavy flywheel, turn upon turn, building momentum until a point of breakthrough is achieved and continues beyond that point over time (Collins, 2001, 2005, 2019). What Collins's concept illustrates in support of W. Wilson (1887) is that the flywheel of government moves slowly and that, while government—or the social sector—can be effective, the efficiency of PA takes time to achieve.

Therefore, all of these literary citings support and compliment this gap-filling research as this study examines the PA dimensions of efficiency and effectiveness through the PA lenses of integrity, transparency, and ethics (American Society of Public Administration [ASPA], 2013).

**Industry Talent Crisis**

Jacobson (2019) sounds the risk management talent alarm in an article entitled "Solving Talent Crisis in the Risk Profession" that appeared in the *Risk and Insurance Magazine*—an industry publication for professional risk managers. Citing a 2015 CompData Survey, the total turnover rate for the insurance industry is 12.2%. At 12.2%, that is below the 16.7% average for all sectors combined, but the insurance industry's rate of turnover has been on the rise since 2018. Industry leaders have warned of this impending exodus of talent in the insurance industry for several years as the insurance industry is facing a growing talent crisis.

An increasing turnover rate combined with a wave of retirements and fewer young people coming into the business is putting more pressure on insurers, third-party administrators, and governmental agencies to maintain a qualified workforce. While the millennial generation offers untapped available talent with employers who are willing to train new employees, there appears to be reluctance on the part of the millennial generation to enter the risk management profession. This article, and many others, as well as peer groups' discussions in the municipal risk management sector, were a catalyst for embarking upon this research topic. While there is not a gap in attrition research in this area overall, there is a gap in research that will impact the public agency risk management function at least at an equal rate or perhaps even more severe levels of attrition.

**Cost-Benefit Analysis in Practice**

Another literary piece in the form of a white paper entitled *Benefit-Cost Analysis and the Cities*, authored by Lisa Robinson (2015) at the Harvard University's Center for Risk Analysis, contributes to literature as it offers additional insight for CBA as it applies to cities across America and the implementation of public policy. This white paper is but one in a series of papers that addresses a call for regulatory reform for the 21st-century city, an initiative of the Ash Center for Democratic Governance and Innovation at the Harvard Kennedy School. Robinson reinforced the concept of CBA that weighing the pros and cons of different choices is a natural part of any decision-making process. By making this process more explicit, benefit-cost analysis provides significant advantages for policymakers as well as for those ultimately affected by their decisions. CBA develops the evidence needed to identify the policy option likely to provide the largest

net benefits to society, promotes understanding of the consequences of different choices, aids in predicting outcomes that might be otherwise unexpected, and fosters effective communication of the reasoning that underlies the decision. Robinson articulated an interesting point when she warned the practitioner against the cost of the analysis outweighing the cost of the benefit—a modern day connection to Shakespeare's (1599/1992) *Hamlet* where overthinking something outweighs the realistic expectation or potential value of success in a decision made in a timely manner.

With rising frequency in limited analytical resources, Robinson (2015) suggested that the ideal analysis will not assess all policy options nor quantify all policy impacts with equal precision. Conducting CBA requires subjecting the analysis itself to an information benefit-cost analysis or considers an informal valuation of the information being reviewed or studied. This white paper reinforced the theoretical framework as the foundational grounded theory of the research study.

**Creating and Recognizing Public Value**

Equally and ideally suited to cite in this literature review are the books authored by seminal public management scholar Mark H. Moore (1995, 2013)—*Creating Public Value* and *Recognizing Public Value*—both published by the Harvard University Press. In *Creating Public Value*, Moore (1995) presented his summation of 15 years of research, observation, and teaching about what public sector executives should do to improve the performance of public enterprises. Useful for both practicing public executives and those who mentor them, this book explicated several hundred cases used at Harvard's Kennedy School of Government and illuminated their broader lessons for government managers. In Moore's (2013) follow-up book *Recognizing Public Value*, he continued with a similar

public management case study format and expounded on concepts throughout the book that include examples of customer-oriented government, better performance management systems, total quality management for public agencies, and strategic management practices, and he propounded that recognizing public value is a key ingredient in creating public value. The book presents case studies of public agency executives who embraced and implemented these concepts. These two books contribute significantly to this research study because CBA, when employed properly, enables the public agency risk management practitioner to recognize the public value in the programs that are managed in order to create public value for internal and external agency stakeholders. The next section of the literature review briefly explores its foundation, its relevance today, and its connections to Pareto efficiency (Weimer & Vining, 2017).

**The CBAT Practitioner**

CBAT is a theoretical construct that examines a public policy decision in terms of its consequences or costs and benefits (Nas, 2016). The shadow price of a good measures the net impact on social welfare of a unit increase in the supply of that good by the public sector. In this regard, CBAT is closely aligned with the economic concept of Pareto efficiency (Weimer & Vining, 2017). For the public administration practitioner, CBA is often used in practical application by organizations to appraise the desirability of a given public policy, program, or process. It is an analysis of the expected balance of benefits and costs, including an account of any alternatives versus the status quo. CBA helps predict whether the benefits of a policy outweigh its costs, by how much, and relative to other alternatives (Boardman et al., 2011). Moreover, CBAT is often closely aligned with risk benefits analysis, which is grounded in probability theory. While those

concepts are examined and utilized in this research, particularly in the quantitative methodology of this research, the foundation of this study was grounded in CBAT in examining the overarching research questions.

## Literature Review Conclusion

The foregoing literature review is a brief glimpse into the plethora of research available in this field of study. The works cited in Chapter 2 drew connections between the research questions and theory, the theory to the literature, and the literature to the research questions.

In summary, an historical background of the evolution of workers' compensation in California gave rise to a review of the theoretical foundations of CBAT and CMT and provided the construct for the public administrator to place these theories into practice. In presenting these foundational theories, the literature supported the three overarching research questions with a nexus to PA practice and the PA dimensions of efficiency and effectiveness through the lenses of integrity, transparency, and ethics. Building on these concepts and operationalizing them, this chapter also presented the concept that, while government is often effective, it is also often not efficient and that overanalyzing the cost of a desired outcome can impede the end state of delivering a benefit sought. In that regard, this review also illustrated the desired PA outcomes of Pareto efficiency, Pareto improvement, recognizing public value, and creating public value, and how these concepts foster building trust in policy makers and administrators. Lastly, this literature review identified the impending exodus of risk management talent in the public agency space and provided the catalyst for conducting this research study.

Within the literature review and theoretical foundations of this study, there is a confluence of CBAT and CMT as it applies to this research. CBAT is a theoretical construct that propounds that public policy decisions are made in terms of the consequences and the cost benefits of implementing those decisions (Sandmo, 2011). CMT is a theoretical construction that recognizes that organizations operate from legitimate authority, that people and processes can be measured to improve efficiencies, and that management's ability to plan, organize, command, control, and coordinate activities of the organization are all relevant to achieving efficiency and effectiveness. While CMT has its origins in manufacturing, this research recognizes that human relations theory (HRT)—or behavioral management theory (BMT)—is a necessary and meaningful thread when combined with CBAT and CMT. Therefore, when HRT is also combined with CBAT and CMT, the potential to increase employee retention rates and productivity creates a culture wherein employees feel more valued by an organization because they invest in the greater good of the organization. In turn, from a practitioner standpoint, the measured cost-benefit outcomes will be embraced by employees through their contributions and the organization achieves a congruence of policy, operations, accountability, and efficiency and effectiveness.

While this research study anticipated that there are additional literary citings going forward in subsequent chapters, the literature presented in this chapter represents the core, seminal research exigent in this research area and was expounded upon as the research study progressed toward findings and conclusions. The literature presented was selected to demonstrate that there is a gap in research specifically related to the organizational placement of the risk management function in municipalities, and is,

therefore, worthy of further scholarly research and discourse. The methodology of this research study is framed and presented in Chapter 3.

# CHAPTER 3: METHODOLOGY

## Purpose Statement

The purpose of this chapter is to introduce the research methodology for this convergent mixed methods study examining the risk management best practices in California municipalities and the impacts of the organizational placement of the risk management function. The foundational theories of this study are cost-benefit analysis (CBA) theory (T)—or CBAT—and classical management theory (CMT) as described in the previous chapter. CBAT is a theoretical construct that examines a public policy decision in terms of its consequences or costs and benefits (Nas, 2016). CMT is a theoretical construct that is concerned with bureaucratic organization, scientific management, and administrative management. This convergent mixed methodology grounded in CBAT and CMT includes a qualitative component and a quantitative component to merge data, analyze data, and draw inductive conclusions. The applicability of CBAT, CMT, and a convergent mixed methods approach for this study are discussed in-depth in this chapter. The research plan, including methodology, study participants, procedures, analysis method, and ethical concerns with human respondents are also primary components of this chapter.

## Research Questions

To maintain focus and draw nexus to the overarching research questions, as previously stated in Chapter 1, the specific purpose of this study was to analyze, correlate, and identify risk management best practices for efficient and effective outcomes for workers' compensation program delivery by practitioners in various municipalities (Dean, 2011). An expected outcome from this research was to produce

these risk management best practices to identify those elements of professional competence that would inform and advise executive leadership, governing bodies, and workers' compensation risk pools in California in making the most effective placement of risk management professionals within their organization. To those ends, the overarching research questions for this research topic were:

Research Question 1 (RQ1). How does the organizational placement of the risk management function in the finance department impact the finances of a municipal agency?

Hypothesis 1 (H1). The risk management organizational placement in the finance department favorably impacts the workers' compensation cost of risk (WCOR) of a municipal agency.

Research Question 2 (RQ2). How does the organizational placement of the risk management function in the human resources department impact the claim closure ratio of a municipal agency?

Hypothesis 2 (H2). The risk management organizational placement in the human resources department favorably impacts the workers' compensation claim closure ratio (WCCR) of a municipal agency.

Research Question 3 (RQ3). What are the management factors that contribute to these outcomes of workers' compensation program administration in a municipal agency?

The specific predictive analysis of the quantitative methodology in answering RQ1 and RQ2 was linear regression analysis. Linear regression is a statistical procedure that uses a known relationship between variables to predict an unknown value of one of the variables. For this research study, the independent variables (Y) are the workers'

compensation cost of risk (WCOR) for RQ1 and the workers' compensation claim closure ratio (WCCR) for RQ2. The dependent variables (X) are the risk management organizational placement in the human resources, finance, city attorney, and city manager departments (four dependent variables). Upon completion of the quantitative research, these variables were entered into a database to develop a regression model to calculate *R* square, significance of *F*, coefficients, and *p*-values to interpret the data, whether the data are statistically significant or not, and analyze the direction of the coefficient variables. The analysis of variance (ANOVA) was used to reject the null hypothesis or fail to reject the null hypotheses. Dummy variables replaced the names of the departments in order to quantify the regression. Depending on the predicted outcomes of the linear regression, a multiple regression model to control for other observed characteristics to derive the unbiased impact of the dummy variables on the variable of interest (WCCR and WCOR) may have been required. If there were other factors that could also influence the WCCR independent variable or the WCOR independent variable, but were excluded from the linear regression model, the predicted outcome may have been biased upward or downward.

The specific qualitative methodology to answer the overarching research question was a research survey questionnaire of those incumbents who were responsible for workers' compensation program administration. The qualitative portion of this research study was conducted following the quantitative portion and assisted in identifying those management factors that impact the predictive outcomes of the quantitative portion of the study.

The mixed methodology outlined in this chapter sought to answer these overarching research questions in an effort to contribute to the risk management field of study and fill a void in the existing body of literature.

## Research Design

The convergent mixed methodology is a specific form of mixed methods design in which the researcher merges qualitative and quantitative data in order to provide a comprehensive analysis of the overarching research problem or question and drawing conclusions (Creswell & Creswell, 2018). In this specific type of research design, data can be collected at nearly the same time, which will contribute to combatting threats to internal validity due to maturity.

### Quantitative—Multiple Regression Analysis

Quantitative data in workers' compensation program administration is well defined, developed, and consistent across the sample population due to industry-specific standards of data analytics, regardless of the size or type of agency examined. For example, all public agencies, whether municipalities or not, calculate workers' compensation key risk indicators (KRIs) using industry-defined methods regardless of the type of organization, size of organization, or a predominance of traditional blue collar or white collar job classifications. These KRIs include injury frequency (number of claims) and severity (cost of claims), lost time days of employees, WCCRs, and total claim costs, which includes the cost of indemnity payments, medical payments, litigation costs, and other miscellaneous costs. A KRI data table was constructed for each sample agency as reflected in the data collection section of this chapter. The KRI data tables were used to calculate the WCOR. This calculation levels the measurement of the WCOR calculation

regardless of the size of an agency's general fund expenditures and enables the predictive analysis dependent upon organizational placement of the risk management function.

In addition to public agencies, private sector third-party administrators (TPAs), workers' compensation risk pools, and the state of California track, monitor, and analyze workers' compensation data in a standardized reporting format outlined by the state of California's Department of Industrial Relations, Office of Self-Insured Programs (DIR-OSIP). As a result of this standardization, maturity of quantitative data is mitigated because the data look backwards in time and are always valued on a fiscal year basis, typically July 1 to June 30 in any given fiscal year. The challenge to quantitative reliability rested with observer bias in this research study but was mitigated through qualitative study efforts. Therefore, it was opined that the reliability and validity of the quantitative data were enhanced for all the foregoing reasons.

