

BUDGETING IN TIMES OF FISCAL STRESS: EXPLAINING STRATEGIES FOR  
REDUCING AGENCY EXPENDITURES

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BUDGETING IN TIMES OF FISCAL STRESS: EXPLAINING STRATEGIES FOR  
REDUCING AGENCY EXPENDITURES

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BUDGETING IN TIMES OF FISCAL STRESS: EXPLAINING STRATEGIES FOR  
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Date of Graduation

DISSERTATION ABSTRACT

BUDGETING IN TIMES OF FISCAL STRESS: EXPLAINING STRATEGIES FOR  
REDUCING AGENCY EXPENDITURES.

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This research compared budget coping strategies of state administrative heads in public state agencies focusing on the influences of executive administrator characteristics, and organizational characteristics. Budget theory and cutback management with organizational theory is used in this research in conjunction with Lowi's public agency model. The research is supplemented with data from survey research in an effort to frame the relationship between the types of budget strategies used by state administrators during times of fiscal austerity.

Quantitative analysis is utilized relying on survey data obtained from the 2004 survey of the American State Administrators Project (ASAP). This project surveyed state agency administrators across the country in over 80 fields. The population size used in this study was 943 cases in the 2004 survey. Fourteen hypotheses were developed for

this study; they are divided evenly among administrator variables and organizational variables.

Crosstabulation and binary logistic regression (logit) is used to analyze the data in this study. Results of this analysis show that organizational variables were found to have more influence on administrator choice of budget coping strategy than administrator characteristics. Organizational size (number of employees) and organizational budget size showed many statistically significant associations with the budget coping strategies. The control variable divided government also has influence across all model types in influencing the administrator's choice of budget coping strategy. The premier budget coping strategy is identified as hiring freeze.

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## **CHAPTER ONE**

### **INTRODUCTION**

Understanding budgeting policies and processes has been one of the most prevalent tasks undertaken by public administrators and academics. Public budgeting manages to influence everyone in society by incorporating varying financial activities for individuals, businesses, governments, and organizations. This statement is not meant to evoke a negative image of budget policy but to acknowledge the vast spectrum of budget activities undertaken in our society. We use budgets as a tool to function or operate. Wildavsky (1984) referred to budgets as a plan comprised of goals that, “lies at the heart of the political process.” (p.5) Rogers and Brown (1999) perceive it as “fascinating”, referring to budget policy as, “. . . the nerve center of government and the place where policy is routinely made.” (p.441) Schick (1980) acknowledges the work of Wildavsky when he refers to the budget as, “. . . the life-blood of the government, the financial reflection of what the government does or intends to do.” (p.71) As Thomas Dye succinctly elucidates, “The budget is the single most important policy statement of any government. . . the budget tells us how much money is being spent by government and for what it is being spent” (2001, p.150).

In essence, scholars of budget theory point to a plan of action, a financial document that guides the behaviors of those that have a stake in the resources that are

being used. Budgeting, according to Wildavsky and Caiden, “. . . is supposed to contribute to continuity (for planning), to change (for policy evaluation), to flexibility (for the economy), to rigidity (for limiting spending), and to openness (for accountability). (2004, p184)

Topics associated with the budget are consistently salient. Whether the country experienced an economic recession or expansion, newspapers, magazines, and news broadcasts have kept the public informed of national, state, and local economic news. This observation is further substantiated by the noticeable increase in financial management laws, increased deficits, increased spending on military engagements, recent economic recessions, and the increase in devolved programs from the federal government to the states. A substantial amount of budget dialogue has not been limited strictly to rudimentary economics but has incorporated an increase in competition among states and localities for additional funding and resources from the federal government. This public discourse on budgeting also includes the resounding plea for government to take fiscal accountability of budgets and the economy.

A variety of recent scholarly works (Wildavsky, 1980; Schick, 1980; Miller, 1991; Rubin, 1999; Rogers & Brown, 1999; Wildavsky & Caiden, 2004) document increased competition. This competition and public dialogue exemplifies the generalization that budget policy is as much economic as it is political. Budget policy certainly relates to revenues and expenditures. However, the survival and health of organizations are also associated with budgeting. I believe organizations or agencies to be legitimate public companies created and legally acknowledged to provide service or



business to the public. They are primarily funded by public money and guided by the United States federal and state governments.

The recent economic environment within the states has included a severe economic downturn resulting from the terrorist attacks of September 11, 2001. Consequently, states responded to this decline with a variety of solutions for the survival of their respective state agencies. One of the solutions taken by the states was to decrease expenditures and look to supplementing revenue in new ways.

Government agencies compete for increased revenues to implement programs, execute daily operations, procure required materials and resources, invest, and pay debts. However, during times of fiscal austerity, it is important that public organizations seek alternatives to curb expenditures in the upcoming budget. Presently, there does not exist any cataloguing of budget strategies used by top public agency administrators, nor any documentation comparing agency budget strategies. There are few case studies of how a specific organization seeks new ways to enhance budget revenue but no empirical studies have been reported. Whether agencies receive funding from private sector sources or from the federal or state governments, organizations must identify feasible ways to continue providing uninterrupted and efficient service to the public with diminishing revenues and minimized costs. This is vital to the health of the organization. By cutting expenditures, organizations can control activities, preserving its health and longevity. Reducing expenditures may take the form of curbing overtime pay, freezing employment of new hires, shelving new programs or projects, cutting capital outlays, or eliminating funding of organization healthcare options.

These strategies are employed because of the increased competition for agency funding. Rubin (1990) writes, “. . . budget actors may devise a variety of strategies to help them compete successfully.” (p.107-108) Whicker and Mo (2002) state that, “. . . because public budgeting involves a wide variety of actors with different spending goals, competition among agencies to garner resources necessarily leads to politically calculated strategies.” (p.216) Strategies to reduce funding are also carefully chosen to lessen the cuts to an agency’s budget. The budget coping strategies chosen by the agency administrator are weighed with other strategies. In addition, agencies have to presume the expected costs they will incur as a result of these actions. The resulting decision to execute budget reduction strategies lie with the administrator within the context of the type of organization. Therefore, the characteristics of the agency head and the organizational features are the two main areas of this research into understanding the budget strategies used by agency administrators during the year 2004. Administrator characteristics such as gender, method of selection for career placement, experience, and the administrator’s fiscal ideology are presumed to have influence on the type of budgetary coping strategy used by the agency administrator because they are all personal characteristics that are a part of the individual. They are personal characteristics that make each individual unique to their role of agency head. These administrator characteristics are a few of the attributes that shape the individual to perform in dynamic ways, and allow the individual to bring something distinct from that of others into the decisions of the workplace. The individual makes the choices of how to proceed with the agency budget, what budget items to reduce, and the plan of action for the coming fiscal year.

Organizational characteristics such as agency type, agency size, and agency budget size influence the budgetary coping strategy employed by the agency administrator because they are facets of the administrator's environment that dictate the actions of the agency head. The rules that guide and maintain the organization as one whole, also influences the decisions of the individuals that form the organization as one holistic entity. The characteristics of the organization influence the budget coping strategy because it is within the rules of organization that the administrator performs. This research will provide an original account of what budget strategies are used by administrators and their organizations as cutbacks occur.

### Budget Reduction Strategies

State administrators and their respective agencies are held accountable to the state budget office and the budget requirements as set forth in each state's budget laws. These budget laws vary by state, as do the budget processes for administrators submitting requests for the next year's funding. It is within these budget processes that the tools or strategies for budget reduction are found. The types of budgetary coping strategies used by top state administrators in public agencies to cope with the dwindling organizational budget are the focus of this research.

Administrators utilize budget coping strategies in times of fiscal crises. These strategies minimize increasing costs and secure organizational operations for the upcoming year.

These strategies are used by agencies for a plethora of reasons -- unforeseen environmental catastrophe, below average revenue projections, or because the federal or state government mandates budget reductions or a decrease in spending. Some researchers (Levine & Posner, 1981; McCaffery & Jones, 2001; Quigley & Rubinfeld, 2000) confirm that in recent years the federal government has increased mandates to the states. McCaffery and Jones (2001) reveal, "Superior levels of government have been fond the last two decades of levying requirements upon subordinate levels of government, not always with the necessary funding to accompany the workload." (p.236)

The amount of unfunded mandates delegated to the states can be contested, but the fact remains that states will have to adjust programs to pay for state agency services and projects that are required. State agency heads must revise budget items to fund agency programs, and budget coping strategies are the tools administrators use to achieve reductions. Whether economically or politically motivated, the state agency administrator must sometimes reduce his or her agency's budget. Strategies for cutting budget items without jeopardizing agency mission or objectives are necessary in austere times. These tools are not to be confused with budget ploys (e.g., merging new or challenged programs with popular programs so that they will be less susceptible to attack) which Axelrod (1995, p.60-61) informs, ". . . may jeopardize the credibility of the agency." Budget strategies are actions taken by the agency administrator to comply with budget reductions during times of economic adversity. I explore these budget coping strategies identifying that some are immediate cuts to agency budgets, while other budget coping strategies delay cuts or lessen the abrupt termination of funding agency activities. It is important to the fields of public budgeting and public administration to study budget

reduction strategies to provide necessary information about these options taken by administrators to cope with economic austerity. Knowledge of these strategies will allow for innovation in future budget reduction tools, and this information will increase our ability to respond effectively and efficiently in austere times. The authenticity of our public service system can be enhanced with the preparation and budgeting of public funds more efficiently during times of austerity. The information derived from this research will supplement the present literature on state governments and administrator decisions in the budget process.

### Historical Background

Government budgeting is a vast subject to research and analyze. The activity of the economy is volatile with periods of growth and expansion visited by periods of reduction and contraction. Lance LeLoup characterized the budget scene in the federal government:

The environment for budgeting shifted markedly from expectations of growth in the 1960s to one of constraints and cutback management in the 1980s and 1990s. As the environment changed, agency strategies and the norms of budgeting shifted as well. (2002, p.1)

One area of budget history that characterized the best of times in the economy was the late 1990s. The national economy was prospering and state governments enjoyed surpluses as a result. Jernann & Quadrini (2007) document that, “During the second half of the 1990s, the United States experienced the continuation of one of the longest

economic expansions. The distinguishing characteristics of this period” were summarized as:

1. High growth rates of output, employment, investment and wages.
2. High growth rates of labor productivity.
3. A stock market boom.
4. A financing boom for new and expanding firms.
5. A sense of moving toward a “New Economy”.

In the article Jernann & Quadrini use statistical formulas to explain their conclusion that, “The reaction of the economy to a stock market boom is consistent with a number of features of the 1990s expansion in the U.S. economy.” Nordhaus (2002) testimony to the Joint Economic Committee confirms the findings in the Jernann & Quadrini article, he states:

. . . there was a major productivity upsurge in the middle 1990s. The growth in productivity per hour since 1996 has been 2.8 percent per year, which is slightly higher than the average for the entire postwar period of 2.5 percent per year.

In fact, the United States Census Bureau’s National data book confirms a gross domestic product (GDP) that nearly doubles between the year 1990 and the year 2000. GDP is the premier economic indicator measuring the nation’s output of goods and services. The real GDP adjusts for inflation. In 1990, the GDP in real year 2000 dollars was 5.8 trillion and by the year 2000, the GDP in real year 2000 dollars was 9.8 trillion. The GDP percent change in 1999 was 4.5 compared to 0.8 in 2001 and 1.6 in 2002. The GDP soared during the 1990s with the unemployment rate below 5%, and investments high. It is these factors that lead many economists and business people alike to claim, as Labonte and Makinen (2002), “The on-going economic expansion that began in March 1991 has entered the history books as the longest expansion in American history.” (p.49)

The beginning of the 21<sup>st</sup> century however, marked a time when economic prosperity of the late 1990s was interrupted by economic recessions for many states. Then in late 2001 the nation was devastated by the events of September 11 – the fiscal health of many states was compromised, leaving many state agencies scrambling in search of financial stability. The National Association of State Budget Officers (NASBO) reports annually on the fiscal condition of the states. Several of the NASBO reports attest to the overall economic conditions during the early 21<sup>st</sup> century. According to the December 2001 NASBO report, “Current severe economic conditions mean that state revenues have fallen far below original estimates, leading to budget shortfalls or significant fiscal woes in nearly every state.” (2001, p.1) The following year in November 2002 the NASBO report found that, “States used an assortment of short-term solutions, such as drawing from one-time sources and cutting spending to bring their fiscal 2002 budgets in balance.” (2002, p.1) In addition, the same report stated, “Fiscal 2002 revenues show how hard state coffers were hit by the economic slowdown and the more dramatic economic aftereffects of the September 11 attacks.” (2002, p.9) In fiscal year 2003 NASBO reported, “Continuing the trend of the previous two years, state finances in fiscal 2003 remain fragile. To combat persistent budgetary stress, states have ratcheted down expenses both through across-the-board and targeted reductions to a wide array of programs.” (2003, p.1) The following year, the 2004 NASBO report uncovered a “slowly recovering economy” with “slight revenue gains.” (2004, p.1) Finally, in December 2005 the NASBO reported, “While their finances improved substantially in fiscal 2005, states still face myriad spending challenges.” (2005, p.1) The downturn of the economy within the states is reflected in the annual percent change of the national

real GDP. In 2001, the real GDP fell to 0.8 percent change this number. The percent change in 1999 and 2000 were 4.5 and 3.7 respectively. The real GDP slowly increases to 1.6 percent change in 2002, 2.5 percent change in year 2003, and 3.9 percent change in year 2004.