**Qualitative—Research Survey Questionnaire**

The qualitative data gathering was conducted through a research survey questionnaire that provided opportunities to inductively ascertain management factors based upon where the risk management function was organizationally placed. As mentioned in Chapter 1, the risk management function is most typically placed in the city manager, city attorney, finance, or human resources departments. In addition to this organizational placement, other phenomenological information was gleaned, to include, but not be limited to, staff experience, staff education and certifications, bifurcation of traditional risk management practices (e.g., loss control and prevention, workers' compensation administration, and property and casualty management), philosophies related to budgeting in departments for workers' compensation, and the agency's overall

claims settlement philosophy. The qualitative portion of this mixed methodology tells the story of risk management best practices when merged with the quantitative data in order to help the public agency practitioner better understand the individual and organizational behavior aspects of the efficacy of delivering a workers' compensation program in California municipalities (Creswell, 2013). Through this mixed methodology of linear regression analysis and the research survey questionnaire, the placement of the risk management function was measured to assess the statistical significance of the WCOR and the WCCR to predict outcomes and formulate conclusions.

## Procedures

The procedures of this study compare the organizational placement of the risk management function in the sample population of full-service municipalities in California and evaluate the impacts of workers' compensation program costs upon municipal finance utilizing the WCOR and WCCR of the sample population. In comparing organizational placement, the dependent variables (X) were defined as the department in which the risk manager is placed. The independent variables (Y) were WCOR and the WCCR. Linear regression analysis was used to statistically predict the impact to the workers' compensation program based on which department the risk management function resides (Creswell & Creswell, 2018; Dean, 2011). The spatial characteristics of the sample population are discussed in the study participants section of this chapter.

### Timing

Given that this study was a convergent mixed methodology, timing was not a critical issue in gathering the necessary data for this study. The combined data collection through a qualitative research survey questionnaire and the quantitative method of linear

regression analysis provided the mechanism to merge results of the data to compare the efficacy of workers' compensation program delivery based upon which municipal department the risk management function was organizationally placed.

**Collection**

The qualitative data collection included a survey questionnaire of respondents to induce the phenomenological experience within respective agencies. It also included review and evaluation of agency-specific documents such as paid medical leave polices, long-term disability policies, and bargaining unit memoranda of understanding (MOU) to assess the interplay of these administrative policies on the quantitative data. The quantitative data collection included longitudinal data from municipal actuarial reports (MARs), comprehensive annual financial reports (CAFRs), and workers' compensation loss runs (WCLRs) for the last 5 fiscal years valued to June 30th of each year for the years 2016 to 2020. The merger of these combined results into the KRI data table for each agency provided the WCOR and WCCR data sets in conducting linear regression analysis. In this way, the qualitative data collection built directly upon the quantitative data in answering the overarching research questions.

**Limitations**

Even though the California Public Records Act (CPRA) enables citizens of California to obtain public information from municipalities, there may have been reluctance for respondents to participate in this research. However, confidentiality statements and permissions within the scope of the CPRA and the Institutional Review Board (IRB) mitigated this limitation. The limitation are more applicable to the qualitative data collection than the quantitative data collection as the quantitative

materials from which data were collected are already publicly reported. Another limitation included not being able to achieve an $N = 50$ sample size because of the manner in which cities deliver public safety. As previously mentioned, some cities provide these services in-house while others contract these services with the county agency where the city resides. Therefore, obtaining these data was time consuming in certain specific instances as research proceeded through the data collection phase of the study.

## Data Collection

This section describes in detail how data were collected and the instrumentation of this convergent mixed methodology design.

### *Quantitative Approach*

The quantitative approach for this research methodology was linear regression analysis that examined the statistical relationship of risk management placement upon the industry standard workers' compensation KRIs valued to June 30th of each fiscal year. The following KRI data table was populated for each research sample agency and the data tables were used to calculate the independent variables (Y), which included WCOR and the WCCR. The linear regression method provided the statistical prediction based on the two stated variables to answer RQ1 and RQ2. Figure 1 is a sample KRI data table that was used to populate the regression database:

**Figure 1**

*Sample Agency KRI Data Table*

| KRI | FY-15/16 | FY-16/17 | FY-17/18 | FY-18/19 | FY-19/20 |
|---|---|---|---|---|---|
| Injury Frequency | # | # | # | # | # |
| Lost Time Days | # | # | # | # | # |
| Claim Closure Ratio | % | % | % | % | % |
| Medical Claim Costs | $ | $ | $ | $ | $ |
| Indemnity Claim Costs | $ | $ | $ | $ | $ |
| Litigation Claim Costs | $ | $ | $ | $ | $ |
| Miscellaneous Claim Costs | $ | $ | $ | $ | $ |
| Total Claim Costs | $ | $ | $ | $ | $ |

Document review to extract these data included agency loss runs and actuarial report data provided by the PRISM joint powers authority. These documents were used to populate the KRI data tables, prepare the regression database, and calculate the linear regression to predict outcomes. These calculations leveled the impact of total program costs versus an agency's general fund expenditures and measured the impact of workers' compensation program administration upon municipal finance. The calculations to obtain the independent variables (Y) are provided as follows:

**Calculation of Workers' Compensation Cost of Risk (WCOR).** The calculation to arrive at this independent variable (Y) was expressed as a percentage:

WCOR = Total Claim Costs (TCC) ÷ General Fund Expenditures (GFE)

**Claim Closure Ratio (WCCR).** The calculation to arrive at this independent variable (Y) for this calculation was expressed as a percentage:

WCCR = (Number of Claims Closed ÷ Number of Total Open Claims) x 100

The linear regression analysis method predicts the relationship of risk management placement and the impact to municipal finances regardless of agency size by population. For the purposes of this research study, the WCCR calculation does not include other total program costs such as total compensation of the risk management function, TPA fees, and loss prevention costs. The linear regression analysis was complemented by the qualitative research data in a meaningful way that enhanced reliability and validity of the overall conclusions of the research study.

### *Qualitative Approach*

The qualitative research approach includes a survey of the sample size within the defined sample population. Follow-up interviews were not needed based upon the surveys captured. The survey portion compared and contrasted the phenomenological experiences of the risk management professional in their respective municipality to arrive at meaningful conclusions for risk management best practices.

The qualitative data gathering was conducted through a research survey questionnaire that provided opportunities to inductively ascertain management factors based on where the risk management function was organizationally placed. As mentioned in Chapter 1, the risk management function is most typically placed in the city manager, city attorney, finance, or human resources departments. In addition to this organizational placement, other phenomenological information was gleaned, to include, but not be limited to, staff experience, staff education and certifications, bifurcation of

traditional risk management practices (e.g., loss control and prevention, workers' compensation program administration, and property and casualty claims management), the agency's overall claims settlement philosophy, and delegation of claims settlement authority.

To present the qualitative research, the data were organized by the department in which the risk management function was placed and then the data were categorized based on how the research survey questionnaire was answered. Coding categories that included years of experience, years on the job, educational level, and professional certifications were compared to the quantitative data. Management factors that included settlement philosophy, budgeting practices, and program administration service delivery were also coded and then compared to the quantitative data. A sample of how this qualitative research data were to be organized is presented in the following qualitative research matrix (see Figure 2).

**Figure 2**

*Qualitative Research Matrix*

| **QUALITATIVE RESEARCH MATRIX** | City 1 | City 2 | City 3 | City 4 |
|---|---|---|---|---|
| Department Assigned | HRD | OCA | OCM | FIN |
| Education Level | BA | AA | AA | MA |
| Certifications Held | ARM | ARM | None | None |
| Years of Experience | 14 | 10 | 8 | 16 |
| # of Staff Supervised | 0 | 1 | 2 | 2 |
| Settlement Authority (Yes or No) | No | Yes | Yes | No |
| Settlement Philosophy (C&R / STIPS) | C&R | C&R | STIPS | STIP |
| Service Delivery (Bundled/Unbundled) | Bundled | Bundled | Bundled | Bundled |

Similar experiences and management factors were clustered to demonstrate major topics, unique topics, and outlier topics that may have had an impact on the quantitative data. The qualitative portion of this mixed methodology tells the story of risk management best practices when merged with the quantitative data to help the public agency practitioner better understand the individual and organizational behavior aspects of the efficacy of delivering a workers' compensation program in California municipalities.

**Ethics and Confidentiality**

Because of transparency initiatives and the California Public Records Act, the data obtained for this study were not subject to confidentiality nor were the names of each municipality. For example, every agency's audited financial data appear on the California State Auditor's website for anyone to review. However, the names of the incumbent practitioners were held confidential while examining their phenomenological experiences in their positions. All survey questionnaires contained an ethical clause and a confidentiality statement for participants to acknowledge as they contributed to this research study (Creswell & Creswell, 2018). This research study adhered to the ethical standards contained in the American Society of Public Administration (2013) *Practices to Promote the ASPA Code of Ethics*.

## Population

In the state of California, there are 3,645 public agencies that are active self-insurers serving over 2 million California workers with an estimated $124 billion in self-insured payroll, $8.5 billion in estimated claims reserves, and making in excess of $2.3 billion in annual medical and indemnity payments through workers' compensation

programs (DIR, 2020). Within this statewide research population, there are 58 counties and 482 cities in the state of California, but not all of these entities are what is known as full-service agencies. In particular, many of these municipal agencies contract out for various service deliveries either through the county in which they are geographically located or through a public-private partnership. Additionally, many of these agencies do not employ a full-time, dedicated risk management professional in their respective organizations.

Therefore, the sample population for this research study came from the 139 municipal agencies who were members of the PRISM joint powers authority. This sample population was narrowed down further to only those cities that had full-service functions to include stand-alone public safety delivery and other service delivery functions such as power distribution, water and sewer services, and municipal airports. The sample population also sought to group these cities by size of population: cities with a population between 50,000 and 100,000, cities with a population between 100,000 and 200,000, and cities with populations greater than 200,000. These are the spatial characteristics of the sample population that provided the study participants for the sample size for this research study. The sample population of 139 cities in the PRISM joint powers authority represented 29% of the 482 cities in the state of California.

Focusing the study's sample size within these spatial characteristics provided a depth and breadth of research analytics that lent credibility, reliability, and validity to the overall research study. A sample size of 50 municipalities with full-service functions and a dedicated risk management professional achieved research validity and credibility in answering the overarching research questions and achieving the goals of the study.

## Instrumentation

The research instruments for this mixed methods research study included a detailed review and analysis of the agency's audited annual financial reports (AFRs), MARs, and WCLRs for the quantitative portion of the research as presented in the quantitative approach paragraph listed previously. The foregoing documents were analyzed to populate the KRI data tables for each study participant and the KRI data tables were used to create the linear regression database for the regression model. The research instrument for the qualitative portion of this research study was a research survey questionnaire that compiled unique organizational demographic data and assessed respondents' phenomenological experiences identified through 10 survey questions for the participants to tell their story within their respective agencies. Subject or participant instructions included a survey questionnaire and potential follow-up interviews to capture the participant's phenomenological experiences in their respective agency (Creswell & Creswell, 2018). A sample of the research survey questionnaire is presented at the end of this chapter.

## Data Analysis

The analysis for this research study involved a multiple regression methodology that was used to predict outcomes of the independent variables (Y) of WCOR and WCCR based on the dependent variables (X) of risk management organizational placement. The regression database was populated after creating the KRI data tables for each study participant from the research. The regression database was used to develop the regression model to calculate *R* square, significance of *F*, coefficients, and *p*-values to interpret the data, whether the data were statistically significant or not, and to analyze the

direction of the coefficient variables. The analysis of variance (ANOVA) was used to reject the null hypothesis or fail to reject the null hypotheses. Dummy variables replaced the names of the dependent variable departments (X) to quantify the regression for the independent variables (Y).

Given that all public agencies in the state of California track, document, and report financial data and workers' compensation metrics in the same manner, an historical look at the sample population's CAFRs, WCARs, and WCLRs provided the metrics needed in this research study in order to draw meaningful conclusions from the phenomenological experiences of the incumbent risk management practitioners. Based on the department in which the risk management function was placed, correlations were drawn between risk management placement, KRIs, and impacts on the agencies' financial position. Regardless of the size of the municipality by population, or general fund budget, the independent variables (Y), which included the WCOR calculation and the WCCR calculation were used to predict outcomes. These leveling and comparative metrics were used to accept or fail to reject the null hypotheses. With this quantitative and qualitative research completed, the researcher was able to analyze the efficacy of the agency's worker's compensation program delivery based on departmental placement of the risk management function, the training and education of the incumbent, and the years of experience of each incumbent. The data analysis, when combined with the phenomenological experiences, enabled the researcher to draw meaningful conclusions and make research-based recommendations in this field of study. This research study can be operationalized for the municipal administration practitioner in making research-based organizational placement decisions of the risk management function.

## Summary

The purpose of this chapter was to outline the research methodology designed to answer the overarching research questions of the study. The specific quantitative methodology was Pearson's correlation coefficient, which assessed the statistical significance of risk management placement on a municipal agency's finances. The specific qualitative methodology was through a research survey questionnaire that assessed the phenomenological experiences of incumbent risk managers within their organizations to identify key competencies and their impacts to workers' compensation program delivery. The convergence of these two methodologies provided a mechanism to inductively determine key competencies and best practices within the risk management profession.

A discussion of measures, design, procedure, participants, instrumentation, materials, and analysis outlined specifics of how the study was conducted. A convergent mixed methods design grounded in CBAT and CMT were used to develop risk management best practices in delivering workers' compensation program efficacy to California' municipalities and the taxpayers that these public practitioners serve. The goal of Chapter 4 of this study is to present the research results described in this methodology.

# CHAPTER 4: RESEARCH, DATA COLLECTION, AND FINDINGS

## Overview

This chapter presents the research methods, data collection procedures, and the analysis of a convergent mixed methods research design as it summarizes findings of risk management organizational placement in California municipalities and the impact upon workers' compensation program administration. The research study included both quantitative and qualitative data collection. The data were merged and interpreted to make predictions and draw conclusions with respect to the larger sample population in answering the overarching research questions. Additionally, this chapter also presents three challenges to the field research and how adjustments were made to the sample size to account for those challenges.

As articulated in Chapter 3, this research study's sample size included the 138 California municipalities who are members of the Public Risk Innovation, Solutions, and Management (PRISM) joint powers authority (JPA). The total population specifically within the state of California encompasses 482 municipalities. This study is more narrowly focused and, thus, consists of a sample size of cities of the larger sample population. The research sample size of 138 cities represents 29% of the municipalities in the state from which inferences and predictions can be propounded to the total sample population.

## Data Collection

Data collection for this study began on January 4, 2021, and concluded on April 30, 2021. The observations collected for the quantitative portion of this study were captured from publicly accessible databases from the California State Controller's Office

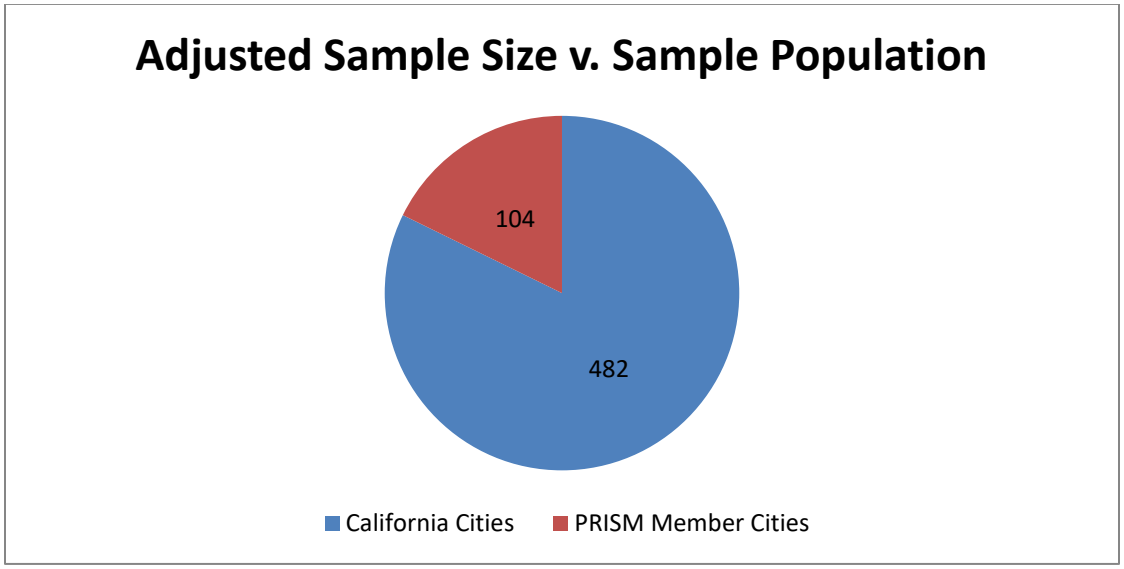
(SCO) and the California Department of Industrial Relations, Office of Self-Insured Programs (DIR-OSIP). As mentioned in the previous chapter, these data are publicly reported annually valued to June 30th of each fiscal year and are the source of the calculations and analysis presented herein, which includes the workers' compensation claim closure ratio (WCCR) and workers' compensation cost of risk (WCOR). The observations for the qualitative portion of this study were captured by the research questionnaire and included phenomenological responses, which were coded for the purposes of analysis and integration of data.

**Research Challenges**

Three challenges arose with the field research that needed to be accounted for in the study. The first challenge during data collection was the discovery that not all member agencies report their workers' compensation program metrics directly to the state. It was discovered that of the 138 municipalities that are members of the PRISM JPA, only 104 of those agencies were direct reporters to the state's OSIP. The 34 excluded agencies report their annual data to a smaller JPA that subsequently attaches to the PRISM JPA for purposes of pooling its workers' compensation risk. Consequently, this reduced the sample size to 104 agencies, or 22% of the sample population, for the WCCR and WCOR key indicator calculations. Figure 3 graphically represents the sample population versus the sample size after adjusting for the excluded agencies that do not report metrics directly to the state.

**Figure 3**

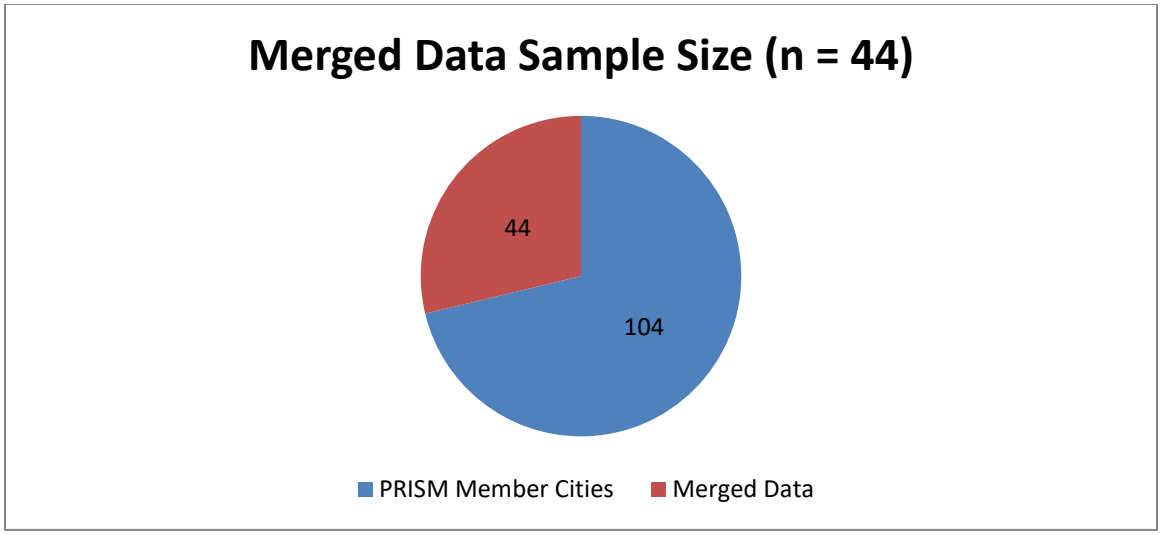
*Adjusted Sample Size Versus Sample Population*




Secondly, of the 138 survey questionnaires distributed, only 44 were returned in contribution to the research, or 42% of the adjusted quantitative sample size. The phenomenological responses, as well as the data coding, contributed to the calculations and analysis. Figure 4 is a graphical representation of the sample size after the coding of variables resultant from the research survey when merged with the sample size data from agencies reporting directly to the state. As mentioned previously, all self-insured agencies in California report annual workers' compensation claims data to the state's OSIP. The merging of the quantitative and qualitative data reduced the sample population examined from 104 to 44.

**Figure 4**

*Merged Data Sample Size*




Lastly, the third research challenge to be addressed was the global COVID-19 pandemic. The initial design of this research methodology was to capture and analyze data through June 30, 2020. However, the COVID-19 pandemic impacted society so significantly, particularly with the state of California's Stay-at-Home Order issued by the Governor's Executive Order, that workers' compensation frequency and severity were skewed for the fiscal year period July 1, 2019, to June 30, 2020 (Executive Order N-33-20). Therefore, to offset pandemic skew, this research study valued all WCCR and WCOR key risk indicators (KRIs) to June 30, 2019.

With an overview of the research study, sample population, sample size after exclusions, the merged data sample size described and graphically depicted, and the challenges of conducting this study outlined, the next section of this chapter stated the purpose of this study with a review of the overarching research questions.

## Purpose Statement and Research Questions

The purpose of this convergent mixed methods study was to examine the risk management best practices in California municipalities and the impacts of the organizational placement of the risk management function in a statistically meaningful manner in relation to the foundational theories of cost-benefit analysis (CBA) theory (T)—or CBAT—and classical management theory (CMT) as described in Chapter 1. The specific aim of this study was to analyze, correlate, and identify risk management best practices for efficient and effective outcomes for workers' compensation program delivery by practitioners in various municipalities (Dean, 2011). As such, this convergent mixed methodology grounded in CBAT and CMT included quantitative and qualitative research with a simultaneous bidirectional framework for convergent design integration (Moseholm & Fetters, 2017). In support of this analysis, the research data presented contribute to answer the following overarching research questions:

Research Question 1 (RQ1). How does the organizational placement of the risk management function in the finance department impact the finances of a municipal agency?

Hypothesis 1 *(H1)*. The risk management organizational placement in the finance department favorably impacts the workers' compensation cost of risk (WCOR) of a municipal agency.

Research Question 2 (RQ2). How does the organizational placement of the risk management function in the human resources department impact the claim closure ratio of a municipal agency?

Hypothesis 2 *(H2)*. The risk management organizational placement in the human resources department favorably impacts the workers' compensation claim closure ratio (WCCR) of a municipal agency.

Research Question 3 (RQ3). What are the management factors that contribute to these outcomes of workers' compensation program administration in a municipal agency?

With the foregoing restatement of the purpose of this research study and propounding of the research questions, the next section of this chapter presents the research methodology and data collection procedures.

## Research Methods and Data Collection Procedures

The convergent mixed methodology is a specific form of mixed methods design in which the quantitative and qualitative data are merged to provide a comprehensive analysis of the overarching research questions and drawing conclusions (Creswell & Creswell, 2018). In this specific type of research design, data were collected at the same time, which contributed to combatting threats to internal validity due to maturity of the data. The specific statistical methods and data collection procedures are described here.

### Quantitative—Multiple Regression Analysis

Quantitative data in workers' compensation program administration are well defined, developed, and consistent across the sample population due to industry-specific standards of data analytics, regardless of the size or type of agency examined. All public agencies, whether municipalities or not, calculate workers' compensation KRIs using industry-defined methods regardless of the type of organization, size of organization, or a predominance of traditional blue-collar or white-collar job classifications. These KRIs include injury frequency (number of claims) and severity (cost of claims), lost time days

of employees, WCCRs, and total claim costs, which includes the cost of indemnity payments, medical payments, litigation costs, and other miscellaneous costs. From these data, calculations were made and a KRI data table was constructed for the purposes of conducting multiple regression models which consisted of calculating the WCCR and WCOR for the sample size a presented earlier. The specific calculations for arriving at these KRIs are as follows:

WCOR = Total Claim Costs (TCC) ÷ Audited General Fund Expenditures (AGFE)

WCCR = Number of Open Claims ÷ Number of Closed Claims

For the purposes of this research study the TCC excludes legal defense costs, the total compensation of the incumbents of the observations, and third-party administration (TPA) costs. Both WCCR and WCOR calculations are expressed as a percentage and compared with each municipality reflected as observations in Table 1.

Next, for the categorical variables represented by the department where the risk management function was organizationally placed, dummy variables were used to conduct the multiple regression analysis. Table 1 depicts how these data were constructed after KRI calculations and dummy variable coding for the regression models.

**Table 1**

*Multiple Regression Data Table (X = 1 or 0)*

| Municipalities | Human resources department | Finance department | City attorney department | City manager department | WCCR KRI | WCOR KRI |
|---|---|---|---|---|---|---|
| Observations | X | X | X | X | % | % |

One of the trappings of using dummy variables in multiple regression is multi-collinearity. In order to offset multi-collinearity, one of the referenced categoricals is

excluded from the model (C–1). In this research study, for RQ1, the finance department variable was excluded, and, for RQ2, the human resources department variable was excluded. In this methodology, the remaining calculated variables were then referenced to the excluded variables for each hypothesis. For the multiple regression models, a confidence level of 95% was used (≤ .05) to assess the statistical significance of the regression.