Analyzing survey responses from state agency administrators during this period provides reliable and valid information on the coping strategies employed during a memorably critical time in recent state budget history. In addition to the economic downturn, unfunded mandates left states and localities scrambling for supplemental revenues in public policy areas of education, healthcare, and welfare. This research illustrates specific strategies employed by state administrators to allow state governments to function. States and localities competed for limited federal grants, sought private funding, and/or implemented user fees to provide government services. The amount of expenditures for state services grew remarkably because of the devolution of social service programs from the federal government to localities (Bowling et al., 2005). Social services is only one area of state programs that grew rapidly, devolved programs also included the areas of education and transportation. State agencies had to cope with budget shortfalls, and although relief was pending, the decisions made by agency administrators would assist in easing agency hardships. This leads to the primary investigation of this research. What factors influenced the individual choices of administrators as they pursued cutbacks?



## Classic Budget Theory

Budget theory as explained by Wildavsky (1967) is a calculated financial process that occurs incrementally. According to Wildavsky, agency requests for funding are increased by some small percentage over the previous year's base amount. This is known as incremental budgeting. Typically, the agency's budget expands by some percentage each year.

The reduction of agency budgets also can be incremental. The budget coping strategies are tools that can be applied incrementally to reduce a percent of agency expenditures throughout a specific period. According to Rubin (1990), formulas can be used to achieve a percentage decrease to agency budgets. Incremental reductions using formulas and budget coping strategies are two ways to limit the competition for funding and reduce expenditures.

The budgetary coping strategies used in the past have included across-the-board cuts, release of personnel, hiring freeze, and the elimination of programs; strategies that are more recent include privatization. (Perez & Zelio, 1991; Wright, 1999; Bowling, 2004). The strategies used by the state administrator range from the highly creative to the more mundane. In any event, the strategies vary by observable effects, organization, its leadership, and the legal parameters set within the organizational and state environments. Whichever course of action the administrator chooses; the underlying assumption is that the decision made is in the best interest of the organization. McCaffery and Jones (2001) attest, "before developing plans to manage financial stress, prudent managers will attempt to define the seriousness of the financial crisis." (p.245)

## Lowi's Agency Model

Developed by Theodore Lowi in the late 1960s, the premise of Lowi's policy type model is that different types of public government agencies manage distinct types of policies within different political activities. Lowi (1964) defines and classifies government into ". . . three major categories of public policies in the scheme: distribution, regulation, and redistribution. These types are historically as well as functionally distinct" (p.689). Lowi's work has been expanded by many scholars, notably Newman's (1994) article coupling the Lowi model with gender research, and Hill & Plumlee's (1984) article focusing on budget politics. The various research using Lowi's model of policy areas point to the difference in operations among these organization types. For example, the power given to the environmental agency is distinct from that of the power given to a labor department. The four policy typologies as classified by Lowi – distributive, redistributive, regulatory, and constituent – have distinct characteristics, which cause the respective agencies grouped to each typology to function differently. Using this information to study state agencies, one would assume that their budgets and budget coping strategies would also vary. Indeed, based on Lowi's model, Newman (1994) showed that ". . . organization behavior is determined by agency type".

## Research Focus

Fiscal year 2004 is chosen for analysis because of the economic circumstances associated with the federal and state governments during this period. The first years of the 21<sup>st</sup> century were marred with recessions and economic upheavals causing state and federal governments to seek alternatives to funding programs and services.

This research will focus on the activities and data from state governments as these entities are quasi-sovereign and implement policies differently than the federal government. States governments are also smaller replicas of the national government with varying characteristics allowing straightforward comparisons. The expectation of budget shifts from expansion to contraction and vice versa, along the economic business cycle, parallels the shifts in the budgeting norms previously observed by LeLoup at the federal level. These observations might also be expected at the state level as the fifty states reflect the federal government with varying state economies. As the economic environment changes, so do the budget strategies used to minimize the costly effects of the economy.

This research is significant in that it is practical and applicable to the present functions of state agencies. Classic budget theory in combination with current state survey research is used to illustrate how different organizations cope with budgetary constraints during times of retrenchment, specifically during the early 2000s. This research presents original analysis into an area of state administration that previously has been undocumented.

As mentioned earlier, during this time of reduced state expenditures, it becomes critical that states and localities locate feasible alternatives to funding the necessary social services demanded by the public, while protecting equity, efficiency, and the desired federal or organizational outcome(s). Although financial upswings, economic contraction and expansion within the budget cycle affect the states differently, not all states and their agencies experience austere times. Some research on state surpluses during economically ravaging times have been documented by groups such as NASBO.

The purpose of this research is to identify the budgetary coping strategies used by state agency administrators in the most recent economic recession of 2004. Specific questions to be answered include: Is there a difference in the types of budget strategies used by state administrators during this time? Do administrators or organizations have more influence on budget coping strategies? Specifically, what influence do the organizational variables of organizational size, budget, and type have on budget coping strategies? Do the administrative variables of gender, method of selection, experience, and fiscal ideology, influence the type of budget coping strategies used by a state agency administrator?

### *Research Questions*

The central questions associated with this research are:

RQ1. Are administrator characteristics more influential in the types of budgetary coping strategies chosen by agency administrators?

H1a) In comparing male and female state agency administrators, female administrators tend to use fewer budgetary coping strategies than male administrators.

H1b) In comparing male and female state agency administrators, female administrators are more likely to use delayed budget coping strategies than male administrators.

H2a) In comparing state agency administrators, those that identify themselves as fiscally conservative will utilize more budgetary coping strategies than administrators that identify themselves as fiscally liberal or moderate.

H2b) In comparing state agency administrators, those administrators that identify themselves as fiscally conservative will utilize immediate budget coping strategies more than administrators that identify themselves as fiscally liberal or moderate.

H3a) In comparing state agency administrators, those appointed by the governor will use more budgetary coping strategies than administrators appointed by boards or the legislature.

H3b) In comparing state agency administrators, those appointed by the governor will use immediate budget coping strategies while those appointed by boards or the legislature will use delayed strategies.

H4a) In comparing state agency administrators, administrators with a greater number of years of experience (longevity) will use fewer budget coping strategies.

H4b) In comparing state agency administrators, administrators with increased longevity will use budget coping strategies classified as delayed cuts.

RQ2. Are organizational characteristics more influential in the types of budgetary coping strategies chosen by agency administrators?

H5a) In comparing state agency administrators, those administrators operating in agencies categorized as regulatory will use more budget coping strategies than any other agency type.

H5b) In comparing state agency administrators, budget coping strategies will differ among regulatory, distributive, redistributive, and constituent agency types.

H6a) In comparing state agency administrators, the greater the total number of agency employees in the organization, the greater the use of budget coping strategies.

H6b) In comparing state agency administrators, budget coping strategies will differ among the organization size. The bigger agencies will use more immediate cuts.

H7a) In comparing state agency administrators, as agency budget size increases, the number of budget coping strategies will increase.

H7b) In comparing state agency administrators, budget coping strategies will differ among the budget size of administrator organizations. Larger budget size use more immediate cuts.

### *Methodology*

My research utilizes survey results from the 2004 American State Administrators Project (ASAP), as the empirical basis for research analysis. The data obtained from this nationwide survey includes over 900 state administrators' responses to questions about budgets, agency programs, fiscal austerity, cutback strategies, intergovernmental contact, and government regulation. Using cross tabulation and descriptive techniques for

exploration, this research will provide information to practitioners and academics. It supplements the existing public administration literature by providing a detailed analysis into administrative and organizational influences on present-day state agency budget coping strategies.

### Organization of Research

Chapter one of this dissertation presented an introduction to the research with highlights of the scope and background of the research, in addition to the methods employed. Chapter two will summarize the relevant literature on budget theory, budget coping strategies, and the administrative and organizational variables used in this research. Chapter three provides a detailed account of the methodology used in this research. It incorporates a discussion of ASAP survey methods and the methods of analysis. Chapter four presents the analysis and findings. The conclusion of this research is found in chapter five.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### Introduction

The theoretical foundation of this research centers on budget theory to assess the budget coping strategies of public agency administrators. Incrementalism is used as the framework to guide this investigation because this theory best encapsulates the processes of budgetary politics. The premise of incrementalism is that budgets are altered by percent increase; however, this theory also applies to the percent decrease of agency budgets. Budget reduction goals are achieved through increments not by overhaul. The budget items that agencies seek to reduce have lasting effects on the organization and the public clients these agencies serve. The research questions of this study are as follows: What influence do administrator and organizational characteristics have on budget coping strategies? Is there a difference in the types of strategies used by administrators? Does the type of strategy employed differ among agency types? This chapter creates the framework for the dissertation research and discusses the literature. The factors used in the research hypotheses are discussed and supported by a comprehensive review of the literature. The chapter concludes with a brief summary.



## Theoretical Foundation

Classical budget theory sets the foundation for this research, specifically the theorists that have written extensively on Incrementalism. Research on Incrementalism has verified the influence of the budget environment, stakeholders, and evidence of a political struggle.

Budget theory was influenced by the early writings of Charles Lindblom (1959) in the classic, *The Science of Muddling Through*. In this article, he established the concept of incrementalism. Lindblom introduced the idea that policy usually is created by a series of small or incremental events, which include careful and systematic consideration of possible alternatives toward achieving the policy goal. He acknowledged the limits of man's 'intellectual capabilities' as advanced by Herbert Simon's bounded rationality, and proposed the root and branch method; a systematic process that focuses on building off a previous stage ". . . step-by-step and by small degrees." (p.81)

The idea that policy is created by a process catapulted into the forefront of public administration and management research. Subsequent research demonstrated that human beings are not only limited in the ability to make choices, but that there is a process by which informed decisions were being made. Some of those scholars are presented here.

Wildavsky (1986, 1997, and [2004]) builds on Lindblom's premise by advancing budget theory with the assertion that "Budgeting is incremental, not comprehensive." Once a budget is created, this prototype is added to in subsequent years never recreated from a hollow framework. Wildavsky's mantra encompasses perspectives on the various elements existing within the practice of budgeting. He claimed budgeting is consensual;

all parties involved must reach a compromise with the budget item if there is to be any benefit from the overall budget. He also insisted budgeting is fragmented; an agency's appropriations must be considered and agreed upon by many actors, from the state budget office to the state legislature. This fragmentation focuses on the various key budget players within the state that have influence over the agency's budget for the fiscal year. Budgeting is social; many people will interact in determining which budget items will be funded. Budgeting is 'satisficing'; not everything that is desired by the agency is granted, therefore budget makers try to get what they can. Finally, budgeting is repetitive; budget items may come under review each year for reappropriation.

Lindblom and Wildavsky created a premise for the discipline while others chose to either expand or criticize it. Several authors (Fenno (1966), Sharkansky (2002), Kingdon (1984), among others) developed or supported the theory. Naomi Caiden, who has written alongside Wildavsky, considers incrementalism to be an informal practice within the process of budgeting.

On the other hand, many others denounce the usefulness of Incrementalism (Schick (1980), Tucker (1982), and LeLoup (1980)). Among the reasons is that budgeting has changed over the years, that a budget base does not exist, no standard definition of the concept incremental, and that budgeting is comprehensive relying on the health of the economy. Whether one supports the incremental premise or criticizes it, the fact remains that this core description of budgeting provided a constructive and essential means to approach the practice of budgeting.

Caiden confirms that:

Budgeting works best where year-to-year adjustments are marginal, where it is possible to make firm commitments in advance of expenditures, where the recent past is a good guide to the immediate future, and where results may be easily and promptly evaluated. . . Policies of incrementalism, or regular additions to the budget base, have also helped to accommodate change and increase predictability from year to year. (1997, p.409)

Kettl also defends the usefulness of Wildavsky's premise as he reiterates:

Wildavsky's book was revolutionary . . . first, it was a direct challenge to economists and their efforts to build a new approach to policy analysis. . . second, a direct challenge to traditionalists in political science and public administration. . . third, Wildavsky helped blaze the trail for the budding movement toward 'public policy'. (2004, p.xiii)

Incrementalism, like anything in life, is not without its critics. Allen Schick decries,

...it is neither significant nor useful...To say that budgeting is incremental is merely to say that it is no different than all the organized processes familiar to human beings. Incrementalism covers just about everything in budgeting, and it therefore explains just about nothing. (1980, p.9)

Axelrod refers to incrementalism as a “. . .creature of its times.” (1995, p.18)

Critics posit that incrementalism is outdated and not relevant to present economic and political times (Tucker, 1982). Berry (1990) believes most criticism stems from the turning tide of the 1980s. He states, “There is little doubt that changes occurring during the Reagan presidency are a partial explanation for the tendency of recent studies to reject the once widely accepted hypothesis of incrementalism” (p. 168)

Incrementalism is relevant. Authors within the field of public administration continue to create explicit writings using this premise of incrementalism as a basis for research (Weiss & Woodhouse, 1992; Hayes, 2001; Morcol, 2006). As Harvey Tucker convincingly demonstrates, there are many meanings, models, and increase in knowledge as a result of Lindblom's initial premise.