Additionally, there was an impact, positively or negatively, upon these KRIs based on a set of phenomenological experiences of the incumbents in these positions charged with administrating the risk management function. To assess this impact, the responses to the research survey questionnaire were coded and then correlated using a confidence level of 75% (≤ .25) for each WCCR and WCOR KRI to assess the statistical significance of the correlation. The coding of the survey responses included a numerical value assigned to each response in the survey categories that included years of experience, department assigned, education level, professional certifications, essential job functions, number of staff supervised, claims settlement philosophy, claims settlement authority, claims administration, and service delivery model. Finally, once these data were merged, additional multiple regression analysis were conducted on both RQ1 and RQ2 using a confidence level of 95% (≤ .05) to assess the statistical significance of the regression. See Appendices A and B for a sample of the research survey questionnaire and an example of how the responses were coded for the purposes of conducting correlation analysis and running multiple regression models.

### Qualitative—Research Survey Questionnaire

As previously mentioned, the qualitative data gathering was conducted through a research survey questionnaire that provided opportunities to inductively ascertain management factors based on where the risk management function is organizationally placed. This research survey confirmed within this sample size that the risk management function is most typically placed in either the city manager, city attorney, finance, or human resources departments. The research survey captured phenomenological information that included years of experience, department assigned, education level, professional certifications, essential job functions, number of staff supervised, claims settlement philosophy, claims settlement authority, claims administration, and service delivery model. The qualitative portion of this mixed methodology captured the commonality of certain risk management best practices that had the most significant impact on the KRIs of WCCR and WCOR. These best practices and phenomenological experiences are presented later in this chapter.

### Data Collection Procedures

As previously mentioned in the overview section of this chapter, data collection for this study, for both the quantitative and qualitative methodology, began on January 4, 2021, and concluded on April 30, 2021. The observations collected for the quantitative portion of this study were captured from publicly accessible databases from the California SCO and the DIR-OSIP. The annual DIR-OSIP reports submitted by self-insured municipalities were downloaded in spreadsheets and the specific data sets from these reports included total indemnity paid, total medical paid, and estimated future liabilities for the period ending June 30, 2019. The organizational placement by

department of the workers' compensation program administration was captured by a combination of input by PRISM JPA staff, the results of the research survey questionnaire, and follow-up by the researcher to fill in the gaps of any missing categorical data points. The WCCR KRI was calculated directly from the DIR-OSIP reports submitted by the self-insured agencies, with the exception of those agencies that were excluded that do not make these direct reports to the state DIR-OSIP. The total payroll and audited general fund expenditures were downloaded directly from the California SCO and merged into the master data table of this research study. As mentioned, all of these data are publicly accessible as agencies are required to report these data annually to the state. However, although the data are publicly accessible, for the purposes of this research study, no names of California cities are used in presentation of these data. Rather, the term *observation* (e.g., Observation 1, 2, 3, etc.) was used to reflect each city across the data table. Lastly and equally, similar to the foregoing study's confidentiality measure, the respondents from the research survey questionnaire are represented in this study by the term *city respondent* (e.g., City Respondent 1, 2, 3, etc.) rather than their personal name or the agency in which they are employed.

With a description of the research methods and data collection procedures articulated, the data and analysis of the data resultant from this research study are presented next.

## Presentation and Analysis of Data

The research data and analysis for this study are presented in research question order (RQ1, RQ2, and RQ3) and consist of a combination of histograms, regression models, correlation tables, and the phenomenological survey responses of the

respondents. The quantitative data are presented first, then the qualitative data, followed by a convergence of the two methodologies. A decision on the null hypothesis is propounded through multiple regression analysis to make inferences and predictions upon the larger sample population of California municipalities.

**Quantitative Data Presentation and Analysis**

In presenting the quantitative data portion of this section, RQ1 and RQ2 contain two multiple regression models each: one model containing the categorical variable reflective of departmental placement and one containing the categorical variable combined with coded survey responses from the research questionnaire. Therefore, a total of four regression models are presented and analyzed for RQ1 and RQ2.

**Qualitative Data Presentation and Analysis**

In presenting the qualitative data portion of this section for Research Question 3 (RQ3), phenomenological experiences of the respondents from the research survey questionnaire are discussed with commonalities of best practices to achieve efficiencies in workers' compensation program administration. In addition to a confirming question related to departmental placement and positions of the incumbents, the research survey questionnaire asked each survey respondent a series of questions that related to years of experience, department assigned, education level, professional certifications, essential job functions, number of staff supervised, claims settlement philosophy, claims settlement authority, claims administration, and service delivery model. The concluding question of the research survey provided an additional opportunity for respondents to provide experiences not reflected in the main body of the survey. Respondent quotes as they correlate to RQ3 are also presented.

## Quantitative Data and Analysis

### Research Question 1 (RQ1)

*How does the organizational placement of the risk management function in the finance department impact the finances of a municipal agency?*

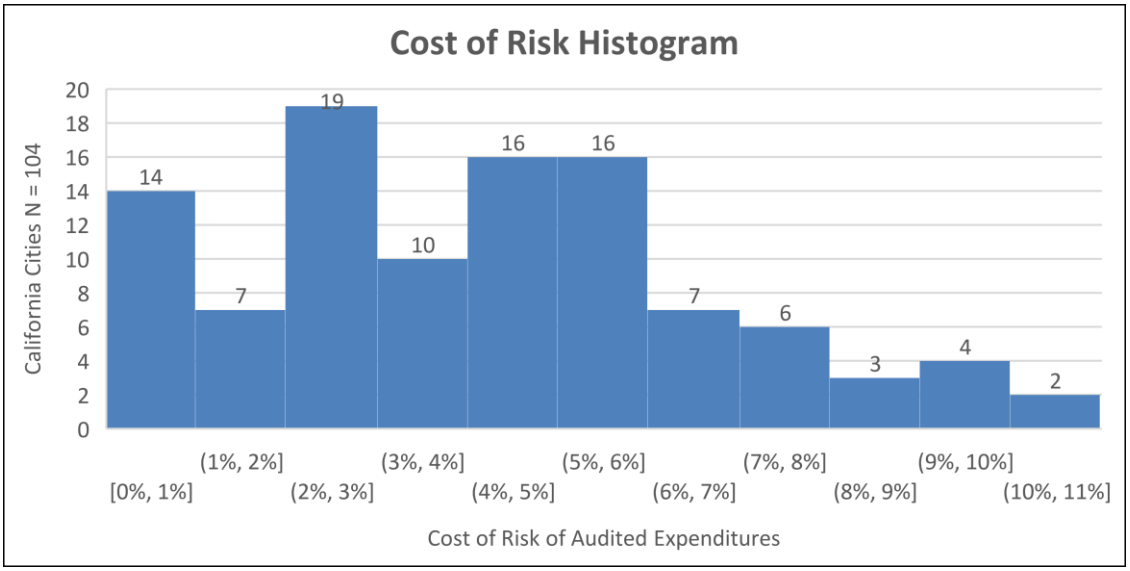
$H_O$. The risk management organizational placement in the finance department favorably impacts the WCOR of a municipal agency.

### *Presentation of Data for RQ1*

The Cost of Risk Histogram in Figure 5 provides a visual interpretation of the distribution pattern of this data set and summarizes the historical data points with a 2% range of values, a mean of 4.19%, and a standard deviation of .0257. The frequency distribution of this data set appears to be normally distributed.

**Figure 5**

*Cost of Risk Histogram*




*Note.* Bin Range 2%, $M$ = 4.19%, $SD$ = .0257.

The frequency graph in Figure 6 depicts the WCOR by department placement, the number of observations, and when the WCOR is both less than or equal to 3% and when the WCOR is greater than 3%. Within the sample size of 104 observations, 38% of the WCOR data is less than or equal to 3%. Conversely, 62% of the observations were greater than 3%. Recall that the WCOR calculation is the total claims costs divided by the audited general fund expenditures in a given fiscal year.

**Figure 6**

*Frequency of Workers' Compensation Cost of Risk ≤ 3%*

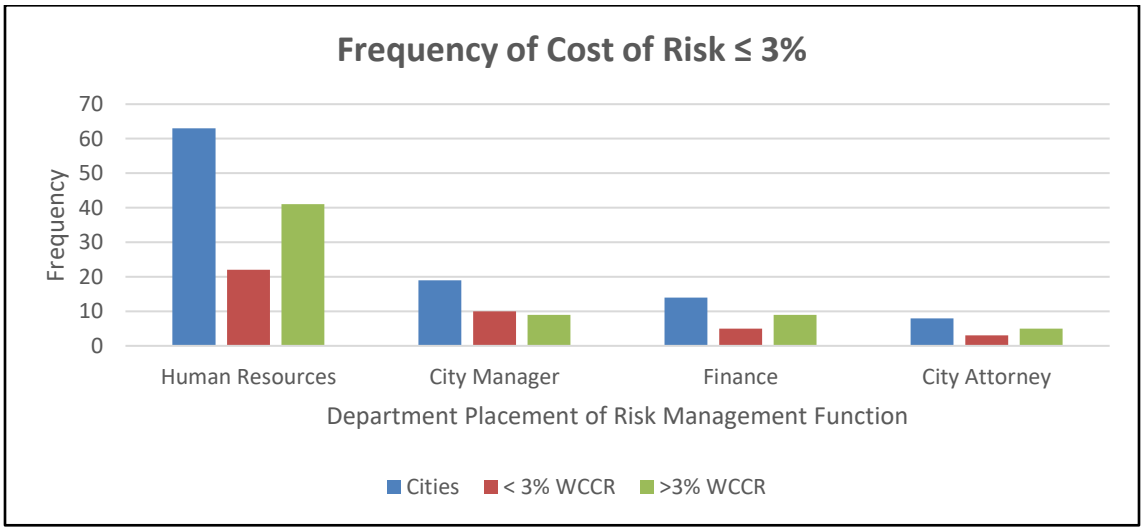



Table 2 demonstrates a dominance of observations where the WCOR is greater than 3%. Within this sample size, the KRI of the WCOR is greatest in the city manager department at 53% and the KRI of WCOR for the other departments is 35%, 36%, and 38% respectively.

**Table 2**

*Frequency of Workers' Compensation Cost of Risk by Department*

| Department | Human resources | City manager | Finance | City attorney |
|---|---|---|---|---|
| Observations | 63 | 19 | 14 | 8 |
| < 3% WCOR | 22 | 10 | 5 | 3 |
| >3% WCOR | 41 | 9 | 9 | 5 |
| % KRI < 3% WCOR | 35% | 53% | 36% | 38% |

### *Multiple Regression Analysis*

The multiple regression model for RQ1 consists of the exclusion of the categorial variable of departmental placement in the finance department. The regression equation for WCOR is as follows:

WCOR = b0 + b1X1 + b2X2 + b3X3; where,

B = 0 representing the finance department

X1 = 1 for human resources; X2, X3 = 0 for city manager and city attorney

X2 = 1 for city manager; X1, X3 = 0 for human resources and city attorney

X3 = 1 for city attorney; X1, X2 = 0 for human resources and city manager

**Table 3**

*Effect of Department Placement on Workers' Compensation Cost of Risk*

| Independent variable | Slope | *SE* | *t*-stat | *p*-value |
|---|---|---|---|---|
| Human resources department | -0.004 | 0.008 | -0.486 | 0.628 |
| City manager department | -0.006 | 0.011 | -0.526 | 0.600 |
| City attorney department | -0.017 | 0.009 | -1.941 | 0.055 |
| Constant | 0.048 | | | |
| *R*-squared | 0.049 | | | |
| Significance of *F* | 0.170 | | | |
| *SE* | 0.007 | | | |

*Note.* $N = 4$.
$p < .05$

As presented in Table 3, a positive coefficient means that the WCOR is higher for the other categorical departments than for the finance department. In this case, all coefficients are negative; therefore, the WCOR is lower for the other categorical departments than for the finance department. Additionally, at a 95% confidence level, this regression is not statistically significant because all *p*-values are greater than .05 and with an *R*-squared of .048; therefore, 4.8% of WCOR variation can be explained by departmental placement in human resources, city manager, or city attorney departments. However, when the regression model was calculated with a 90% confidence level, there is marginal significance in the city attorney department with a *p*-value at .055 and this cannot be completely discounted and would need further exploration.

***Null Hypothesis***

Given that the *p*-values of all categorial variables are in excess of .05, the decision in this model is to fail to reject the null hypothesis. The decision does not mean that it is not true or false; it simply concludes that the regression is not statistically significant and should not be used to predict outcomes when applied to the larger sample population of the 482 cities in California. However, further exploration of the marginal significance within the city attorney department is noteworthy for predictability.

***Presentation of Merged Data From Research Survey—RQ1***

In this section of the data analysis for RQ1, the categorial variables of department placement are merged with the coded survey responses provided by respondents to test the relationship to the WCOR. See Appendix B for an explanation of the coding of survey responses and the numerical values coded to each response. After research survey coding, a correlation analysis was conducted with a confidence level of .25 to test the

relationship to the independent variable. Once identified, multiple regression analysis was performed.

### *Correlation Analysis of Survey Responses*

In this correlation table, only positive correlations were considered in the regression analysis that had a confidence level less than or equal to .25. Table 4 demonstrates that there tends to be a positive relationship to a city's WCOR based upon education level, essential job functions, and settlement philosophy.

**Table 4**

*Correlation of Survey Responses to Workers' Compensation Cost of Risk*

| WCOR | Correlation | Confidence level |
|---|---|---|
| Years of experience | -0.028 | |
| Department | -0.253 | |
| Education level | 0.012 | ≤ .25 |
| Certifications | -0.141 | |
| Essential functions | 0.242 | ≤ .25 |
| Staff supervised | -0.139 | |
| Settlement philosophy | 0.138 | ≤ .25 |
| Settlement authority | -0.041 | |
| Claims administration | -0.029 | |
| Service delivery | -0.090 | |

### *Multiple Regression Analysis of Coded Survey Responses*

The multiple regression model for RQ1 consists of the merged data from the research survey. The regression equation for WCOR when data are merged is as follows:

WCOR = b0 + b1X1 + b2X2 + b3X3; where,

B = 0 the constant representing the WC cost of risk (WCOR)

X1 = Education level

X2 = Essential functions

X3 = Settlement philosophy

**Table 5**

*Effect of Independent Variables on Workers' Compensation Cost of Risk*

| Independent variable | Slope | *SE* | *t*-stat | *p*-value |
|---|---|---|---|---|
| Education level | -0.001 | 0.006 | -0.192 | 0.849 |
| Essential functions | 0.005 | 0.003 | 1.375 | 0.179 |
| Settlement philosophy | 0.007 | 0.009 | 0.758 | 0.454 |
| Constant | 0.011 | | | |
| R-square | 0.076 | | | |
| Significance of F | 0.849 | | | |
| *SE* | 0.026 | | | |

*Note.* $N = 35$.
$p \leq .05$

In this regression, a positive coefficient means that the independent variable has more of an impact on the WCOR when departmental placement is in the finance department. However, this merged regression is also not statistically significant because all *p*-values are greater than .05, and, with an *R*-squared of .076; therefore, 7.6% of WCOR variation can be explained by an incumbent's education level, essential job functions, and the organization's settlement philosophy.

***Null Hypothesis***

Given that the *p*-values of all independent variables are in excess of .05, the decision in this model is to fail to reject the null hypothesis. The decision does not mean that it is not true or false. Rather, the decision simply concludes that the regression is not statistically significant and should not be used to predict the impact of education level, essential job functions, and settlement philosophy impacting the WCOR when applied to the larger sample population of the 482 cities in California. This concludes the research data section related to RQ1. The research data for RQ2 are presented next.

**Research Question 2 (RQ2)**

*How does the organizational placement of the risk management function in the human resources department impact the workers' compensation claim closure ratio of a municipal agency?*

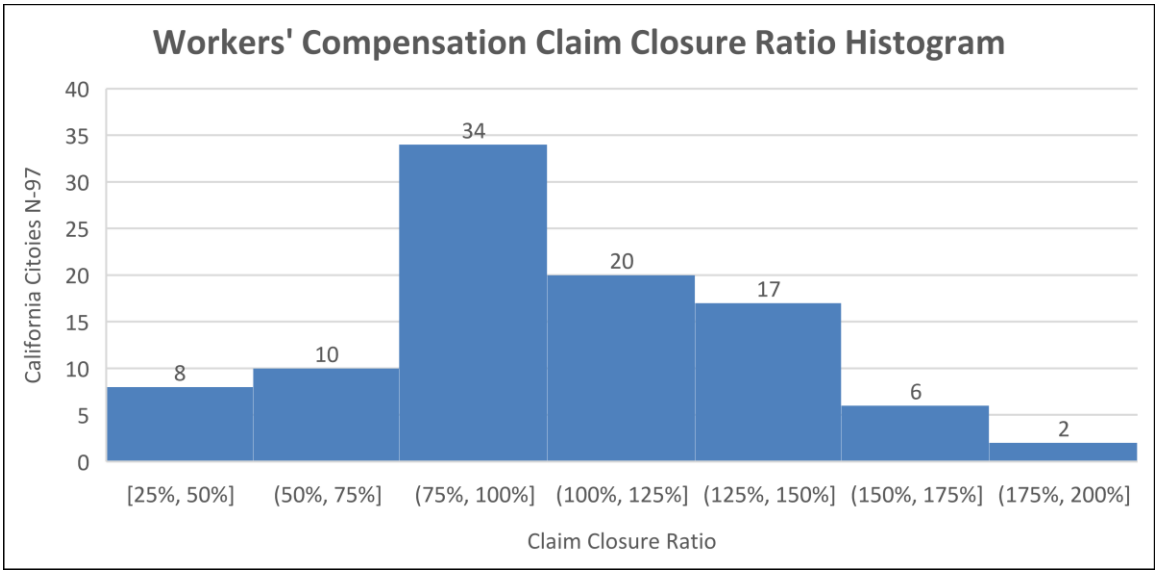
$H_O$. The risk management organizational placement in the human resources department favorably impacts the WCCR of a municipal agency.

***Presentation of Data—RQ2***

This WCCR histogram in Figure 7 provides a visual interpretation of the distribution pattern of this data set and summarizes the historical data points with a 50% range of values, a mean of 105.6%, and a standard deviation of .3423. The distribution of this data set appears to be normally distributed. A difference in sample size (*N*) must be denoted here from the RQ1 sample size ($N = 104$). This data set contained mild and extreme outliers of the observed WCCRs and all ratios above 200% were removed from the sample size to account for outliers. A total of seven observations above 200% were removed from this analysis, resulting in a sample size of 97 ($N = 97$). The desired WCCR is to be above 100%, indicating that the program is closing claims at a faster rate than new claims opened. While seven observations were removed as outliers above a 200% WCCR, research recognizes that there are likely tangible reasons for these metrics that may be worthy of further examination. For example, there may have been a change in practitioner management, an internal reorganization, a change in TPAs, or even a change in organizational philosophy that yielded greater than normal WCCRs. The graph in Figure 7 depicts those observations that are greater than or equal to that 100% metric and with the foregoing outliers removed from the sample size.

**Figure 7**

*Claim Closure Ratio Histogram*




*Note.* $N = 97$, Bin Range 50%, $M = 105.6\%$, $SD = .3423$.

The frequency graph in Figure 8 depicts the WCCR by department placement, the number of observations, and when the WCCR is greater than or equal to 100%. Within the sample size of 97 observations, 68% of the WCCRs observed are greater than or equal to 100%. Conversely, 32% of the observations were less than 100%. It is important to remember that the WCCR calculation is the total number of open claims minus newly opened claims divided by the total of all open claims times 100 in a given fiscal year. In workers' compensation program administration, a WCCR of 100% indicates that the program is opening and closing injury claims at an equal rate.

**Figure 8**

*Frequency of Workers' Compensation Claim Closure Ratio ≥ 100%*

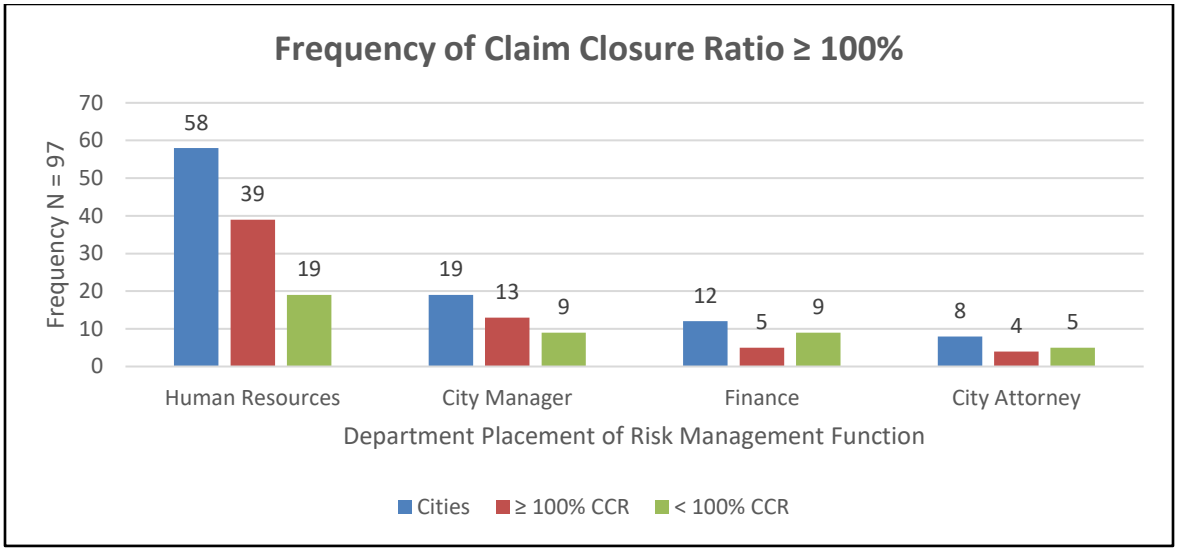



Table 6 demonstrates a dominance of observations where the WCCR is greater than or equal to 100%. Within this sample size, the KRI of the WCCR is greatest in the city manager department at 68% and the human resources department at 67% and the KRI of the WCCR for the other departments is 42% and 50%.

**Table 6**

*Frequency of Claim Closure Ratio by Department*

| Department | Human resources | City manager | Finance | City attorney |
|---|---|---|---|---|
| Observations | 58 | 19 | 12 | 8 |
| ≥ 100% WCCR | 39 | 13 | 5 | 4 |
| < 100% WCCR | 19 | 9 | 9 | 5 |
| % KRI ≥ 100% | 67% | 68% | 42% | 50% |

***Multiple Regression Analysis***

The multiple regression model for RQ2 in Table 7 consists of the exclusion of the categorial variable of departmental placement in the finance department. The regression equation for WCCR is as follows:

WCCR = b0 + b1X1 + b2X2 + b3X3; where,

B = 0 the constant representing the human resources department

X1 = 1 for finance; X2, X3 = 0 for city manager and city attorney

X2 = 1 for city manager; X1, X3 = 0 for finance and city attorney

X3 = 1 for city attorney; X1, X2 = 0 for finance and city manager

**Table 7**

*Effect of Placement on Workers' Compensation Claim Closure Ratio*

| Independent variable | Slope | *SE* | *t*-stat | *p*-value |
|---|---|---|---|---|
| Finance department | -0.185 | 0.108 | -1.709 | 0.091 |
| City manager department | -0.125 | 0.129 | -0.974 | 0.333 |
| City attorney department | -0.073 | 0.090 | -0.808 | 0.421 |
| Constant | 1.103 | | | |
| R-square | 0.037 | | | |
| Significance of F | 0.315 | | | |
| *SE* | 0.045 | | | |

*Note.* $N = 97$.

In this regression, a positive coefficient means that the WCCR is higher for the other categorical departments than for the human resources department. In this case, all coefficients are negative; therefore, the WCCR is lower for the other categorical departments than for the finance department. Additionally, at a 95% confidence level, this regression is not statistically significant because all *p*-values are greater than .05 and with an *R*-squared of .037, only 3.7% of the WCCR variation can be explained by

departmental placement in the finance, city manager, or city attorney. However, when the regression model was calculated with a 90% confidence level, there is marginal significance in the finance department with a *p*-value at .091, and this cannot be completely discounted and would need further exploration.

***Null Hypothesis***

Given that the *p*-values of all categorial variables are in excess of .05, the decision in this model is to fail to reject the null hypothesis. The decision does not mean that it is not true or false, it simply concludes that the regression is not statistically significant and should not be used to predict outcomes when applied to the larger sample population of the 482 cities in California. However, further exploration of the marginal significance within the finance department is noteworthy for predictability. The merged data from survey responses and the impact of independent variables on the WCCR is presented next.

***Presentation of Merged Data From Research Survey—RQ2***

In this section of the data analysis for RQ2, the categorial variables of department placement are merged with the coded survey responses provided by respondents to test the relationship to the WCCR. See Appendix B for an explanation of the coding of survey responses and the numerical values coded to each response. After research survey coding, a correlation analysis was conducted with a confidence level of .25 to test the relationship to the independent variable. Once identified, multiple regression analysis was performed.

### *Correlation Analysis of Coded Survey Responses*

In the correlation analysis in Table 8, only positive correlations were considered in the regression model that had a confidence level less than or equal to .25. This correlation table demonstrates that there tends to be a positive relationship to a city's WCCR based on years of experience, education level, certifications, essential job functions, the number of staff supervised, and claims administration. This differs greatly from positive relationships in the merged data in RQ1, which consisted of only the education level, essential job functions, and settlement philosophy.

**Table 8**

*Correlation of Coded Survey Responses to the Claim Closure Ratio*

| WCCR | Correlation | Confidence level |
|---|---|---|
| Years of experience | 0.047 | ≤ .25 |
| Department | -0.210 | |
| Education level | 0.174 | ≤ .25 |
| Certifications | 0.171 | ≤ .25 |
| Essential functions | 0.116 | ≤ .25 |
| Staff supervised | 0.098 | ≤ .25 |
| Settlement philosophy | -0.014 | |
| Settlement authority | -0.058 | |
| Claims administration | 0.104 | ≤ .25 |
| Service delivery | -0.035 | |

With the foregoing independent variables identified with a positive relationship at a 75% confidence level, the regression analysis is presented next.