Tucker informs:

Although none of the critical papers . . . achieves the goal of disconfirming incrementalism, each makes a valuable contribution to our understanding of budgeting. One need not reject the work of proponents of incrementalism in order to recognize the value of the work of critics of incrementalism...the destructive debate impeded the growth of knowledge. . . progress in model building would be stimulated if critics of incrementalism would devote less effort to disconfirmation by identifying counterexamples and more effort to identifying superior models. (1982, p.335)

Incrementalism is undeniably a core perspective within budget theory. Whether endorsed or criticized, it has provided a valuable basis for research into the decision-making aspect of budgets. It applies to a distinct process. “Process is and should be the focus of research, says Mohr.” (1987, p.187) It provides knowledge of all components, interactions, and our actions within the environment. It is the only way to learn, analyze, and reform our standards and practices.

Budget reductions are a component of incrementalism. This component illustrates the percent change in the decrease of agency budgets. Wildavsky (1984) stated, “A percentage cut or increase, providing it is not too large, may be viewed as a marginal change enabling the participants to observe the consequences in a complex area and deal with them piecemeal as they emerge in the future.” (p.148) The term decrementalism or decremental budgeting emerged during the 1980s to describe facets of the Reagan domestic economic policy. Decrementalism affects budgets similarly as cutback budgeting yet Schick (1983) distinguishes between the two. Schick explains:

Decremental budgeting can be distinguished from ‘cutback budgeting’ in which major program changes are made in recognition of the fact that resources do not permit the government to continue doing all that it did in the past. While some cutback budgeting was practiced during Reagan’s first two years, most of the reductions were made in decremental fashion. (p.19-20)

Levine (1984) writes about decrementalism using human resource management as a subject reference. He explains that under decrementalism the “spending-service cliché” loosely links expenditures, revenue, and services. Decrementalism according to Levine is a short-term adjustment pursuant to cost savings, and maintaining the effectiveness of operations. (p.251) I believe cutback budgeting is an aspect of budgeting in austere times. The budget coping strategies are tools used to reduce expenditures. These strategies are implemented with precision by use of percent reduction or budget dollar goals. Decrementalism describes this phenomenon when programs, projects, and services are eliminated and/or reduced because of insufficient resources.

### Budgeting in Times of Fiscal Stress

Incrementalism is one approach to budgeting. As Gist (1989) explains:

The nature of budgetary decisions is well suited to incrementalist behavior. Budget decisions are frequent and routinized, subject to many centers of influence and fragmented decision authority, and relatively easy to compromise because of the divisibility of money, compared with issues... (p.235)

The budget coping strategies used during times of fiscal stress are incremental approaches to reducing budget expenditures. Given that calculated reductions are sought in this budget activity because the resources are scarce, and this alters projects, programs, and services, then aspects of decrementalism are part of this budget reduction decision-making process. Whicker and Mo (2002) indicate, “Incremental budget strategies are most likely to be used when the budget environment is favorable.” (p.231) When the

budget environment is unfavorable, or when decreases in allocation must be requested by the agency or external entities, the budget strategies used during these times of fiscal stress are budgetary coping strategies. These strategies are documented in the research area of retrenchment or within the cutback management literature.

### Cutback Management Literature

Cutback: the term best describes the need to maintain an equilibrium to some extent by ‘doing more with less’ and protecting services, programs, and projects from termination. Agency executives seek supplemental funding, operate under restraint, or identify ways/tools to “cope” during times of fiscal austerity. The foremost authority on cutback management was Charles Levine; his innovative writings in the 1970s and 1980s introduced cutback literature to inform scholars, students, and practitioners of the impending resource scarcity within the public sector. He termed this an approaching era of “cutback management.” (Levine, 1996). Levine defined the concept to denote, “. . . managing organizational change toward lower levels of resource consumption and organizational activity. . .making hard decisions about who will be let go, what programs will be scaled down or terminated, and what clients will be asked to make sacrifices” (p.131). He wrote extensively on every area associated with cutback management, from the strategies used, to the many internal and external influences dictating this type of retrenchment. Levine wrote about the difficulty states and localities would experience in satisfying the mandates of the federal government. The burden state agencies and

localities would experience were the result of having to secure state funds to match federal funds. This became increasingly difficult for localities and states because of the decreasing revenue and increasing programs due to the devolution of more federal programs to the states. This phenomenon would cause states and localities to experience considerable fiscal austerity in the form of resource scarcity; budget cutback techniques would be a necessity (1981). In essence, cutbacks are concerned with prioritizing the services and obligations of the organization. The tools used by administrators reflect the best alternative in the current budget situation and at a certain point in time. Therefore, budget coping strategies can vary by organization, time, administrators, environment, and the magnitude of the fiscal situation. Irene Rubin and Charles Levine delved into this aspect of budget reductions. Their writings explain the budgeting process of organizations during times of retrenchment.

Irene Rubin (1980, 1985) wrote recurrently on cutback management, particularly contributing to the viewpoint regarding the lack of flexibility within organizations over their budgets. She proposed that structural response varies by organizations, as do retrenchment strategies. Levine (1997) reiterates that, “Retrenchment politics dictate that organizations will respond to decrements with a mix of espoused and operative strategies that are not necessarily consistent.” (p.374) This literature guides the original investigation into state agency administrators decisions regarding the strategies used to cope with fiscal austerity since the events of September 11.

There are many stakeholders, services, and projects managed by organizations. In accordance with the work of Levine, organizations must take time to apply budget cutbacks in the most feasible, effective, and equitable fashion. There is a great deal for

the administrator to take into consideration before making a choice, including criteria by which to evaluate the tools, desired outcomes or goals, and external pressures from the state, federal government, or any other entity.

### Budget Coping Strategies

Budget coping strategies are the ‘tools’ used to reduce budget items within the agency. As scholars have documented, there has been substantial progress in the kinds of techniques being used. Although many of the long-standing tools are also being used, they all contain specific elements. Levine (1979) identified major steps in the cutback process: 1. Resist or smooth cuts. The initial decision the administrator makes on how to lessen the impact to the organization by that individual’s choice(s) in curbing expenditures. Levine states, “. . .an organization’s or government’s leadership will have to make the choice between struggling to resist cuts or struggling to minimize their negative effects.” (p.182) 2. Deep gouge or small decrements. Levine explains that the rational management strategy would be a deep gouge and the rational political strategy would be to implement small decrements. The choice lay between the impacts of a large budget cut versus small budget cuts over a period of time. 3. Share the pain or target cuts. The strategy across-the-board cuts would be a concrete example of sharing the pain. Levine explains that this strategy is primarily used at the beginning of austere times, and as times worsen, targeted cuts become more feasible to organizational survival. 4. Efficiency or equity. Levine clarifies that this is the most difficult strategic choice to



make in the process of reducing expenditures. The administrator may have to choose between cost and fairness of cuts to disadvantaged sectors. All budget reduction strategies used by organizations fit one or more of these steps. Levine's fourth step in the cutback process acknowledges an undocumented cost to the public. He writes, "Perhaps the most difficult strategic choice to make in the cutback process involves the tradeoff between efficiency and equity. This dilemma stems from both the cost of delivering services to different populations and the composition of the public workforce." (1979, p.182) It is a tradeoff that illustrates the profound nature of the effects of budget reductions on our lives. For public agencies that provide vital services to the populace, there is a prominent duty to uphold the principles of public administration; these foundations of public service must not and should not be compromised.

Allen Schick discusses past strategies, "The tools for cutting expenditure were simple but adequate. Budget makers would estimate available resources and would scour the lists of items requested by agencies to determine where savings could be obtained." (1990, p.86) The same holds true for agency executives. Before submitting requests during times of fiscal austerity, budgets would not be maximized; rather items placed on annual budgets would need careful consideration.

Naomi Caiden (1980) points to some remedies to fiscal stress:

. . . reduction in expenditures, economies in staffing, more accurate accounting, tighter estimates, and effort to demonstrate efficiency and effectiveness in the use of public money. In short, financial authorities are urged to strengthen the basic features of public budgeting as a means to control expenditure, restore public confidence, and set public finances on a firmer footing. (1980, p.143)

Savage & Schwartz (1999) expands upon the work of Schick (1980, 1983) when they identified several standard techniques being used within the country.

The authors state:

. . . namely budget freezes, across-the-board cuts, reducing hiring, marginal reductions in entitlements and transfer payments, raised user fees, the tightening of eligibility standards for program beneficiaries, the loosening of expenditure categories to enable greater flexibility, an increase in program analysis, and the rise of spending targets, sometimes in the form of target-based budgeting. (p.536)

These budget reduction strategies are used currently to curb expenditures. The budget coping strategies used in this research derive from contracting out, cutting outlays, freezing aspects of personnel, cutting subunits, in addition to reducing wages and programs. They will be categorized according to delayed and immediate cuts to the agency budget. Budget coping strategies can be employed to administer reductions over time or used to cut aspects of the organization's activities going forward.

Since the 1980s, privatization has emerged as another popular technique used by state agencies to curb costs. Many scholars have documented the use of this type of public service delivery (Brudney, O'Toole, & Rainey, 2000; Romzek & Johnston, 2000; Peters & Pierre, 2003; Rainey, 2003). Privatization allows agencies to contract out services to other private, public, or non-profit organizations. Dunleavy (1986) attributed the surge in contracting out to "strong interaction between political/corporate privatization campaign" and the new right view of "privatization as innovation, backed by change in public attitudes, bureaucratic powercheck." (p.16-32) According to the Council for State Governments' (CSG) (2005) Book of the States, privatization was one of many techniques used by state agencies to reduce expenditures. In an article by CSG employees Arnold and Perkins (2003) found that during the years of 2002-2003, when most states employed cutback management tools in coping with fiscal stress, one of the options used was privatization. Privatization is a budget coping strategy embraced by

some. However, according to Elling (2004), it is not without costly consequences, and he advised states to proceed with caution.

The preceding literature on budget theory and cutback management provided the theoretical foundation for this research. The scholarly works previously mentioned guide this investigation into the choices of budget coping strategies used by public agencies during times of budgetary contraction.

### Factors Influencing Choice

Research confirms that biographical, organizational, and environmental factors influence decision-making. An individual (agency head) is vested with choosing a budget coping strategy within the context of the organizational environment, so biographical factors are the first cluster of influence chosen for this investigation. According to some scholars, (Tullock, 1965; Downs, 1967; Niskanen, 1971; Wildavsky, 1986, 1997, 2004; Kingdon, 1984; Caiden, 1997, 2004; Rubin, 1985; Lindblom, 1959; Simon, 1997) the chief administrator has the most influence and pressures over the activities and decisions of an organization. In addition, others believe the organization influences how the administrator reacts in every situation (March & Simon, 1958; Lowi, 1972, 1985; Moe, 1984).

In fact, many factors influence administrator decisions. The magnitude of these influences varies across individual, situational, environmental, and organizational realms. Miles' Law (1978) states, "Where you stand depends on where you sit", - one's position

on any given topic can change based on the situation and capacity in which one finds oneself. Sharkansky's (1965) comparison of the budget strategies used by four agencies clearly depicts multiple elements affecting the choice of strategy used by the agencies' top executives. Egeberg (2003) refers to the writings of Simon (1997), "What decision makers know and believe is also partly determined by their organizational position" (p.116). Simon (1997) believed in the duties of the administrator. He declared, "In almost all organizations he has a responsibility not only to establish and maintain the organizational structure, but also to make some of the broader and more important decisions regarding the content of the organization's work" (p.326).

The administrator belongs to part of a bigger entity – the organization. The organizational cluster contains factors that influence the decisions of the administrator. Research has confirmed that the type of agency also influences the activities of the administrator and the organization (Lowi, 1972, 1985; Brudney & Hebert, 1987; Thompson & Felts, 1992). Therefore, the research factors chosen for this investigation divide into two categories: administrator and organizational. Each of these categories are equally important to this research because of the administrator's active role in the budgeting process and the organization's influence on the administrator's actions. According to Hall (1982), "Structural characteristics and individual characteristics interact. Indeed, things that might appear to be a consequence of individual actions can turn out to have important structural linkages."(p.55) The interplay between individual action and organizational culture can be analyzed via the factors chosen for this research. As mentioned previously, organizations like states and organisms vary, so too will their responses to fiscal austerity.

Individual action also varies, according to Miles' Law – “Where you stand depends on where you sit.” (Miles, 1978). This maxim implies that the administrator's action is contingent on his/her position and power held within the hierarchy of the organization. Each administrator is guided by his or her own principles, which interact with the doctrine of the organization. These personal beliefs would influence an individual at any level in an organization. The administrator acts within organizational parameters and decides which budget coping strategy to employ. Administrator factors more so than organizational factors should have greater influence on the chosen budget strategy. Administrators are limited in the kinds of activities allowed within certain agency types. However, within these parameters the decision is unique to that individual choosing a particular tool/strategy to reduce expenditures. The activities of an administrator in a redistributive agency would vary from that of an administrator in a regulatory agency. The agency type may condition the actions of the administrator. Nevertheless, no two individuals in that same position as agency head would choose to employ the same strategies in reducing expenditures. Administrator reasoning, beliefs, and actions will vary within the parameters set by the rules of the organization.

Administrative and organizational characteristics will be explored in this research into the types of budget coping strategies chosen by state agency administrators. The administrative characteristics chosen to have influence on decision-making are limited to gender, fiscal ideology, experience (longevity) and style of career appointment in this dissertation. The organizational characteristics analyzed are limited to organizational size, agency type, and agency budget size.

The administrator, organizational, and control variables chosen for this research will be identified and clearly hypothesized subsequently in chapter three. The rationalization for the administrator and organizational factors used in this investigation is presented below.