### *Multiple Regression Analysis of Coded Survey Responses*

The multiple regression model for RQ2 in Table 9 consists of the merged data from the research survey. The regression equation for WCCR when data are merged is as follows:

WCCR = b0 + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + b6X6; where,

B = 0 the constant representing the claim closure ratio (WCCR)

X1 = years of experience; X2 = education level; X3 = certifications

X4 = essential job functions; X5 = number of staff supervised

X6 = claims administration

**Table 9**

*Effect of Independent Variables on the Claim Closure Ratio*

| Independent variable | Slope | *SE* | *t*-stat | *p*-value |
|---|---|---|---|---|
| Years of experience | 0.0200 | 0.049 | 0.400 | 0.692 |
| Education level | 0.0740 | 0.073 | 1.012 | 0.321 |
| Certifications | 0.1100 | 0.105 | 1.046 | 0.305 |
| Essential functions | 0.0760 | 0.039 | 1.963 | 0.060 |
| Staff supervised | 0.0050 | 0.084 | 0.064 | 0.950 |
| Claims administration | 0.0320 | 0.107 | 0.301 | 0.766 |
| Constant | 0.3140 | | | |
| *R*-square | 0.1906 | | | |
| Significance of *F* | 0.4340 | | | |
| *SE* | 0.2771 | | | |

*Note. N = 33*
$p \leq .05$

In this regression, a positive coefficient means that the independent variable has more of an impact on the WCCR when departmental placement is within the human resources department. Similar to the merged data of RQ1, this merged regression analysis for RQ2 is also not statistically significant because all *p*-values are greater than .05, and, with an *R*-squared of .190, only 19% of WCCR variation can be explained by an incumbent's years of experience, education level, certifications, essential job functions, number of staff supervised, and claims administration. However, when the regression model was calculated with a 90% confidence level, there is marginal significance in the essential risk functions variable with a *p*-value at .060 and this cannot be completely

discounted. These functions within this independent variable include the incumbent practitioner's responsibility for managing the essential job functions that include workers' compensation claims administration, property and casualty claims administration, and safety and loss control functions. This marginal significance with essential job functions with the incumbent placed in the human resources department is worthy of further exploration.

### *Null Hypothesis*

Given that the *p*-values of all independent variables are greater than .05, the decision in this merged model is to fail to reject the null hypothesis. The decision does not mean that the hypothesis is not true or false. Rather, the decision simply concludes that the merged regression is not statistically significant and should not be used to predict the impact of these independent variables impacting the WCCR when applied to the larger sample population of the 482 cities in California. This concludes the research data section related to RQ2 and completes the presentation of the quantitative data and analysis of the research. The qualitative data and analysis portion of this mixed methodology is presented next.

## Qualitative Data and Analysis

As mentioned at the beginning of this chapter, the qualitative data portion of this section for RQ3 focuses on the phenomenological experiences of the respondents from the research survey questionnaire and identifies commonalities of risk management best practices to achieve efficiencies in workers' compensation program administration. While the previous presentations focused on data analysis as it applies to organizational placement and independent variables, and their respective data predictability on the

WCOR and WCCR calculations, the qualitative section of this study presents best practice commonalities from the 44 research surveys returned.

Survey Questions 1 (Q1) through 16 (Q16), after coding of the responses, provided the statistical basis for the merged data presented in the quantitative data analysis in making null hypotheses decisions on RQ1 and RQ2. For RQ3, Q1 through Q18 provided the phenomenological experiences of the respondents. See Appendix A for a copy of the research survey questionnaire. As previously discussed, the research survey questionnaire was conducted at nearly the same time as the quantitative data analysis, which began on January 4, 2021, and concluded on April 30, 2021. The survey was conducted electronically utilizing the on-line research tool SurveyMonkey (https://www.surveymonkey.com) from February 18, 2021, and concluded on May 3, 2021; 138 surveys were electronically sent out and 44 were returned as completed for a survey response rate of 32%. The requisite consent and confidentiality notices for conducting this research study were part of the survey questionnaire and submission of the survey responses provided the consent to participate from each respondent.

The survey demographics of the 44 respondents are summarized in the next section, which includes a nexus to the KRIs of WCCR and WCOR for the qualitative sample size. Results of the survey are presented within the context of departmental placement as well as each category of demography contained in the research survey questionnaire and provide the foundations for addressing RQ3.

**Research Question 3 (RQ3)**

*What are the management factors that contribute to these outcomes of workers' compensation program administration in a municipal agency?*

### *Presentation of Qualitative Data*

As mentioned earlier in this chapter, the survey was conducted electronically utilizing the online research tool SurveyMonkey from February 18, 2021, and concluded on May 3, 2021. Table 10 presents the research survey questionnaire efficacy. One hundred thirty-eight surveys were electronically sent out and 44 were returned as completed yielding a survey response rate of 32%.

**Table 10**

*Research Survey Questionnaire Efficacy*

| Category | *N* | % |
|---|---|---|
| Number of surveys | 138 | 100% |
| Surveys completed | 44 | 32% |
| Unopened surveys | 54 | 39% |
| Partially completed surveys | 32 | 23% |
| Surveys opted out | 8 | 6% |

### *Survey Questionnaire Reponses*

The research survey questionnaire asked respondents a series of phenomenological questions to provide key demographic data from each of municipal agency that participated. A copy of the research survey questions is provided in Appendix A.

The first survey question asked respondents to describe their years of experience within the risk management discipline. Within the sample size, 72% of the respondents reported between 0 and 10 years of experience in their field, while 28% of the respondents had greater than 10 years of experience. The second survey question asked respondents to present their highest level of formal education achieved in their careers. Of the respondents within this sample size, 93% held education credentials at or above the baccalaureate level. To compliment formal education, the respondents were also

asked to report whether or not professional industry certifications were held. Exactly half of the respondents held professional certifications and half did not hold a professional certification.

Another area examined by this survey was the degree to which the respondents performed three essential risk functions that include workers' compensation program administration, property and casualty claims administration, and safety and loss control/prevention administration. As noted in Table 10, 82% of survey respondents had program responsibility for all three risk administration functions within their respective agencies while 18% had responsibility for workers' compensation program administration only. To assess the incumbents' span of control of these functions, respondents were asked how many professional staff were supervised within their areas of responsibility. Of incumbents in respondent agencies, 80% reported supervision from one to six professional staff in the performance of their risk management duties.

The next questions examined respondent agencies' organizational settlement philosophy of settling workers' compensation claims for existing employees and whether or not the incumbent had any settlement authority delegated to them. As noted in the foregoing table, 61% of the respondents reported that their agencies either did not settle claims with existing employees (5%) or the agencies only settled claims by stipulated awards (56%). Conversely, 39% of the respondent agencies had a philosophy of settling claims with existing employees by full compromise and release. Further, the survey revealed that 55% of incumbents in respondent agencies had been given some level of settlement authority with 45% of respondents reporting that they held no delegated settlement authority for their position.

The next area that the research survey examined was the manner in which the respondent agencies handled claims administration and how program services were delivered. The response choices for claims administration included TPA administration—a private sector firm hired to manage claims; agency administration—a model where claims are administered in-house within the agency; or a combination of both TPA and agency administration. The response choices for service delivery were either bundled or unbundled service delivery. A bundled service delivery model includes all services related to claims administration, bill review, pharmacy benefits management, nurse case management, utilization review, and a medical provider network. An unbundled service delivery model means that the agency contracts with multiple TPAs or other vendors for these services. Within this sample size, 86% of the respondents stated that their agency utilized a TPA to manage workers' compensation claims and 77% of respondents reported a fully bundled service delivery. Table 11 summarizes the dominant survey indicators of respondents.

**Table 11**

*Dominant Survey Indictors of Respondents*

| Survey response category | Dominant indicator | % |
|---|---|---|
| Years of experience | 0-10 years | 72.7% |
| Education level | Bachelor's degree or higher | 93.2% |
| Professional certifications | Certified | 50.0% |
| Essential risk job functions | All 3 functions | 81.8% |
| Number of staff supervised | 1-6 staff | 79.5% |
| Settlement philosophy for existing employees | No settlements or STIPs only | 61.3% |
| Delegated settlement authority | None | 54.5% |
| Claims administration | Third party administrator | 86.4% |
| Service delivery model | Bundled services | 77.3% |

*Note.* $N = 44$.

The next section of data presents the merged survey responses and respective impacts upon the WCCR and WCOR KRIs.

### *Merged Survey Data With WCCR and WCOR Calculations*

With a convergent mixed methods research survey, it is imperative that quantitative and qualitative data be merged in the presentation of the research study (Creswell & Creswell, 2018). In this section, data from the survey responses were merged with the WCCR and WCOR calculations of the sample size. This section presents the data as reported by each respondent agency combined with the responses of the survey participants.

Unlike the mean WCCR KRI (105.6%) within the sample size of the quantitative data analysis, the merged mean WCCR KRI increases to 142%. However, the quantitative mean WCOR KRI and the qualitative mean WCOR KRI are constant at 4.1% and 4.2% respectively. Table 12 presents the mean WCCR and mean WCOR when data are merged.

**Table 12**

*Mean KRIs of the Sample Size by City Population*

| City by population | *n* | Mean WCCR | Mean WCOR |
|---|---|---|---|
| 200K-500K | 4 | 155.0% | 4.2% |
| 100K-199K | 15 | 110.0% | 4.0% |
| 50K-99K | 14 | 174.0% | 4.5% |
| 0K-49K | 11 | 140.0% | 4.1% |
| Sample size | 44 | 142.0% | 4.2% |

*Note.* $N = 44$.

Table 13 presents the impacts to KRIs when the phenomenological experiences of departmental placement, education and certifications, essential risk functions, settlement

philosophy, claims administration, and service delivery are considered from within the sample size based on the survey responses. In the quantitative data analysis presentation, it was reported that a 100% WCCR was the benchmark for an agency to achieve. At 100%, this metric indicated that an agency is closing existing claims at the same rate they are opening new claims. A WCCR below 100% means that more claims are being opened at a faster pace than claims are being closed. Conversely, a WCCR above 100% indicates that more claims are being closed than new claims are being opened.

Additionally, in the previous quantitative data analysis presentation, a WCOR metric of ≤ 3% was the desired benchmark of this research study. However, it must be noted that each respondent agency's appetite for risk may be attributable to other factors that are not being examined by this research study. Therefore, this data table is simply an expression of the merged data within the qualitative sample size examined.

**Table 13**

*Survey Category Data Merged With Key Risk Indicators (KRIs)*

| Survey category | Mean WCCR | Mean WCOR |
|---|---|---|
| Human resources department | 153.3% | 4.7% |
| Finance department | 97.8% | 2.3% |
| City attorney department | 110.5% | 2.4% |
| City manager department | 64.0% | 2.1% |
| Education > bachelor's degree | 166.5% | 3.9% |
| Education > bachelor's + certification | 128.9% | 4.5% |
| Education < bachelor's degree | 86.6% | 3.7% |
| All 3 essential risk functions | 113.7% | 4.5% |
| Stipulated awards only | 100.4% | 4.2% |
| C&R + stipulated awards | 149.8% | 4.1% |
| No claims settlements | 92.5% | 5.5% |
| TPA administration (bundled) | 144.4% | 4.3% |
| Agency administration (unbundled) | 134.7% | 3.8% |

The next section of the qualitative data analysis presents the phenomenological experiences of the survey respondents based on their years of experience, education level, and department placement within their respective agencies. Therefore, the next section of the qualitative data analysis sought to answer the final research question of this study.

### *Synopsis of Risk Management Best Practices*

At the end of the survey questionnaire, each respondent was asked to provide risk management best practices for effective workers' compensation program administration to include additional pertinent perspectives that may impact their programs. Forty-four survey respondents cited 142 risk management best practices that were organized into eight main categories for the purposes of presenting their collective information. As demonstrated in Table 14, employee safety training and education, city safety programs, and employee customer service were the top three best practices propounded by survey respondents.

**Table 14**

*Best Practices Impacting Workers' Compensation Administration Program*

| % Cited | Respondent citings | Risk management best practices |
|---|---|---|
| 61.4% | 27 | Employee safety training and education |
| 59.1% | 26 | City safety programs |
| 50.0% | 22 | Employee customer service |
| 47.7% | 21 | Employee return to work program |
| 38.6% | 17 | City culture of safety |
| 25.0% | 11 | City claims management |
| 20.5% | 9 | Employee safety equipment |
| 20.5% | 9 | Employee wellness program |

**Employee Safety Training and Education.** This best practice was the most cited by 27 of the 44 survey respondents (61.4%). The need for a structured training program,

consisting of a combination of formalized training, online training delivery, and traditional tailgate safety meetings, provides the solid foundation for employee safety and contributes to reducing injuries in the workplace. City Respondent 39 expounded,

> Safety training—classroom, virtual, computer-based, huddle/tailgate meetings, on-the-job training, and a review of policy and procedures.

**City Safety Programs.** This category was cited as a best practice by 26 of the 44 survey respondents (59%) and includes such enterprise-wide programs like the Injury and Illness Prevention Plan mandated by the state of California. Formal loss control techniques such as root cause analysis of employee injuries was included by respondents. City Respondent 8 stated,

> Having an effective Injury and Illness Prevention Plan (IIPP) and a Safety Ombudsman Program helps reinforce a culture of safety.