#### *A. Administrator Factors*

##### *Gender*

Gender studies have emphasized marked differences between the employment work styles of men and women. Historically, according to (Broverman et. al. 1975; Lahti & Johnson 1992) women have been employed in fields that contain an element of nurturing, such as the healthcare and education professions. Females in the work force tend to exhibit a characteristic trait that translates into being less abrasive than their male counterparts. (p.35-38) Females also tend to be more compassionate, and will do more to preserve the status quo. For instance, rather than utilizing termination or reduction in the workplace, females have more of a tendency to protect and maintain employee relations. (Broverman, et. al., 1975). Based on research it seems as though males are more prone than females to take increased financial risks, dominate fiscal matters, and act quickly and decisively with finances. Succinctly, females are considered more risk averse while males are more inclined to take increased risks. (Powell & Ansic, 1997).

The differences between females and males have been documented since the 1970s; (Loden, 1985; Powell & Graves, 2003) the majority of this documentation indicates limited female contributions in the workplace within a male-dominated society. Clichés referencing the ‘glass ceiling’ and other stereotypical inferences regarding

women have been referenced and reinforced frequently within the literature. (Lahti & Johnson, 1992; Jianakoplos & Bernasek, 1998; Bowling et.al., 2006) It is apparent that women's advancement in the workplace has been nothing short of a slow and arduous process by way of painstaking litigation, continuous determination, changing circumstances, and unfaltering perseverance in the face of adversity. Yet women's advancement within management ranks is generally within fields deemed traditional to women. As Lahti and Johnson (1992) inform:

. . . progress for women occurs fastest in predictably gendered ways. Women are most likely to advance in those agencies and positions that are receptive to women because they are sex-appropriate and women break few gender stereotypes by working on such issues as health, education, or welfare. Women are also likely to advance in positions that lack structural power resources . . . their positions have a relatively small budget, few employees to supervise, and mainly routine decisions to make. Rarely do women lead major agencies, and even more rarely do a majority of women exist in top management. (p.132)

Gender matters, largely due to the way in which we are socialized. Inge Broverman (1975) performed one of the earliest research studies on gender differences. Her study on the effects of sex-role stereotypes on society found agreement on the widely held beliefs of men and women. Findings included characteristics of males and females, cultural acceptance of these characteristics, and "Characteristics ascribed to men are positively valued more often than characteristics ascribed to women." (p.33) Since the completion of her study, the findings from her research have become the basis of further research supporting the stereotypes and characterizations regarding gender. Powell & Graves state:

A study of gender stereotypes in 30 different nations found evidence for common male and female stereotypes. Across cultures, the male stereotype was seen as stronger and more active than the female stereotype. The male stereotype was characterized by high needs for dominance, autonomy, aggression, and achievement, whereas the female stereotype was characterized by high needs for deference, nurturance, and affiliation. (p.45)

We might expect that, the male gender characterization of aggressive behavior will hold true in the activity of fiscal decision-making. The socialization of the genders will influence the management characteristics of males and females. Loden (1985) states, “. . . a growing body of evidence suggests that, as a group, women compared to most men do indeed have a different natural style of management and are likely to function somewhat differently, yet effectively, in leadership roles.” (p.62) Many women have been promoted to executive leadership roles, albeit a small number of women, they have possessed the ability to lead organizations effectively and successfully. “So, women must behave differently from men in some ways in order to be as effective as men because culture has molded sex differences into gender differences.” (Lahti and Johnson, p.154)

Loden presents key characteristics of a Feminine Leadership Model: lower control, empathetic, collaborative, and high performance standards. (p.63) This research further corroborates the different characterizations between the genders. Therefore, the financial management styles of men and women should be different. Indeed, there are reported differences in the ways men and women approach financial management. In a 1998 U.S. survey studying personal household wealth, financial risk-taking among single women was found to be lower than that of single men. Jianakoplos and Bernasek (1998) found women were more risk averse in financial decision-making. Powell and Ansic (1997) found that “. . . there is consistent evidence of gender differences in risk preference in business and financial decision-making” (p.608). They concluded, “The evidence supports the view that gender differences in financial risk preference exist in management populations. . .” (p.623-624) Strong leaders have emerged within both



genders. Although a minority in organizational leadership, women are increasing in numbers among top executives in the private and public sectors. Kelleher et.al. (2006) provides tabular data illustrating the percent increase of women in state government through previous decades. The unweighted administrative agency average (percent) for women state administrators among all states were 15 in the 1980s, 22 in the 1990s, and 28 for 2002, 2004, and 2006. The authors reveal that, “. . . the proportion of female administrators increased more rapidly in the 1990s. By 2004, on an aggregate basis, women occupied 30 percent of agency head positions. . .” (p.414) The research above provides evidence that fiscal management and fiscal decision-making among the genders will vary. Characteristic differences that exist between men and women may be observed when analyzing the budget coping strategies chosen among state agency administrators.

### *Administrator's Ideology*

Administrator ideology is the personally held beliefs of an individual agency head; it can be grouped with similar beliefs of others on a variety of subjects. The notion is that individuals think about topics and make choices that best adhere to their values. These shared values that lead individual decision-making can be used to analyze the financial philosophy of administrators.

Fiscal ideology, as it is used here, refers to the distinct set of beliefs held by an individual administrator regarding the issue of financial spending, budgeting, and the economy. The administrator's beliefs concerning taxing and spending issues is thought to have influence on their choice of budget coping strategies because of the difficulty in

separating personally held financial budgeting beliefs from an economic issue within the organizational realm. The interplay of personal convictions of financial decision-making and administrator loyalty to the health and vitality of their organization is believed to have underlying influence in the decision-making of the administrator.

Jacoby (1991) states, “Virtually every issue has an identifiable liberal and conservative position. As a result, ideological reference groups should have a particularly broad effect, across a variety of issue attitudes.” (p.180) His research concludes, “The liberal-conservative continuum is important because of its broad relevance. Virtually all political stimuli (candidates, parties, issue stands, etc.) can be described in ideological terms.” (p.202) It is common knowledge that the dominant liberal view of finance allows for more freedom in financial decision making and spending, in contrast, the dominant conservative view supports more control of financial spending. Paul Krugman (1994) asserts, “. . . liberals always wanted to spend more on social programs, and had trouble finding ways to pay for them. Conservatives on the other hand, were tight-fisted types who constantly warned about the menace of government borrowing.” (p.151)

Andrew Levine (2004, p.3) refers to a “. . . position on an idealized political spectrum.” The continuum does not account for political party affiliation; it strictly gauges the fiscal ideology of the administrator as previously mentioned. The ideology variable analyzed in this research links an administrator’s leanings toward financial actions. The administrator’s fiscal ideology is placed on a continuum from left to right, the left signifies fiscally liberal, the right signifies fiscally conservative, and the fiscally moderate is situated in the center of the continuum.

Although Krugman claims, “. . . there are cyclical swings in ideology from left to right and back again.” (p.5) It is a claim illustrating that an individual can change spending preference on certain financial issues, or hold liberal social views yet act conservatively regarding fiscal issues. Essentially, it is the willingness of an individual to spend revenue on a particular budget issue. For example, the administrator can be affiliated with the Democratic political party but hold fiscally conservative beliefs on government spending. In this example, the individual administrator is considered a fiscal conservative.

Fiscal ideology refers to the shared beliefs individuals possess about financial spending, including debt, expenditures, revenues, and taxes. Fiscal conservatives limit spending much more than fiscal moderates and fiscal liberals in this characterization. The fiscally conservative individual believes in limited yet responsible governmental actions to preserve spending power. These individuals are also proponents of budget reductions and balanced budgets.

In a 1988 lecture on the subject of fiscal conservatism, former Secretary of the U.S. Department of Housing and Urban Development (HUD) Mr. Samuel R. Pierce Jr., referenced his agency’s response to spending on a micro level as, “. . . doing more with less, getting more ‘bang for the buck’ from every dollar spent in each of the government’s functional and organizational areas . . . attacking waste, fraud, and abuse; but it involves much more, too. It means using modern, cost-saving technologies, contracting out, eliminating unneeded facilities, and reducing personnel levels.” (1988, p.1) His lecture eloquently illustrated numerous examples of fiscal conservatism in

action at his agency, such as targeting the greatest need, cost-cutting, data processing, and centralizing debt collection.

Fiscally conservative individuals want a budget ‘in the black’ so expenditures and the operations of the agency flows smoothly, not financed by debts. This point is exemplified in the writing of Paul Roberts:

Prior to February 23, 1977, Republican economic policy focused on balancing the budget by raising taxes and cutting spending . . . The Republicans were not always successful themselves at reducing spending, but if the government was going to spend, they at least wanted to pay for it with cash instead of borrowed money. (1984, 20). The Republicans’ austerity approach to the deficit gave them their image as the party that takes away. (1984, p.23)

The imagery evoked of the fiscal conservative by these writers is of one who reduces budget items to regulate government and its spending. The bottom line in the words of Michael Cobb (2006), “In theory, a fiscal conservative believes in a smaller government that provides fewer public services.”

Fiscal conservatives will reduce spending wherever it is necessary to balance the budget, while the fiscally liberal will want to review areas of excess and determine a feasible alternative for supporting the next year’s budget revenue. Levine (1979) would attest that politicians would pursue the rational political strategy of small decrements avoiding the deep gouge of reductions in one area of the budget. The fiscally liberal or moderate will target areas of excess in the budget, areas that will not disrupt agency operations or decrease staff.

### *Appointment*

The manner in which top state agency administrators attain their leadership positions is also important to this research. The dominant force responsible for the administrator's placement will have marked influence on the administrator's agenda. Research has shown that a dominant force guiding state government budget policy and state agency programs is the governor (Wildavsky; Lauth 1984; Brudney and Hebert 1987; Barrilleaux and Berkman 2003; Vaughn and Otenyo 2007 among others). Governors, as chief administrator have influence on state policies, agencies, and appropriations. They also have a profound impact on the bureaucracy (Rubin, 1990; Thompson & Felts, 1992; Clarke, 1997; Meier, 1999; Bowman & Kearney, 1999). There is only limited research where the selection of administrators and gubernatorial influence on the budget decisions of the individual administrators are explored. According to Clarke (1997), party politics influences the budget requests of elected state agency officials, ". . . with little or no variation based on how the agency head was selected" (1997; p.314). Statistics show that appointed state agency officials outnumber elected officials. (Kelleher et. al, 2006) Party politics may influence the budget coping strategies chosen by those appointed to their agency position by the governor.

In the book, *Managerial Discretion in Government Decision Making: beyond the street level*, Vaughn and Otenyo (2007, p.3) declare, "Analytically, there are at least two types of managers: the appointed and elected . . . the range of their discretionary actions shapes what government actually delivers." A dominant force influences this range of administrative discretion: the governor or an appointive body. For those individuals appointed by the governor, they are aligned with the ideology of the state's chief

executive. It is my belief that appointed executives tend to belong to the governor's political party, they have proven loyalty to the governor through past interactions, and will work vehemently to accomplish the goals and directives of the governor. In contrast, the elected administrators can belong to any political party because they are held accountable to the will of the electorate. Though fewer in number, I presume elected administrators can exercise more discernment in the type and use of budget strategies. They are free from the political restraints of the governor, and they operate more freely with state budget officials, the state legislature, and the public.

Thompson and Felts (1992) attest, "Governors likely expect loyalty from their own appointed officials; appointees may have to shape their budget requests in line with the governor's policies . . . Elected officials, not beholden to the governor, may operate with different agendas." (p.155) Bowman and Kearney (1999) substantiate this claim sighting empirical evidence:

Surveys of past governors indicate that they consider appointment power to be the most important weapon in their arsenal when it comes to managing the state bureaucracy. The ability to appoint one's own people to top positions in the executive branch also enhances the policy management role. When individuals who share the governor's basic philosophy and feel loyal to the chief executive and her programs direct the operations of state government, the governor's policies are more likely to be successful.

Linking managerial position selection to the administrator's choice of budget coping strategy illustrates a distinctive type of gubernatorial influence on state agency administrators. The top administrator appointed to a state agency by the governor takes cues and directions from the governor. That individual administrator has limited discretion in the type of measures used to reduce the agency's budget. Bernard (1968) informs it is ". . . readily apparent that there are far more appointive public officials

around than elected ones” (p.33). These appointed officials may have been selected for their position by department heads, the civil service system, or the legislature. Thompson and Felts (1992) referencing the work of Bowman and Kearney (1986) explain that previously elected agency heads were now being appointed because of the revision to state elections processes.

State administrators elected to top agency positions must identify feasible alternatives to secure service delivery of state programs and policies for the impending years because their clientele may be more likely to demand a precise accountability of their actions. This aspect of accountability is more lacking with political appointees. Loyalty to the governor or legislature is nonexistent; therefore, elected officials managing state agencies are able to explore more innovative options in reducing budget expenditures. Instead of duplicating the budget strategies of previous years, as is the norm for appointed administrators, elected administrators have a greater ability to employ innovative strategies or implement preventative measures beforehand to lessen the drastic measures necessary during times of fiscal austerity. These administrators have access to legislators and private interests which leads Thompson and Felts (1992) to suggest, “. . . elected agency heads may have the best of both worlds – political clout with professional justifications for their budgetary requests” (p.166).

The outcome, in this case the budget coping strategy chosen by the state agency administrator, will be different between those administrators that were elected to their position versus those administrators that were appointed by the governor. Variation will exist among those appointed by the governor versus those appointed by a board, commission, or department head. The administrator’s choice is conditioned by

numerous factors; among them is the influence of the entity responsible for their administrative leadership rank.

There are limitations to these observations. Lauth (1984) cautions that, “Strong gubernatorial budget powers appear to be able to offset weak appointive powers at least when it comes to budgetary decisions” (p.408). Elected administrators may not be limited by ideological constraints but limited by the budgetary rules and laws of the state. Vaughn and Otenyo (2007) inform, “The determination of how decisions are made is constitutionally restricted, with the power sometimes vested in the governor, and sometimes, in a department-level financial manager” (p.68). Acknowledging the restrictions and guidelines to the administrator, the method of selection of the administrator will influence the type of budget coping strategy chosen by the individual.

### *Experience*

Agency administrators possess many similarities, among the common characteristics is the amount of time agency leaders have acquired working in state government. According to ASAP data, most have spent many years employed in the agency that they presently lead, and/or have been employed in state bureaucracies. Over the years of being employed in public service, the knowledge gained of agency culture and norms give the administrator an advantage, not only in relating to subordinates but also in protecting and furthering agency interests. There are two potential effects 1) Knowledge of state government and 2) Agency socialization. The former identifies the individual’s understanding of government processes. Whether contact with other



agencies or officials were an aspect of the job, knowledge is gained on the inner workings of the government. The latter entails the longevity of the individual's career. Rules and customs (both formal and informal) are acquired over time. The individual is conditioned to the norms of the state agency.

Long-term administrators possess an unparalleled collection of information that make them "competent and reliable" (Wildavsky & Caiden, 1997) in managing agency affairs. Egeberg (2003) insists that ". . . with increasing length of service in a particular organization, [one] becomes resocialized . . . length of service can qualify as a real organization factor among the demographic variables" (p.118). Yet this personal experience is a facet of the administrator. It is advantageous for an organization to employ an administrator with this experience it enhances the organizational dynamics. Scholars have supported this prerequisite of possessing knowledge, and occupational maturity evident in the ability to manage varying daily organizational activities as a necessary and desirable quality in a manager. (Fayol & Gray, 1984; Wildavsky & Caiden, 1997; Mintzberg, 2004). A firm understanding of agency practice can only be attained over time; therefore, longevity measures the administrator's knowledge of agency norms and activities in state government.

### *B. Organizational Factors*

#### *Organization type*

Organizations are similar to organisms in that they vary by size, structure, and survival tactics. Many scholars studying organizations use this comparison to biology

because organizations function much like a living entity (Rogers and Brown, 1999).

Organizations differ in the way they function, in the types of services they offer, and in the types of policies they are created to implement.

Organizational theory encompasses behavior, leadership, administration, structure, and most recently organizational budgeting. Organizations have been grouped in various ways, including physical attributes, policies, and outputs. This research uses a public policy typology to group and analyze organizations. The Lowi typology - developed by Theodore J. Lowi in the 1960s and early 1970s, has assisted many researchers in the comparison of organization types and their policies. (Hill & Plumlee, 1984; Heckathorn & Maser, 1990; Newman, 1994, Whicker & Mo, 2002)

Lowi (1972) reasoned, “government coerces” and in their use of coercion “policies determine politics, not vice versa” (p.299). He stated:

. . . most policies and their agencies can be categorized . . . There are four categories of public policies in the scheme: constituent, distributive, regulatory, and redistributive. These types are historically as well as functionally distinct . . . Thus, these areas of policy or government activity constitute real arenas of power. Each arena tends to develop its own characteristic political structure, political processes, elites, and group relations” (1964; p.689-690).

In 1972, Lowi created the fourth category of public policy; constituent.

**Regulatory agencies** control the behavior of society through the use of carrots and sticks, incentives and sanctions (Whicker and Mo; 2002, p.222). These agencies are the strong-arm of federal government, charged with carrying out federal mandates. Agencies in this category exercise a great deal of power over our daily life. Regulatory agencies “are responsible for implementing the classic control policies of government, formulating or implementing rules imposing obligations on individuals, and providing punishment for nonconformance.” (Lowi, 1985, p.85) Regulatory agencies include organizations that

manage the environment, law, and commerce. Regulatory policy controls our daily activities by enforcing sanctions and penalties for failure to comply with federal government laws. **Distributive agencies** deliver government services to everyone in society. Lowi characterized these agencies as having a “patron and client relationship” (1985, p.87). According to Whicker and Mo (p.221), “Everyone has access to and presumably benefits from its production and delivery.” Examples of these agencies include transportation, natural resources, and agriculture. Distributive policy centers on supplying benefits to the public. These benefits may be administered to the public through research, education, and agriculture. (Meier, 1979). **Redistributive agencies** redirect income into the delivery of services to disadvantaged segments of the population. Agencies that dominate all scholars’ lists include education, welfare and social services, and healthcare. (Lowi 1964, 1972, 1985; Meier, 1979; Newman, 1994; Parsons, 1995; Whicker & Mo, 2002). Redistributive policies assist in changing the standard operating procedures and promote equity in society. **Constituent agencies** are third-party entities that ensure the rules of law and agency practices are equitable and just for the public (Heckathorn & Maser, 2000). Constituent agencies provide national security and government services. (Meier, 1979). Nicholson (2002) acknowledges, “Lowi explains that constituent policies set the rules for policymaking; they are procedural” (p.165). They provide the public access to the government in the form of information, assistance, and oversight. Consumer affairs agencies are one example of the constituent agency type. Constituent policies modify former rules and regulations. This policy creates new procedures for public security. (Meier, 1979).

Governmental actions are determined by the dynamics of the organization. All four policy types vary in the implementation tasks and functions, characteristics, policies, and goals. Newman (1994) confirmed these findings on organizational behavior when she concluded, “. . . organizational behavior is determined by agency type; that the nature of bureaucracy is shaped by the type of policies administered” (p.283). Sander (1983) writing on federal water resources and the decision making within that agency type concluded that there were, “. . . two different types of water resource policy- distribution and regulation. Following Lowi, these two types of policy generate different types of politics.” He recommended, “. . . research in alternative institutional approaches which may both protect the public from pejorative aspects of interest group politics and achieve public goals more efficiently” (p.11).

Wechsler and Backoff (1986) wrote of policymaking and strategic management in state agencies, stating that, “Agencies regularly engage in cycles of planning and goal setting . . . and seek new sources of funding and external support” (p.321). According to their findings, among the external factors found to affect strategy were resource constraints. Among the internal factors found to affect strategy were organizational leadership, availability of alternative funding sources, and policy type. Their analysis concluded, “Interestingly, no single factor affected the strategy of all of the agencies. However, organizational leadership and capacity were significant in 3 out of 4 agencies, while resource constraints, fiscal conditions, political agenda, legal mandates, balance of power, internal consensus, and policy type each influenced the strategy of 2 agencies.”

According to the research, the regulatory and distributive agency types dominate the daily lives of all individuals. Male employees with many years of service to the

agency are found to dominate distributive agencies. Based on the research above, I believe these two types of agencies seem more powerful in the execution of federal law. The administrators in these types of agencies must execute tasks with the utmost efficiency and concise decisions with regard to the implementation of federal mandates. Their budgets must support that directive.

The budgeting capacity among regulatory and distributive agency types therefore will be different to that of the other agency types. The administrators of these agencies may apply more immediate budget coping strategies during times of austerity to achieve their expected budget goals. This aligns with the conclusion of Hill and Plumlee (1984), “. . . our findings are precisely in accord with Lowi’s original notions about policy arenas: each arena has generated an entirely distinctive pattern of budgetary policy-making” (p.96). They continue, “We have shown that there are indeed separate budget processes for different categories of policy, that policy arenas theory helps us understand some of these processes, and that policy arenas theory in conjunction with party government propositions helps us understand others” (p.98). The budget coping strategies of regulatory agencies will vary from the budget coping strategies of distributive, redistributive, and constituent agency types because the processes, structure, budgeting, and functions of these agencies are all different. The coercion used by regulatory agencies directly and indirectly affect the conduct of each person while the remaining three agency types affect the societal and political environment to a lesser degree.

### *Organizational size*

Organizations can be measured and easily compared by the amount of personnel actively contributing to the production of goods or services. Wright (1967) defined size in terms of the total number of personnel and for the annual amount of the agency's budget. It is a frequently used variable when comparing the structural components of organizations. (Daft, 1998; Blau, 1974). Katz and Kahn (1978) indicated, "Since size can be so readily measured, it is often utilized as the critical variable in research on organizations." (p.106) The size of the organization, according to Hall (1982), is a "complicated variable . . . four components interplay giving influence: physical capacity for production, available personnel – which affects organization budget, inputs/outputs, and discretionary resources available." (p.55) Organizational size can be tallied, easily compared, and analyzed along with other organizational variables. In their 1987 analysis of state agencies and their environments, Brudney and Hebert used the variable agency size and coded agencies as "minor or major" in their research. The authors confirmed the existence of varying sizes among state agency environments across agency types. Egeberg (2003) acknowledged, "The size... may indicate its capacity to initiate policies, develop alternatives, or to implement final decisions." (p.117) Rainey (2003) affirmed, "Much larger organizations almost certainly show more complexity than much smaller ones, but the effects of size are not clear-cut... since different researchers use different measures of size" (p.189).

Organizational size is a relevant albeit complicated factor in this dissertation. The size of the organization influences decision-making on budget items, especially during recession years. It is common among organizations to grow and expand its activities

incrementally – one of the functions the organization administrators will face is grappling with the budget. Larger organizations are expected to function with larger revenues and expenditures, more so than smaller organizations. To protect fiscal health, agency administrators in large organizations will have many more areas to consider for reduced spending and the ability to use more budget strategies to cut funds than heads of smaller organizations. Small organizations have fewer areas from which to choose to reduce, and must be careful to protect the personnel and resources it takes to maintain organizational operations. The number of budget coping strategies employed will be fewer, compared to the activities of the larger organizations.

Large organizations, due to increased complexity, can handle more stressors from the environment as well as internal instability. In contrast, smaller organizations suffer more drawbacks from internal or external volatility. Typically, smaller organizations are not able to withstand volatility from the environment. These smaller organizations do not possess the ability or the resources to resurge after challenging events like some of the larger organizations.

In this dissertation, the size of the organization is predicted to be an important determinant in the administrator's personal choice of feasible budget reduction tools.

### *Organizational budget size*

Budget size encompasses the total amount of revenue used by an organization for operations within a specific fiscal year. The administrator must consider total revenue and expenditures in the decision of which strategy(ies) to use in maintaining operations in

the organization. Although closely interactive with organizational size, analyzing budget size will provide another dimension connecting levels of budgets with chosen budget reduction strategies. It is proposed that with higher levels of revenue it becomes necessary to cutback more areas within the budget, while the budgets of smaller organizations will have fewer areas to reduce revenue.

### Conclusion

The literature regarding budgeting is filled with the general knowledge of budget theory, history, and the budgetary processes. Among this literature exists the sparse, yet detailed, case studies involving states. The information regarding budgetary coping strategies of public agency types is limited, not to mention the minimal information of budget strategies used by agencies during times of fiscal crises. Budget coping strategies can vary by organization and administrators. Nowhere in the literature researched are Lowi's classifications of public policy types used in assessing the influence of state agency administrators and their environment on state agency budget strategy(ies). Organizations vary in their structure and the tools used to cope with reduced revenues. More important is the agency administrator with personal experiences and expectations, charged with making the vital decisions, with organizational and environmental pressures influencing them. This research will provide new empirical information into what budget strategies are being used by state agency administrators in public agencies, and how they are used.



A substantial contribution of this investigative research will yield insight into the common budget coping strategies used among public agencies nationwide employing the use of Lowi's classifications. This research will investigate the influence of administrative and organizational factors on the choices of budget coping strategies used by top state administrators in a variety of occupations. This research fulfills the need to identify, compare, and expand the budget choices available to our public agencies. As the private sector employs innovative techniques to expand budgets during crises, this research creates alternatives for states and state agencies as they strive to meet increased need with diminishing revenues during times of state recessions.

This chapter provided details of the exact research as it relates to budget theory and budget coping strategies. It also presented additional research, which shaped the choices of independent variables used in this investigation, as well as the statements of hypotheses. The following chapter provides a detailed description of the methods used in this investigation. The hypotheses, dependent, and independent variables are described at length.

## **CHAPTER THREE**

### **METHODOLOGY**

#### Introduction

The purpose of this research is to answer the following questions: What influence do organizational and administrator characteristics have on the strategy(ies) chosen by agency administrators to cope with fiscal austerity? What are the different strategies used by state administrators? Do these budget coping strategies differ across agency types? This chapter provides a complete description of the methods used to answer these questions.

Using administrator characteristics as one set of independent variables, it is posited an agency administrator's gender, fiscal ideology, experience (longevity), and type of occupational appointment, influence budget coping strategies. The variables organizational size, organizational agency type, and organizational budget size also are independent variables that will have influence on the administrator's choice of budget coping strategy. Figure 1 depicts the relationships of the two sets of variables.