Also, within this category, respondents conveyed the need to have an active hazard identification and accident investigation process in place for root cause analysis. City Respondent 39 explained what that includes:

> Hazard identification/recognition—worksite inspections, equipment inspections, job hazard assessments, and communication with frontline employees and safety committees.

**Employee Customer Service.** This best practice was cited by 50% of the survey respondents as a tenet of effective program administration. Included within this category were prompt medical treatment protocols, nurse case management, fast approval of utilization review treatments, approving additional physical therapy appointments, having an employee first aid protocol, and frequent engagement with employees in the

interactive process under the Americans with Disabilities Act. City Respondent 13 explained their process:

> We have historically allowed claims to evolve organically. We are in the process of realigning our program to better service our employees.

**Employee Return to Work Program.** This best practice was cited by 47% of survey respondents and was frequently cited along with the employee customer service category as a high priority. When an employer can offer modified duty assignments to an employee with work restrictions from an injury, the employer reduces indemnity payments. City Respondent 36 stated,

> A thorough review of claims, providing modified duty to lessen disability payments, and closely managing claims to get employees back to work and off to specialist when needed.

**City Culture of Safety.** The next most frequent best practice cited by survey respondents was instilling a culture of safety throughout the organization. Leadership's involvement from the top down, implementation of safety committees, claim review committees, and safety incentives all demonstrate leadership's commitment to safety. According to City Respondent 44,

> A strong and sustainable safety culture really starts from the top down. When the administration demonstrates the importance of following safety guidelines and modeling such behavior, it is much easier for employees to abide.

City Respondent 34 added,

> The city has a lot of work to do regarding safety culture. We have been fairly reactive rather than proactive. We just approved the hiring of a safety consultant,

so I look forward to that integration of knowledge and experience. Our leadership's view on risk management has changed for the better.

**City Claims Management.** This best practice was also cited by survey respondents as being an important part of program administration. The need to go beyond the mere processing of claims and payments related to those claims, the ability to have effective risk transfer techniques in place, implementing a claim closure program, and the willingness to settle any claim at any time, even for existing employees. City Respondent 5 described the agency's practice:

> My agency is fortunate to have buy-in on its claims programs, both workers' compensation and general liability, from upper management. It is recognized that the city has responsibility to its employees to provide a safe working environment. Further, in the event that an employee does get injured, that they are provided with the necessary medical treatment to return them to their pre-injury condition which allows the employee to return to work.

**Employee Safety Equipment.** This category was also identified as a best practice within the survey responses. Respondents propounded the need for providing ergonomic evaluations and equipment, personal protective equipment (PPE) for certain job classifications, and the necessary engineering, environmental, and administrative controls to help keep employees safe and reduce injury.

**Employee Wellness Program.** The last best practice category propounded by respondents was employee wellness. Within this category, agency support of programs that include an employee assistance program for mental health, healthy eating classes,

yoga and fitness classes, and pre-employment physicals were all mentioned. City Respondent 15 discussed the city's process:

> The city operates with an integrated customer service, claims management, and communication philosophy to minimize the impact of workplace illness and injury. We believe in utilizing resources prior to injury as human resources are the most important asset that the city has in delivering core service to its constituents.

### Qualitative Data and Analysis—Concluding Themes

In answering RQ3, based on the research survey questionnaire, the management factors that contribute to best practice outcomes of workers' compensation program administration in a municipal agency include employee safety training and education, city safety programs, employee customer service, employee return to work programs, a culture of safety, employee safety equipment, and employee wellness programs. These eight main best practice themes were cited collectively by the 44 survey respondents as having positive impacts on an agency's workers' compensation program administration.

## Chapter Summary

This chapter presented the research methods, data collection procedures, and analysis of a convergent mixed methods research design and summarized phenomenological findings of research survey participants. The research study included both quantitative and qualitative data collection, merging of that data, the interpretation of the data, and the presentation of the data in order to make predictions and draw conclusions with respect to the larger sample population. Challenges and limitations to

the research study were propounded, adjusted for in the analysis, and data were presented in answering the overarching research questions.

Multiple regression analyses were used in answering RQ1 and RQ2, wherein the statistical significance of the model resulted in decisions to fail to reject the null hypothesis. In each research question, two regression models were conducted. One regression model with only the quantitative research data centrally obtained through publicly reported information to the DIR-OSIP. The second regression model using the coded qualitative survey responses merged with the quantitative data after trending that data through correlation analysis. Failing to reject the null in this research study indicates that the research sample did not provide sufficient evidence to conclude that there is a predicting effect through departmental placement of the risk management function on the outcome of the KRIs that include WCOR and WCCR. However, at the same time, that lack of this evidence does not prove that the effect does not exist within the larger sample population of the 482 California municipalities.

In answering RQ3, the individual responses from the research survey questionnaire captured the phenomenological experiences of 44 respondents from their professional points of view in their respective municipalities. From this research survey, qualitative data were obtained, calculated, themed, and synthesized as risk management factors that impact worker's compensation program administration in California municipalities, and, in particular, those that may have the greatest impact on an agency's WCOR and WCCR.

In the next chapter, the findings, conclusions, interpretations, recommendations of this research study are presented. Connections to pertinent literature and foundational theories of CBAT and CMT are drawn.

# CHAPTER 5: FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter reviews the mixed methods research study, summarizes selected findings, discusses conclusions drawn from the findings, and sets forth selected recommendations for future research.

## Summary of the Study

The purpose of this convergent mixed methods study was to examine the organizational placement of the risk management function in a statistically meaningful manner in relation to the foundational theories of cost-benefit analysis (CBA) theory (T)—or CBAT—and classical management theory (CMT) as described in Chapter 2. The specific aim of this study was to analyze, correlate, and identify risk management best practices for efficient and effective outcomes for workers' compensation program delivery by practitioners in various municipalities (Dean, 2011). As such, this convergent mixed methodology, grounded in CBAT and CMT, included quantitative and qualitative research with a framework for convergent design integration (Moseholm & Fetters, 2017). This pragmatic, mixed methods study, produced research-based insights into organizational placement of the risk management function and produced management best practice outcomes that will inform and advise C-suite executive leadership, governing bodies, and workers' compensation risk pools in making the most effective placement of risk management professionals within their organizations. Utilizing the key risk indicators (KRIs) of the workers' compensation cost of risk (WCOR) and workers' compensation claim closure ratios (WCCR), combined with the observed phenomenological experiences of the research survey respondents, this study has identified best practices to achieve more efficient and effective risk management

outcomes for public agency practitioners to contribute to the financial viability of California cities.

## Major Findings

The following presents the major findings from this mixed methods research on organizational placement of the risk management function and the impacts upon workers' compensation program administration:

### Findings for Research Question 1 (RQ1)

#### *Finding 1*

Quantitatively, the dominant organizational placement of the risk management function where the WCOR KRI was lowest (≤ 3%) was within the city manager department from this sample size.

#### *Finding 2*

Qualitatively, education level, management of all three essential risk functions, and organizational claims settlement philosophy, when correlated at a 75% confidence level, had the most favorable impact upon the outcome of the WCOR KRI.

### Findings for Research Question 2 (RQ2)

#### *Finding 3*

Quantitatively, the dominant organizational placement of the risk management function where the WCCR KRI was highest (≥ 100%) was within both the city manager and human resources departments where the findings were equally weighted at 68% and 67% respectively from this sample size.

### *Finding 4*

Qualitatively, years of experience, education level, professional certifications, management of all three essential risk functions, number of staff supervised, and how claims are administered, when correlated at a 75% confidence level, had the most favorable impact upon the outcome of the WCCR KRI.

## Findings for Research Question 3 (RQ3)

### *Finding 5*

This research indicated that the risk management best practices that most favorably impact an agency's workers' compensation program administration include all eight of the following major program categories:

- Employee safety training and education
- City safety programs
- Employee customer service
- Employee return to work program
- City culture of safety
- City claims management
- Employee safety equipment
- Employee wellness program

Respondents who participated in the research survey questionnaire suggested that all of these programs, implemented collectively, will lead to reducing employee injuries and lowering overall workers' compensation program administration costs.

## Convergent Finding

Lastly, while Findings 1 through 5 were noted as major findings, perhaps the most significant finding results from a combination of all merged quantitative and qualitative data.

### *Finding 6*

The convergent quantitative and qualitative data indicated that cities within this sample size had a combination of the lowest WCOR KRI at 2.59% (≤ 3%) and the highest WCCR KRI at 149% (≥ 100%) when all the following phenomenological conditions were present:

- Incumbents had management responsibility for all three essential risk functions that included property and casualty claims administration, workers' compensation claims administration, and safety and loss control program responsibilities.
- Incumbents had some level of delegated settlement authority from the city manager in a range between $5,000 and $50,000.
- Agency had an organizational settlement philosophy that included both stipulated awards (STIPs) and full compromise and releases (C&R) for existing employees.
- Agency administered the workers' compensation program through a single third-party administrator (TPA) with a bundled service delivery model.

The foregoing major findings from the study provide the foundation for drawing conclusions and making recommendations for further research in subsequent sections of this chapter.

## Conclusions

The following conclusions are drawn from the findings of the research questions, review of the literature, and practical applications of CBAT and CMT theories:

### Conclusion 1

The findings related to the organizational placement of the risk management function and the impact to the WCOR for effective workers' compensation program administration from Research Question 1 (RQ1) are inconclusive. The metric for the WCOR KRI was established at ≤ 3%. The regression models from RQ1 were not statistically significant to predict the same outcomes of the WCOR KRI when applied to all cities in California, suggesting that organizational placement as a factor of effectiveness remains unclear.

However, there was some degree of statistical significance to the WCOR when placed within the city attorney department at a *p*-value of .055 and, therefore, may provide some degree of predictability when combined with other factors. Lastly, there is some degree of frequency significance to the WCOR when placed within the city manager department which indicated a frequency rate of 53% within the sample size.

### Conclusion 2

The findings related to the organizational placement of the risk management function and the impact to the WCCR for effective workers' compensation program administration from Research Question 2 (RQ2) are inconclusive. The metric for the WCCR KRI used for this research study was established as ≥ 100%. Similarly, the regression models from RQ2 were not statistically significant to predict the same

outcomes of the WCCR KRI when applied to all cities in California, suggesting that organizational placement may be irrelevant.

However, there was some degree of statistical significance to the WCCR when placed within the finance department at a *p*-value of .091, and, therefore, may provide some degree of predictability when combined with other factors. Additionally, there is some degree of frequency significance to the WCCR when placed within the city manager department and the human resources department, which indicated a frequency rate of 68% and 67% respectively within the sample size.

The foregoing two conclusions, when examined collectively, indicate that risk management organizational placement has some degree of efficacy when placed within one of the four departments examined within the sample size. However, this research indicated that the greatest frequency rate for a favorable impact upon both the WCOR and WCCR KRIs was when the risk management function was placed within the city manager department.

**Conclusion 3**

Given the information presented above, the research indicated that one of the more significant conclusions that can be drawn from this study resulted when the quantitative and qualitative data were merged. Taking into consideration the phenomenological conditions within each respondent agency, the impact of the organizational placement of the risk management function upon the KRIs became more intelligible. This study indicated that when the organization's settlement philosophy included settling workers' compensation claims with existing employees and the incumbent public administrator held delegated settlement authority from the city

manager, when combined with the delivery of bundled services through a TPA, the outcome and efficacy of the WCCR and WCOR KRIs was profound at 149% and 2.6% respectively.

While examining departmental placement as a single variable was seemingly insignificant, the combination of quantitative and qualitative factors, when merged, provided a much greater degree of predictability upon the larger sample population of California cities. The research concluded that, regardless of which municipal department the risk management function is placed, agency settlement philosophy, delegated settlement authority, and bundled service delivery through a TPA achieves the most effective WCCR and WCOR indicators.

**Conclusion 4**

The phenomenological findings from Research Question 3 (RQ3) related to identifying those risk management best practices that a municipal agency in California should adopt as having the greatest positive impacts to an effective workers' compensation program and confirms the exigent body of literature cited in Chapter 2 (Algire, 2015, 2016, 2019; Deeb, 1999; Hock, 2011). While there were eight main themes that emerged through this research study, the nexus to existing literature is embodied in the following:

- Safety and loss prevention
    - Culture of safety
    - Written safety programs
    - Employee safety and training
    - Employee safety equipment

- Disability management
    - Employee return-to-work program
    - Claims administration
    - Quick treatment protocols
    - Employee wellness programs

Research and existing literature concludes that a two-pronged risk management best practice approach that reduces overall workers' compensation costs is best. Preventing employee injuries with an effective safety and loss control program is the first line of defense. According to Hock (2011), "The best way to contain workers' compensation claims costs over time is to reduce, as much as possible, the frequency of claims" (p. 11). The second prong is disability management after an employee is injured and returning them to their full work duties. Algire (2019) found that "frontline claims professionals rank compensability investigations, disability/return-to-work management, and medical management as the top three capabilities most critical to claim outcomes" (p. 2).

This research draws mirroring conclusions to the survey responses contained in this study. In a similar public agency study that sought to compare risk management policies and practices between private and public agencies, Deeb (1990), found similarly that effective loss control measures are paramount. Speaking to creating a culture of safety in the organization, Deeb concluded that "in order for a noticeable change to occur in the area of risk control, there must be definitive organizational changes made" and that "policies and procedures must be implemented and embraced at all levels" (p. 182).

Grounded in both CBAT and CMT, this research study has provided a more comprehensive understanding of the organizational placement of the risk management function and the impact that it has upon KRIs for the public agency practitioner. This study propounds similar risk management best practices found in other scholarly research, and, therefore, contributes to the existing body of literature in the risk management and workers' compensation claims administration space. Lastly, through this convergent mixed methodology, the research has provided a scholarly based nexus between CBAT, CMT, and public administration (PA) theory, particularly where the PA pillars of efficiency and effectiveness are of utmost concern to the public agency practitioner. With these conclusions made, recommendations for areas of further research are presented.

## Recommendations for Further Research

In this section of the chapter, recommendations for further research, addressing limitations of this study, expanding the research, and examining an emerging conceptual framework are presented.

### Further Research

#### *Examining an Emerging Conceptual Framework*

As discussed in Chapter 1, there are 482 California municipalities. This convergent mixed methodology examined 102 cities quantitatively (21%) and 44 cities qualitatively (43% of the quantitative sample). Within the convergence of that data, a conceptual framework emerged that needs further scholarly examination. One of the major findings and conclusions of this study indicated that a high degree of efficacy was

found in the WCCR and WCOR KRIs when the respondent municipalities had the following framework in place:

- A philosophy to settle workers' compensation claims with existing employees.
- Delegation of some level of settlement authority from the city manager.
- A bundled service delivery through a TPA.

That sample within the sample size indicated a WCCR of 149% and a WCOR at 2.6%. These KRIs combined with the foregoing framework for claims settlement may portend a new model for cities to employ and for agencies to remove these liabilities from general fund reserves. The potential for significant financial savings, improvements to actuarial report development, and lower reserving requirements in an agency's general fund would operationalize those dollars to be available for other municipal service delivery and create public value (Moore, 1995; 2013). Within the sample size of this research study, some cities have already adopted this conceptual framework; it should be examined more thoroughly statewide.

***Examining the Observations Removed From the Study Sample Size***

As discussed in the presentation of the research in Chapter 4, a total of seven observations were removed from the study sample size and regression model calculation as outliers. These observations had WCCR between 300% and 1,200% and were removed to prevent skew within the research study. While there may be superficial and industry-specific reasons for such high WCCR that may include, but not be limited to a change in administrators, agency reorganization, changes to TPAs, or changes in agency philosophy, this research study did not explore these phenomena. Therefore, to understand more globally the reasons for such high WCCR, the conditions and

phenomenological experiences of these observations should be examined in further depth to determine whether or not there is a predictive model that emerges from such high WCCR that would have applicability to the public agency practitioner.

### *Partnering to Study Conceptual Frameworks*

As mentioned in earlier chapters, the quantitative data to further examine these frameworks already exist at the California Department of Industrial Relations, Office of Self-Insured Programs (DIR-OSIP). Cities that are self-insured, directly report to DIR-OSIP on an annual basis; therefore, these quantitative data are publicly available. Additionally, the League of California Cities (LOCC) or the California Legislative Analyst's Office (LAO) could commission the qualitative portion of this research and partner with the DIR-OSIP and other cities that do not report their workers' compensation data to DIR-OSIP. Another entity for potential partnership could also be the International City/County Management Association (ICMA) in concert with the other entities mentioned. Lastly, the study could also include a partnership with academia to provide researchers for the project. In closing these recommendations for further research, the conceptual framework for a workers' compensation claims settlement model for California municipalities should be examined more thoroughly with a specific goal to test the model and to determine phenomenological conditions related to exceedingly high WCCRs.

## Concluding Remarks and Reflections

This convergent mixed methods research study examined the organizational placement of the risk management function in municipalities that pool their workers' compensation risk with the PRISM joint powers authority (JPA). The quantitative

portion of the research examined the impact of this organizational placement upon the KRIs of WCCR and WCOR. The qualitative portion of the research examined phenomenological conditions within the municipalities that included incumbent practitioner responses to a research survey questionnaire. After field research was completed, the data were merged, which provided research-based findings and conclusions that risk management practitioners and executive leadership can reflect upon within their own municipalities with the potential for capturing efficiencies in the public domain (Lazenby, 2009).

In answering the overarching research questions of this study, the specific impact to workers' compensation program administration based on which department the risk management function is assigned, remains inconclusive and requires further research with a larger sample size. As discussed throughout this study, the risk management function is typically placed within the city manager, city attorney, human resources, or finance departments. Within this sample size, there were no observations where the risk management function was a stand-alone department. Given the inconclusive outcome of the organizational placement question, future research should also examine whether California municipalities would benefit from creating a new risk management department that reports directly to the city manager in smaller cities (Lazenby, 2009).

However, with respect to the organizational placement question, within the sample size of this research, there was some degree of significance and frequency of efficiency as measured by the WCCR and WCOR when the risk management function was placed in the city manager and human resources departments. While regression models predicted no statistical significance for applicability to the larger population,

these observations did reveal a degree of frequency that indicated higher WCCR and lower WCOR ratios. Therefore, these findings should also be further examined in future research.

When the phenomenological responses from the survey questionnaire were merged with the quantitative organizational placement observations, a more interesting and significant finding emerged. A smaller sample within the observed sample size indicated the highest WCCR and the lowest WCOR when those municipalities had a compromise and release settlement strategy with existing employees, delegated settlement authority to the program administrator, and delivery of bundled services through a TPA. Therefore, it is recommended this finding also be further examined in future research that would seek to compare agencies that do not employ a settlement strategy with existing employees versus agencies that do. Research of this type might yield significant findings that would portend a completely different way of approaching workers' compensation program administration (Sullivan, 2017).

Given the ever present and austere fiscal positions of California's cities, the foregoing would be an important contribution to existing literature and PA practice. The traditional public agency ethos has been to only settle claims of existing employees by stipulated awards, which keeps liabilities for future medical care related to injuries on the agency's risk book for years. Rarely would the public agency settle these claims by full compromise and release settlement until the employee separates from employment or retires. This research study indicates that the alternative may be more financially efficient and effective by reducing open claims, reducing outstanding liabilities, improving actuarial outcomes, and lowering the overall cost of risk by settling claims

with existing employees (Sullivan, 2017). In doing so, the agency can then operationalize those finances that would have otherwise been reserved liabilities in the agency's general fund.

In closing, this research study provided an opportunity for the researcher to utilize practitioner experiences in a scholarly setting and, thereby, fill in gaps to an existing body of work in the risk management practitioner discipline within the public agency space. Once the relationship between organizational placement of the risk management function becomes clearer when combined with the effect of such factors as years of experience, education level, professional certifications, settlement philosophy, settlement authority, claims administration, and service delivery, PA practitioners can take steps to improve customer service, increase efficiency and effectiveness, and make better use of taxpayer dollars in delivering services to the community, all hallmarks of public administration theory (W. Wilson, 1887).

This research study also portends predictability in public policy setting as it applies to overarching workers' compensation administration and the execution of those operations by executive leadership and incumbent administrators. A framework emerged from this study that reinforces the PA pillars of accountability, efficiency and effectiveness, and provides for a mechanism to keep the checks and balances of the politics-administration dichotomy in place (W. Wilson, 1887).

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# APPENDICES

APPENDIX A

RESEARCH SURVEY

**Research Survey** **November 1, 2020**

This survey is part of a research study seeking to identify risk management best practices related to workers' compensation program administration in California municipalities. Your responses to survey questions will be presented with other findings as part of this research study. Your participation is voluntary and any personal identification will remain confidential with the researcher. This research study is not grant funded and is sponsored by the California Baptist University's (CBU) department of On-Line and Professional Studies (OPS). This research study will adhere to the ethical standards contained in the American Society of Public Administration (2013) *Practices to Promote the ASPA Code of Ethics.*

**RESPONDENT IDENTIFICATION (Confidential)**

**Agency Name:** _____

**Respondent Name:** _____

**Position:** _____

**Years of Experience:** _____

**Department:** _____

**List Education:** HS AA BA MA PhD/JD (Circle All That Apply)

**Certifications:** _____
(e.g., ARM, ARM-P, CPCU, IPMA-HR, PHR, SPHR, etc.)

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**RESEARCH SURVEY QUESTIONS**

**Q1 –** What is your agency's demographics in terms of the following specific data:

_____ Your City's Population (as of May 2020, California Department of Finance)

_____ Your Agency's FTE for All Employees

_____ Your Agency's FTE for Public Safety Officers (All Labor Code 4850 Positions)

**Q2** – Please indicate the major essential job functions of your position (mark all that apply):

_____ Workers' compensation program administration.

_____ Property and casualty claims administration.

_____ Safety, loss control, and loss prevention.

**Q3** – How many professional staff do you supervise:

_____ 0 – 3 Staff

_____ 4 – 6 Staff

_____ 7 – 9 Staff

_____ Greater Than 10 Staff

**Q4** – Do you hold claims settlement authority to any dollar value? If yes, please indicate your claim settlement authority. If no, please indicate who in your agency holds claims settlement authority:

_____ Yes _____ (level of authority in dollars)

_____ No _____ (who holds settlement authority)

**Q5** – What is your agency's claim settlement philosophy for workers' compensation claims for employees still employed with your agency?

_____ Full Compromise and Release Settlement (C&R)

_____ Stipulated Award (STIPS)

_____ Neither ; My agency does not settle claims until employee leaves service

**Q6** – What is your agency's Self-Insured Retention (SIR) level for workers' compensation claims?

_____ Self-Insured Retention (SIR)

**Q6** – What department in your agency is the biggest loss driver for workers' compensation claims costs?

_____ Department (e.g., public works, public safety, community development, etc.).

**Q7** – Does your agency provide workers' compensation claims administration in-house?

_____ Yes

_____ No _____ (List Third Party Administrator)

**Q8 –** How does your agency deliver services under your Workers' Compensation Program? Specific services include claims administration (CA), bill review (BR), pharmacy benefits management (PBM), utilization review (UR), nurse case management (NCM), and medical provider network (MPN). Please select one of the following in answering this survey question:

_____ A bundled service delivery model that includes CA, BR, PBM, UR, NCM, and MPN all under the
same third party administration (TPA) firm.

_____ An unbundled service delivery model wherein CA, BR, PBM, UR, NCM, and MPN are provided
through different third party administration (TPA) firms.

_____ A combination of bundled and unbundled service delivery and how the program is structured:

a. Bundled services include: CA BR PBM UR NCM MPN (circle all that apply).

b. Unbundled services include: CA BR PBM UR NCM MPN (circle all that apply).

**Q9** – What are your top three risk mitigation best practices for workers' compensation program administration and keeping costs under control? (Please list at least three and label #1, #2, and #3).

_____
_____
_____

**Q10** – Please add any additional comments you feel may be pertinent information related to this research survey. (e.g., agency's safety culture, leadership's view of risk management, etc.).

_____
_____
_____
_____

APPENDIX B

CODING KEY

Coding Key – Research Survey Responses

1. How many years of experience do you have in your field?

    1) 0 to 5 years

    2) 6 to 10 years

    3) 11 to 15 years

    4) More than 15 years

2. What agency department do you report to?

    1) Human Resources Department

    2) Finance Department

    3) City Attorney Department

    4) City Manager Department

    5) Risk Management Department

3. What is your highest level of formal education?

    1) High School Diploma Graduate or GED

    2) Associate's Degree

    3) Bachelor's Degree

    4) Master's Degree

    5) Doctorate

4. List all professional certifications you hold (e.g. ARM, ARM-P, CPCU, IPMA-HR, SPHR, etc.). If none, please enter N/A.

    1) Yes

2) No

5. Please indicate the major essential job functions of your position (mark all that apply).

1) Workers' Compensation Program Administration

2) Property and Casualty Claims Administration

3) Safety and Loss Control/Prevention

4) All three job functions

6. How many professional staff do you supervise?

1) None

2) 1 to 3

3) 4 to 6

4) 7 to 9

5) Greater than 10

7. What is your agency's claim settlement philosophy for workers' compensation claims for employees who are still employed with your agency?

1) Full Compromise & Release (C&R) Settlements

2) Stipulated Awards (STIPS) Only

3) Both C&R and STIPS are used in my agency for existing employees

4) Neither - My agency does not settle claims with existing employees

8. Do you hold delegated claim settlement authority for workers' compensation claims to any dollar value?

1) Yes

2) No

9. How does your agency manage workers' compensation claims administration?

1) Third Party Administrator (TPA)

2) Agency Claims Administration

3) A Combination of TPA and Agency Claims Administration

10. How does your agency deliver services under your workers' compensation program? (Services include: claims administration, bill review, pharmacy benefits management, nurse case management, utilization review, and medical provider network).

1) Bundled Service Delivery where all services are delivered by one Third Party Administrator

2) Unbundled Service Delivery where services are delivered by multiple Third Party Administrators