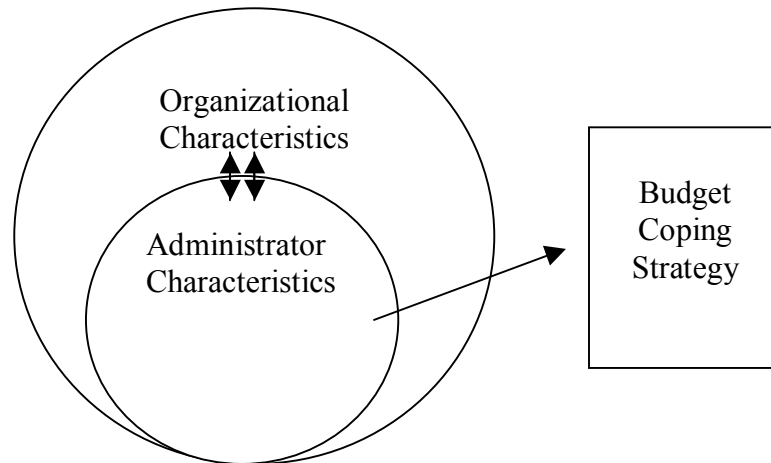


Figure 1. Impacts on Budget Coping Strategies

In every organization there exists many influences on the administrator's budget decision. The individual may be influenced by ideology, socialization, or the entity that appointed the individual into the position as agency head. The size of the organization's budget, numbers of agency employees and the type of agency also have influence on the strategy chosen by the agency head. Because of the influences stated, the decision process is unique to each agency head. Each administrator's personal preferences will vary as will his or her choice of budget strategy. Ultimately, the budget decision lays with the administrator in charge of the agency, not the organization as a whole. The administrator makes the final decision. Therefore, it is proposed that the characteristics of the administrator, not the organization, have the most impact on the decision of which budget coping strategy is best feasible for the organization. The type of agency the

administrator operates within may be of importance in that different agency types dictate different politics.

Previous research indicates budget coping strategies are utilized more than in the past, especially by states during times of economic hardship. (Caiden, 1980; Schick, 1990; Rubin, 1991; Savage & Schwarz, 1999). Privatization or contracting services out to private organizations has emerged as a relatively new budget coping strategy for public agencies. (Dunleavy, 1986; Arnold & Perkins, 2003; Chi, 2005, 2006). Further research indicates that state agencies, unlike private businesses, lack innovation in their use of budget coping strategies (Caiden, 1980; Drucker & Robinson, 1993; Axelrod, 1995; Schick, 1999). The quest to perform effectively and efficiently while operating on the moribund resources of today has resulted in hyperactive reactions in desperate times, rather than maintaining a calculated component within the agency's operating procedures. Administrators therefore find themselves implementing alternatives to curb spending and reduce expenditures in the budget. Areas such as risk management and strategic planning have evolved as sections within some organizations; however, budget coping strategies remain the essential tools used by agency heads to reduce agency expenditures and maintain organizational functions.

The different influences of the administrator and his/her organization on budget coping strategies are the focus of this investigation. Two models were developed to analyze the use of budget strategies. The first is concentrated in the behavioral aspect of the administrator's characteristics. The variables in this first model use administrator characteristics to explain variation in budget strategies. The second model explores the

characteristics of the organization as it relates to an administrator's choice of budget strategy. This discussion follows in the next section.

The hypotheses associated with this research are stated below:

RQ1. Are administrator characteristics more influential in the types of budgetary coping strategies chosen by agency administrators?

H1a) In comparing male and female state agency administrators, female administrators tend to use fewer budgetary coping strategies than male administrators.

H1b) In comparing male and female state agency administrators, female administrators are more likely to use delayed budget coping strategies than male administrators.

H2a) In comparing state agency administrators, those that identify themselves as fiscally conservative will utilize more budgetary coping strategies than administrators that identify themselves as fiscally liberal or moderate.

H2b) In comparing state agency administrators, those administrators that identify themselves as fiscally conservative will utilize immediate budget coping strategies more than administrators that identify themselves as fiscally liberal or moderate.

H3a) In comparing state agency administrators, those appointed by the governor will use more budgetary coping strategies than administrators appointed by boards or the legislature.

H3b) In comparing state agency administrators, those appointed by the governor will use immediate budget coping strategies while those appointed by boards or the legislature will use delayed strategies.

H4a) In comparing state agency administrators, administrators with a greater number of years of experience (longevity) will use fewer budget coping strategies.

H4b) In comparing state agency administrators, administrators with increased longevity will use budget coping strategies classified as immediate cuts.

RQ2. Are organizational characteristics more influential in the types of budgetary coping strategies chosen by agency administrators?

H5a) In comparing state agency administrators, those administrators operating in agencies categorized as regulatory will use more budget coping strategies than any other agency type.

H5b) In comparing state agency administrators, budget coping strategies will differ among regulatory, distributive, redistributive, and constituent agency types.

H6a) In comparing state agency administrators, the greater the total number of agency employees in the organization, the greater the use of budget coping strategies.

H6b) In comparing state agency administrators, budget coping strategies will differ among the organization size.

H7a) In comparing state agency administrators, as agency budget size increases, the number of budget coping strategies will increase.

H7b) In comparing state agency administrators, budget coping strategies will differ among the budget size of administrator organizations.

## Study Population

As part of the ASAP survey, state agency heads and top executive administrators leading departments, bureaus, and state agencies within the 50 states were solicited for their participation in the recurring national mail survey. This population changes periodically, therefore, the listing of state agency administrators received from the Council of State Governments (CSG) were verified against Internet queries of the respective agency websites. The information was matched or updated, then put into Excel spreadsheet form. Surveys were provided to all state administrators in state agency leadership positions. The completed forms were collected, and aggregate data were compiled for reports. The study population for this research uses 943 respondents, the total number of respondents in the 2004 survey. A response rate of 28% was achieved in the implementation of the survey while a 15% random sample of non-respondents was personally contacted for telephone questioning. This research utilizes the year 2004 results of the American State Administrators Project (ASAP), a national mail survey of about 3500 state agency heads across 100 different types of agencies. The ASAP survey obtains pertinent biographical, program, policy, and agency information from top state administrators. This information includes their career positions, agency policies, programs, and budget, as well as intergovernmental relationships and federal aid.

## Data Analysis

This research focuses on correlation using cross tabulations and binary logistic regression models to explain variation between the administrative characteristics, organizational characteristics and the administrator's choice of budget coping strategies. Data assessment involved calculating frequency distributions, means, standard deviations, cross tabulations, chi square statistics, gamma correlations, beta statistics, and binary logistic regression coefficients. Some responses from the 2004 ASAP data were recoded into dummy variables to simplify analysis of budget coping strategies. The exact questions and other survey material used from the 2004 ASAP survey can be found in the appendices. According to the 2004 ASAP website, the total number of survey respondents was 939 and the response rate was 28%. Follow up phone interviews targeted a 15% random sample of non-respondents. The responses of agency heads that participated in the telephone interview (N=39) were also included in ASAP data. Examples of state agencies found in ASAP research include state treasurers, secretary of states, transportation, women's commission, agriculture, corrections, and social services. A complete listing of state agencies and classification assignments are found in the appendices.

The survey year of 2004 is chosen for analysis because it captures a time in recent history in which states were experiencing a recession while trying to manage the devolution of social service programs from the federal government. Within this year, state governments were clamoring for financial relief. The use of varied budget coping strategies reveals how agency administrators chose to reduce their agency's expenditures.



SPSS statistical software package was used to analyze the ASAP data. Frequency distributions and cross tabulations were the descriptive statistics chosen for this research as the former provides a count for all variables and the latter provides detailed observations of the relationship of two variables. Cross tabulations also provided cell percentages for bivariate analyses. Binary logistic regression was used as the multivariate analysis because the dependent variables were dichotomous. This type of analysis allowed for the probabilities that budget coping strategies were used and I was able to explore many models using control variables.

### Hypotheses, Data and Variables

Based on the data sources and methodology presented above, the overarching hypothesis is that administrator influence is expected to have a greater impact on budget coping strategies than organizational influence. Administrator characteristics of gender, administrator ideology, experience (longevity) and appointment are thought to have more influence because of individual decision-making. The individual seizes the opportunity to lead/manage the organization and makes a difference in the organization through action (in this case choice of budget coping strategy). The organizational variables will have influence on the budget coping strategy but are not expected to be as pronounced in impact as with the administrator variables.

The remainder of this chapter provides information on the data used in this research and delineates the hypotheses and variables used in the analysis.

The 2004 ASAP survey responses provide a plethora of biographical, organizational, and state information spanning various occupational fields nationwide. Cross tabulations and binary logistic regression analyses were employed through use of SPSS statistical software to assess the influence of the independent variables on the dependent variable budgetary coping strategies. Frequency distributions also were created using the same software.

The dependent variable is the particular budgetary coping strategy chosen by state agency administrators. Individual aspects and organizational attributes categorize the main independent variables chosen to explain variation. Binary logistic regression incorporates these variables along with some environmental variables. This type of regression analysis is used because the dependent variables are dichotomous, to explore the association among the variables, and to predict probabilities. The specific hypotheses chosen for this investigation and the variables within them are summarized in Table 1 and then discussed below.

Table 1. Hypotheses and description of the variables.

Related Hypothesis	Variable	Variable Type
Dependent Variables	14 different Budget Coping Strategies	Nominal
<u>Independent Variables</u>	<u>Administrator</u>	
H1	Gender	Nominal
H2	Administrator Ideology	Ordinal
H3	Appointment	Nominal
H4	Experience	Interval
	<u>Organization</u>	
H5	Agency Type	Nominal
H6	Agency Size	Interval
H7	Agency Budget Size	Interval

### *Dependent Variable*

Budget coping strategies are the “tools” used to reduce expenditures within an agency’s budget. Exploring the tools used by agency administrators in public organizations will provide empirical information that can be used to compare agencies. This investigation also allows for the cataloging of budget strategies used by agency types. The research from this study will enhance existing literature by providing an analysis of influences that guide administrator’s decisions across varying public agencies. The first research question is: Are administrator characteristics more influential in the types of budgetary coping strategies chosen by agency administrators? The second research question is: Are organizational characteristics more influential in the types of budgetary coping strategies chosen by agency administrators?

The dependent variable BUDGET COPING STRATEGY was derived from responses to ASAP survey item E6 that asked respondents: Among the strategies listed below, please indicate the relative importance **in terms of dollars saved** of each strategy used by your agency at any time in the *past three years*. For each of the 14 strategies presented: across-the-board cuts, cut least efficient subunits, hiring freeze, personnel layoffs, freeze salaries/wages, reduce salaries/wages, contract out- private firms, contract out- local governments, contract out- nonprofit firms, shift programs/functions to local governments, improve productivity, eliminate programs, cut capital outlays, and cut maintenance outlays respondents could choose an answer from a scale of degree of importance: high, moderate, slight, none, and not used. Responses were coded (3) high, (2) moderate, (1) slight, (0) none, and (7) not used.

For the analysis reported here, responses were recoded (1) for use and (0) if not used. Prior to analysis, the decision was made to focus on those strategies used by at least 50 percent of respondents. Table 2 lists the seven strategies that met this criterion. The strategy contract out to private firms was added for analysis because of the recent surge toward private sector activities.

Table 2. Percent administrator's use of all budget coping strategies.

Budget Strategy	Percent Used
1.Hiring Freeze	76.4%
2.Cut Capital Outlay	64.8%
3.Freeze Salaries	63.7%
4.Across-the-board cuts	60.7%
5.Eliminate Programs	60.0%
6.Cut least efficient subunits	58.3%
7.Cut Maintenance Outlay	57.9%
8.Contract out – private firms	47.2%

N=938

The variations among the budget coping strategies are between delayed and immediate cuts. Hiring freeze and freeze salaries are common strategies that possess a delayed nature to the action of reducing expenditures. Once these actions are taken, time must elapse before their effects are realized. It is more difficult to quantify the cost savings of these strategies because of the time factor. The remaining budget coping strategies are targeted cuts that have an immediate effect on the overall budget. The cost savings of these strategies can be quantified immediately. These differences are pursued in the hypotheses exploring the influence among the administrator and organizational characteristics on the budget coping strategies, as well as the difference between the types of budget coping strategies. The two research questions in this dissertation guide the 14

hypotheses. The first research question is: Are administrator characteristics more influential in the types of budgetary coping strategies chosen by agency administrators? The second research question is: Are organizational characteristics more influential in the types of budgetary coping strategies chosen by agency administrators? These questions allow the variables in the hypotheses to be grouped by administrator characteristics and organizational characteristics. There are two hypotheses for each variable that allow focus on the amount and difference of the budget coping strategies.

### *Administrator Hypotheses*

The following eight hypotheses explore the administrator characteristics in the choice of budget coping strategy. These eight hypotheses focus on two dimensions; the quantity of the strategy and the difference among strategies based on the four administrator characteristics: gender, fiscal ideology, experience (longevity) and appointment. Therefore, it is hypothesized:

H1a) In comparing male and female state agency administrators, female administrators tend to use fewer budgetary coping strategies than male administrators.

H1b) In comparing male and female state agency administrators, female administrators are more likely to use delayed budget coping strategies than male administrators.

H2a) In comparing state agency administrators, those that identify themselves as fiscally conservative will utilize more budgetary coping strategies than administrators that identify themselves as fiscally liberal or moderate.

H2b) In comparing state agency administrators, those administrators that identify themselves as fiscally conservative will utilize immediate budget coping strategies more than administrators that identify themselves as fiscally liberal or moderate.

H3a) In comparing state agency administrators, those appointed by the governor will use more budgetary coping strategies than administrators appointed by boards or the legislature.

H3b) In comparing state agency administrators, those appointed by the governor will use immediate budget coping strategies while those appointed by boards or the legislature will use delayed strategies.

H4a) In comparing state agency administrators, administrators with a greater number of years of experience (longevity) will use fewer budget coping strategies.

H4b) In comparing state agency administrators, administrators with increased longevity will use budget coping strategies classified as immediate cuts.

### *Independent Variables*

The independent variables are discussed below with administrator characteristics discussed first.

## *Gender*

Male and female individuals function differently on many levels. Females in the work force tend to exhibit a characteristic trait (nurturing) that translates into being less abrasive than their male counterparts. The differences in executive management styles between females and males have been documented since the 1970s including reported differences in the ways men and women approach financial management. Financial decision-making is thought to have influence on budget coping strategies due to the differences between men and women regarding money. Women would tend to resist deep cuts to the budget and find equitable ways to minimize spending while protecting employees. Therefore, it is hypothesized:

*H1a. In comparing male and female state agency administrators, female administrators tend to use fewer budgetary coping strategies than male administrators.*

*H1b. In comparing male and female state agency administrators, female administrators are more likely to use delayed budget coping strategies than male administrators.*

The independent variable GENDER was derived from responses to ASAP survey item J3. Respondents were asked, What is your gender? Responses were coded as a dummy variable (0) male and (1) female.

### *Administrator ideology*

Based on research, I presume the dominant liberal view of finance allows for more freedom in financial decision making and spending. (Roberts, 1984; Jacoby, 1991; Krugman, 1994; Cobb, 2006). In contrast, the dominant conservative view supports more control of financial spending. The ideology variable refers to the belief system administrators hold related to fiscal issues. The administrator's personal fiscal ideology helps guide the choices made when minimizing budget expenditures. Those identifying themselves as liberal tend to use less and/or delayed budget coping strategies while those identifying as conservative employ more immediate strategies. Therefore, it is hypothesized:

*H2a. In comparing state agency administrators, those that identify themselves as fiscally conservative will utilize more budgetary coping strategies than administrators that identify themselves as fiscally liberal or moderate.*

*H2b. In comparing state agency administrators, those administrators that identify themselves as fiscally conservative will utilize immediate budget coping strategies more than administrators that identify themselves as fiscally liberal or moderate.*

The independent variable IDEOLOGY was derived from ASAP survey responses to item J6. The respondents were asked: On a scale of 1 to 7, with 1 being conservative and 7 being liberal, please indicate how you rate or rank yourself on (a) social and moral issues, and (b) taxing and spending issues. For the research reported here, only the taxing and spending response is included. For cross tabulations, the variable was recoded into



three categories. Survey responses (1)(2)and(3) were combined and recoded into (1) for conservative,(4) converted into (2) or moderate, and responses (5)(6)and (7) were combined and recoded into (3) for liberal.

### *Appointment*

The dominant force responsible for an administrator's placement has marked influence on his or her agenda. This variable measures the impact of the method of administrator selection on the budget coping strategies chosen by state agency administrators. Research has shown that the dominant force guiding state government budget policy and state agency programs is the governor. (Wildavsky; Lauth 1984; Brudney and Hebert 1987; Barrilleaux and Berkman 2003; Vaughn and Otenyo 2007). Administrators chosen by the governor or department head are under increased pressure to perform at their optimum level. In theory, the actions of these administrators are driven by their own definition of professionalization, while longevity in their positions requires loyalty with compliance. Therefore, it is hypothesized:

*H3a. In comparing state agency administrators, those appointed by the governor will use more budgetary coping strategies than administrators appointed by boards or the legislature.*

*H3b. In comparing state agency administrators, those appointed by the governor will use immediate budget coping strategies while those appointed by boards or the legislature will use delayed strategies.*

The independent variable APPOINTMENT was derived from responses to ASAP survey item B1. Respondents were asked, "Please indicate the nature of appointment or approval process by which you came to your present post." Response categories were coded (1) Governor with legislative consent, (2) Governor without legislative consent, (3) Board/Commission with governor's consent, (4) Board/Commission without governor's consent, (5) Department head, (6) Popular election, (7) Civil Service Process, (8) Other (please indicate). This nominal variable was then recoded into a new variable (APPOINTMENT) where (1) governor, (2) department head and civil service, and (0) all others.

### *Longevity*

Over the years of being employed in public service, the knowledge gained of agency culture and norms give the administrator advantages not only in relating to subordinates but also in protecting and furthering agency interests. The organization's influence on the administrator also occurs over time; it is through this process of socialization that increased knowledge is attained. These administrators possess an unparalleled collection of information due to the longevity of their careers within the agency. Because of socialization into agency culture, they know the best practices to safeguard the status quo and alternatives to curb spending without jeopardizing agency health. A firm understanding of agency practice can only be attained over time;

therefore, this factor measures the administrator's knowledge of agency norms and activities and acceptance of goals and clientele. Therefore, it is hypothesized:

*H4a. In comparing state agency administrators, administrators with a greater number of years of experience (longevity) will use fewer budget coping strategies.*

*H4b. In comparing state agency administrators, administrators with increased longevity will use budget coping strategies classified as delayed cuts.*

The independent variable LONGEVITY is derived from an ASAP survey response. Respondents were asked to indicate the number of years employed in the present agency and in the current position (Items I1b and I1c). Exact responses were recorded. This interval variable will influence the choice of budget coping strategies because those with increased time in the agency or within this administrative position will be more apt to protect agency interests and resist or minimize curbing expenditures. The budget strategies chosen would be less intrusive and equitable for all sections of the organization, whereby being fewer and delayed. The administrators' responses to the years in the agency and years in the current position as agency administrator were recoded into quartiles for crosstabulations and bivariate analysis. The original interval data was used in the binary logistic regression.

## *Organizational Hypotheses*

The following six hypotheses explore the organizational characteristics that influence the administrator's choice of budget coping strategy. These six hypotheses focus on two dimensions; the quantity of the strategy and the difference among strategies based on the three organization characteristics: size, agency type, and budget size.

Therefore, it is hypothesized:

H5a) In comparing state agency administrators, those administrators operating in agencies categorized as regulatory will use more budget coping strategies than any other agency type.

H5b) In comparing state agency administrators, budget coping strategies will differ among regulatory, distributive, redistributive, and constituent agency types.

H6a) In comparing state agency administrators, the greater the total number of agency employees in the organization, the greater the use of budget coping strategies.

H6b) In comparing state agency administrators, budget coping strategies will differ among the organization size. The bigger agencies will use more immediate cuts.

H7a) In comparing state agency administrators, as agency budget size increases, the number of budget coping strategies will increase.

H7b) In comparing state agency administrators, budget coping strategies will differ among the budget size of administrator organizations. Larger budget size use more immediate cuts.

The organizational characteristics and independent variables are discussed below.

### *Organization type*

Organizations differ in the way they function, in the types of services they offer, and in the types of policies they are created to implement. State agencies that regulate air pollution, disburse funding for road projects, implement programs to safeguard or health, and provide public security function differently, implement different public policies, and use different budget coping strategies. Government actions are determined by the dynamics of the organization therefore the four types of agencies explored here are regulatory, distributive, redistributive, and constituent. It is hypothesized:

*H5a. In comparing state agency administrators, those administrators operating in agencies categorized as regulatory will use more budget coping strategies than any other agency type.*

*H5b. In comparing state agency administrators, budget coping strategies will differ among regulatory, distributive, redistributive, and constituent agency types.*

The independent variable ORGANIZATION TYPE was derived from 2004 ASAP data providing 6 groupings of state agencies. These groupings were then assigned to classifications from the Lowi model of policy types: constituent, distributive, redistributive, and regulatory (Lowi, 1985). Constituent agencies are third-party entities that ensure the rules of law and agency practices are equitable and just for the public (Heckathorn and Maser, 2000). Distributive agencies deliver government services to everyone in society. Redistributive agencies redirect income into the delivery of services to disadvantaged segments of the population. Regulatory agencies are the main enforcers

of federal government, charged with carrying out federal mandates; agencies in this category exercise a great deal of power over our daily life. All four Lowi policy types vary in implementation of task and function, characteristics, policy, and goals. The coercion used by regulatory agencies directly and indirectly affect the conduct of each person while the remaining three agency types affect individual conduct to a lesser degree. Agencies performing primarily as regulatory, distributive, redistributive, or constituent were placed in the appropriate category. A complete listing of public agencies and the corresponding agency types used in this research are presented in Appendix C. Table 3 below is taken from the appendix to assist with further explanation of this variable.

Table 3. FUNCAT 6 categories conversion to agency type.

6 Research Categories (FUNCAT 6)	Grouped Categories from 13 functional categories	Agency Type
1.Staff	2,3	Constituent
2.Human Resources	4,5,6	Redistributive
3.Natural Resources	7,8,12	Distributive
4.Economic Development & Regulation	9,11	Regulatory 1
5.Crime	10	Regulatory 2
6.Other	13	-

These organizations were assigned to agency categories. The variable functional category 6 (FUNCAT 6) is comprised of the categories: (1) staff, (2) human resources, (3) natural resources and transportation, (4) economic development and regulation, (5) crime, and (6) other. Organizations assigned to staff were considered constituent because of these agencies focus on service delivery to the public in the form of third-party

security and administration. Agencies assigned to human resources were reclassified as redistributive because their primary function was to redirect income through government programs to the populace. The types of agencies assigned to natural resources were reclassified as distributive because their primary function was service delivery of government programs to the populace. Agencies assigned to economic development, regulation, and crime were assigned regulatory status because of the control in executing federal laws. The six values within FUNCAT 6 were coded as dummy variables where (1) is that particular type of variable, (0) otherwise.

*Organizational size (employees)*

This variable measures the number of personnel actively contributing to the production of goods or services in an agency. The size of the organization influences decision-making on budget items, especially during recession years. As previously mentioned, larger organizations are expected to function with a larger number of personnel, more so than smaller organizations. Theoretically, agency administrators in large organizations will have many more areas to consider for reduced spending in the budget and the ability to use more budget strategies to cut funds than in those of smaller organizations. Generally, small organizations have fewer areas from which to choose, and much less to reduce. Administrators must be careful to protect the limited amount of personnel it takes to maintain organizational operations. The amount of budget coping

strategies employed will be less, compared to the activities of the larger organizations. Therefore, it is hypothesized:

*H6a. In comparing state agency administrators, the greater the total number of agency employees in the organization, the greater the use of budget coping strategies.*

*H6b. In comparing state agency administrators, budget coping strategies will differ among organization size. The bigger agencies will use more immediate cuts.*

ORGANIZATION SIZE was obtained from ASAP survey item B3a.

Respondents were asked this open-ended question: How large is the agency which you head in total number of employees? Responses were recorded as given. For bivariate analyses, organizational size was recoded into quartiles using SPSS.

#### *Organizational size (budget)*

This variable measures the total amount of expenditures used by an organization for operations within a specific fiscal year. Budget size will provide another dimension in analyzing administrator choice of budget coping strategy size of budgets with chosen budget reduction strategies. The larger agencies will have bigger yearly budgets; when reduction is required, administrators will use multiple strategies to achieve budget cuts. Therefore, it is hypothesized:

*H7a. In comparing state agency administrators, as agency budget size increases, the number of budget coping strategies will increase.*



*H7b. In comparing state agency administrators, budget coping strategies will differ among the budget size of administrator organizations. Larger budget size use more immediate cuts.*

The independent variable ORGANIZATION BUDGET SIZE is derived from ASAP survey item B3b. Respondents were asked: How large is the agency you head in size of current annual budget (in millions of dollars). Responses were recorded precisely, then, using SPSS, were recoded into quartiles for bivariate analysis.

## Discussion

The dependent variables, the 8 different budget coping strategies, are analyzed for summary of the data and to investigate the administrative and organizational influences surrounding the choice of budget coping strategies. Little is known why certain budget strategies are chosen over others. This dissertation is conducted to highlight the current budget strategies used (during fiscal stress) by public administrators, as well as empirically explains the choices made by state agency administrators. Binary logistic regression is used to explore the strength of the associations among these variables. The focus of the research divides influences into administrator and organizational characteristics. These characteristics are thought to influence administrator choice because of the individual's action in budgetary decisions and the organization's influence on the individual through agency rules and regulations. Characteristics of other

influences are included in this investigation as control variables. They are used in the context in which administrators and organizations operate. The state legislature bears influence because the populace elects the representatives to the state legislature which holds the purse strings to state economic activities. The other control variable used in this research was proportion of budget based on federal aid. Funding from the federal government in the form of federal aid is thought to influence state agency administrator choice of budget coping strategy because it is common knowledge that many programs are partially funded by the federal government with supplemental funding from the states. Transportation and healthcare are two areas where states must match federal funding.

### *Control variables*

#### *Partisanship*

The popular election of the state's governor reflects the dominant political party ideology held by the majority of the state's electorate. The governor, whom researchers have shown is one of the powerful if not most powerful decision makers of state policy, controls much of the agenda within the state. "The chief executive tries to hammer his or her priorities into the budget by proposing extensions or cuts in funding for programs. The executive's influence over the budget depends on many factors. . . the chief executives have significant potential influence on public policy and public agencies." (Rainey, 2003, p.114)

The other entity that possesses power within the state is the state legislature. Brudney and Hebert (1987) found that ". . . the legislature exerts a consistently high level

of influence, rivaled only by the governor” (p.203). In recent years, it has become imperative that the state legislatures work alongside the governor to secure balanced budgets, required in some form in majority of the states. This interaction between the state’s governor and legislature over finances constitutes a large part of the political nature of the budgeting process within state governments. All state agency budgets are directly affected by the actions of these legislatures. State legislatures hold the undeniable power of the purse-- they giveth and they taketh away. Therefore, state agency funding during times of fiscal austerity is affected by the budget decisions of the legislature and governor. More can be achieved in the two branches with party unity. The political party of the governor can achieve their platform initiatives if the same party has control of the legislature. The variable partisanship is derived from the National Governor’s Association (NGA) website with information on all governors in office during 2004. Political party affiliations were coded 0 for Republican and 1 for Democrat to show the party of the governor.

### *Divided government*

Divided government is the result when differing political parties control the state government executive and legislative branches. I believe that during this time there is increased need for bipartisan effort to achieve the work of state government. Alesina and Rosenthal (1995) inform:

Divided government occurs because moderate voters like it, and they take advantage of ‘checks and balances’ to achieve moderation. In dividing government, the voters force the parties to compromise: divided government is a remedy to political polarization. (p.44)

State agency administrators not involved in the in-fighting among legislators have less pressure from the legislature at this time.

Divided government is used in this analysis to show the party in control of the state legislature and the influence of disjointed legislating in austere times. The common characteristics of gridlock and in-fighting among the political parties may prove influential on the administrator's choice of budget coping strategy. The agency administrator may feel less pressure to achieve expeditious results in their budgets because the legislature is engrossed with increased wrangling.

Fiorina (1996) states that there is, “. . . limited systematic research on the effects of divided government.” (p.106) He cautions, “. . . there are at least two distinct possibilities. The first holds that divided government is only a symptom not a cause; where popular consensus exists both unified and divided governments will act on it.” (p.177)

Divided government is used in this analysis as a control variable measuring the impact of the executive and legislature on administrative and organizational variables on the agency budget coping strategies. The control variable DIVIDED GOVERNMENT was derived from The National Conference of State Legislatures's (NCSL) State Vote 2004 to determine party control in the 2004 state legislatures. This information is found in Table 4 at the end of this chapter. The data is analyzed to ascertain the party in control of the senate, the house, and in the position of governor during the year 2004. Divided government exists if 1. differing parties control the upper and lower legislative chambers, or 2. the governor is of a different party from that controlling both chambers of the legislature. The result is coded 1 for divided government within the state or 0 for no

divided government. It is a compilation of the post-election party control of state legislatures. The measure combines the dominant political party of the state House with the dominant political party of the state Senate to generate the primary political party in control of the state legislature. The majority party sets the legislative agenda and controls issues brought to the legislative floor. (Aldrich & Rohde, 1997; Dodd & Oppenheimer, 2005). Table 3 provides a complete listing by state. The political affiliation of the state governor is also incorporated into this variable. Each of the 943 cases in the 2004 ASAP research had a state code beginning with the first number of the state followed by the type of agency (e.g. 1 for Alabama to 50 for Wyoming). The divided government number correlates to the number of the state, therefore if Alabama had a divided government in 2004 the divided government variable shows 1 for each agency in Alabama.

#### *Proportion of agency budget federal aid*

The receipt of federal aid has been vital to the budgets of state and local governments since the early twentieth century. Federal money has allowed numerous state and local programs to prosper, allowing the innovation and delivery of many programs within social services such as in the areas of education, welfare, Medicare, health, and transportation. Elazar (1972) wrote of the marked differences among states receiving federal aid in which the executives possessed more centralized power than in others:

In those states where administration is concentrated at the executive level and the governor is usually strong, federal aid has tended to strengthen executive powers by giving the governor more and better tools to wield. In those states where power is widely diffused among the separate executive departments, federal aid has tended to add to the diffusion by giving the individual departments new sources of funds outside of the normal channels of state control. (p.86)

In support of Elazar's findings, within the past few decades, state governments have become increasingly more reliant on the federal government for revenue, partly due to the major recessions encountered at the onset of each decade. (Gosling 1997; p.76) Yet Brudney and Hebert's (1987) article on the external actors in state agency environments reinforced the claim that, "... federal monies may serve to buffer an agency from influence by the legislature." (p.200) Federal aid seemed to give states and localities the revenue boost necessary to operate without dependency on state coffers. Also within the same time period of the past few decades, (mid 1980s -1990s) the federal government responded with increased mandates, increased devolution of programs back to the states with decreasing revenue to implement much needed programs. Gosling (1997) acknowledged:

The tight economic times of the 1990s have forced all levels of government to reexamine their fiscal conditions and more guardedly prioritize their spending. A national focus on reducing the federal budget deficit has provided an inhospitable climate for federal aid, regardless of who occupies the presidency. By the mid-1990s, many states still had trouble pulling loose from the grips of the 1991-1992 recession...state policymakers have been satisfied just to get by without cutting government programs further, let alone expanding them. A return to the heyday of rapidly expanding state aid does not appear likely. (p.26)

The federal government searched for ways to reduce the amount of federal aid allocated to the states, although some areas within states are still reliant on federal aid to execute programs. Only recently, with the recession and advent of prolonged military engagements, have the states felt the costly consequence of dependence on the federal government for revenue. As an alternative, the states faced the need for new techniques generating revenue – maybe even of increased privatization techniques.

This variable is believed to influence the choice of budget coping strategies because state agencies that receive funding from the federal government usually have

strict guidelines to which they must conform or risk losing federal funding for the impending years. This may limit the number and type of budget coping strategies that may be applied.

The variable PROPORTIONFED is derived from ASAP responses to items in section G. The survey respondents were asked: Does your agency receive any federal aid or other federal fiscal assistance? Responses were coded (1) Yes, and (0) No. Respondents were then asked what proportion of the agency's budget comes from federal funds? (Item G3). Responses were coded: (1) for under 25%, (2) for 25-49%, (3) for 50-74%, and (4) for 75% or more. This research focused on the responses to the latter question and recoded responses to 1 for under 49% and 2 for over 50%. Focusing on the midpoint of the continuum allowed the four categories above to be collapsed into two equal and manageable categories for analysis.

Table 4. 2004 - Political Party in Control of State Legislature

STATE	HOUSE	SENATE	LEGISLATIVE CTRL	GOVERNOR	DIVIDED GOVERNMENT
AL	D	D	<b>D</b>	R	Y
AK	R	R	<b>R</b>	R	N
AZ	R	R	<b>R</b>	D	Y
AR	D	D	<b>D</b>	R	Y
CA	D	D	<b>D</b>	R	Y
CO	D	D	<b>D</b>	R	Y
CT	D	D	<b>D</b>	R	Y
DE	R	D	<b>Split</b>	D	Y
FL	R	R	<b>R</b>	R	N
GA	R	R	<b>R</b>	R	N
HI	D	D	<b>D</b>	R	Y
ID	R	R	<b>R</b>	R	N
IL	D	D	<b>D</b>	D	N
IN	R	R	<b>R</b>	D	Y
IA	R	Split	<b>Split</b>	D	Y
KS	R	R	<b>R</b>	D	Y
KY	D	R	<b>Split</b>	R	Y
LA	D	D	<b>D</b>	D	N
ME	D	D	<b>D</b>	D	N
MD	D	D	<b>D</b>	R	Y
MA	D	D	<b>D</b>	R	Y
MI	R	R	<b>R</b>	D	Y
MN	R	D	<b>Split</b>	R	Y
MS	D	D	<b>D</b>	R	Y
MO	R	R	<b>R</b>	D	Y
MT	Split	D	<b>Split</b>	R	Y
NE	-	-	<b>Non Partisan</b>	R	
NV	D	R	<b>Split</b>	R	Y
NH	R	R	<b>R</b>	R	N
NJ	D	D	<b>D</b>	D	N
NM	D	D	<b>D</b>	D	N
NY	D	R	<b>Split</b>	D	Y
NC	D	D	<b>D</b>	R	Y
ND	R	R	<b>R</b>	R	N
OH	R	R	<b>R</b>	R	N
OK	R	D	<b>Split</b>	D	Y
OR	R	D	<b>Split</b>	D	Y
PA	R	R	<b>R</b>	D	Y



STATE	HOUSE	SENATE	LEGISLATIVE CTRL	GOVERNOR	DIVIDED GOVERNMENT
RI	D	D	<b>D</b>	R	Y
SC	R	R	<b>R</b>	R	N
SD	R	R	<b>R</b>	R	N
TN	D	R	<b>Split</b>	D	Y
TX	R	R	<b>R</b>	R	N
UT	R	R	<b>R</b>	R	N
VT	D	D	<b>D</b>	R	Y
VA	R	R	<b>R</b>	D	Y
WA	D	D	<b>D</b>	D	N
WV	D	D	<b>D</b>	D	N
WI	R	R	<b>R</b>	D	Y
WY	R	R	<b>R</b>	D	Y

### Limitations

One of the obvious limitations of this research is the parameters and uniqueness of the data obtained from respondents. Data are limited to the respondent's perceptions and it builds upon the original survey created four decades ago. Bias may exist in answering survey questions. All responses are accepted and record as accurate information from the state agency administrators. Another limitation was the amount of time available to pursue the research. The lack of knowledge of all possible factors of influence on the administrator's use of identified budget coping strategies is also a limitation to this research. Following the lead of many theorists, and utilizing the control variables in this research, the research and analysis presented here provides valid and reliable information into the influences surrounding state agency administrators' decisions regarding budget coping strategies. This data is also limited by the low survey

response rate. It was supplemented by a random sampling of non-respondents to augment survey data.

## Conclusion

The main independent variables chosen for analysis align with the behavioral and organizational aspects of public administration theory. The analysis of administrator and organizational characteristics will provide increased knowledge into the influences affecting state agency administrators as they choose budget coping strategies within their agencies.

This chapter detailed the research variables, hypotheses, and explanations, in addition to the methods and limitations. The next chapter provides the results and analyses.

## **CHAPTER FOUR**

### **ANALYSIS & FINDINGS**

#### Introduction

The purpose of this research is threefold: 1) to identify the budgetary coping strategies used by state agency administrators in 2004, 2) to explore the differences among these strategies, and 3) to identify which has greater influence, administrator or organization characteristics. This investigation seeks to answer the two following questions: Is there a difference in the types of budget strategies used by state administrators during the recession of fiscal year 2004? Do characteristics of administrators or organizations influence the choice of budget coping strategies more? Specifically, do the organizational variables organizational size, budget size, and type of organization, as well as, the administrative variables of gender, method of selection for career placement, and fiscal ideology, influence the type of budget coping strategy used by a state agency administrator? This chapter provides the analysis and findings related to these questions.

Analyses of the budget coping strategies started with a comparison of all 14 budget coping strategies listed in the 2004 ASAP survey. Using SPSS, frequency

distributions were run to determine the percentage of all administrators who used each budget coping strategy. Table 5 presents the results. The table indicates eight budget coping strategies were used by over 50% of agency heads.

Table 5. Budget Coping Strategies Used by Administrators

	Budget Strategy	% Use
1	Improve productivity	91.2
2	Hiring freeze	76.4
3	Cut capital outlays	64.8
4	Freeze salaries/wages	63.7
5	Across-the-board cuts	60.6
6	Eliminate programs	60.6
7	Cut least efficient subunits	58.3
8	Cut maintenance outlays	57.9
9	Contract out -private firms	47.2
10	Personnel layoffs	39.0
11	Contract out –non profits firms	27.3
12	Shift programs/functions to local governments	23.5
13	Contract out –local governments	18.5
14	Reduce salaries/wages	10.4

N=875

The top seven budget coping strategies were chosen for this research because over half of the respondents used them; this was one way to simplify and minimize the long list of the 14 original budget strategies. The strategy of contracting out to private companies was added to the list for analysis due to the recent allure of privatization as an alternative technique in curbing public expenditures. Its level of use was also just below the original threshold.

The responses to eight original strategy items were recoded into new variables. The original values of high, moderate, and slight impact were recoded into 1 for use and

the original values of none and not used were recoded into 0 for not used. These new dependent variables are dummy variables with (0) not used and (1) used.

Frequency distributions for all eight budget coping strategies are presented in Table 6 below.

Table 6. Top 8 Budget Coping Strategies Used

Budget Strategy	Percent Used
1.Hiring Freeze	76.4%
2.Cut Capital Outlay	64.8%
3.Freeze Salaries	63.7%
4.Across-the-board cuts	60.6%
5.Eliminate Programs	60.0%
6.Cut least efficient subunits	58.3%
7.Cut Maintenance Outlay	57.9%
8.Contract out to Private firms	47.2%

N=927

Of the eight budget coping strategies, five strategies (cut capital outlay, across-the-board cuts, eliminate programs, cut least efficient subunits, and cut maintenance outlays) are immediate cuts to budgets. These strategies lessen expenditures by directly removing funding to budget items. The cost savings are identified more quickly than the cost savings of delayed cuts (hiring freeze and freeze salaries). These reductions in expenditures are viewed over time. Contract out to private firms can be an immediate cut to the budget however; this strategy may also have a tendency to increase in cost in the future. Since this strategy can be immediate or delayed, the categorization for this strategy will be both.

Table 6 illustrates that cut capital outlay is the only one of the top three strategies used that involves immediate reduction in resource or investment spending. In contrast,

the two remaining strategies restrict additional spending on agency personnel, which over time would lessen agency expenditures. Placing restrictions on further spending for agency personnel seems to be one of the most important aspects in budget reduction. It would come as no surprise if agency spending on personnel was among the highest areas for expenditures within many organizations.

## Variables

Table 7 summarizes the variables and their coding. The table also provides the means, medians, and standard deviations for the interval research variables, as well as the recoded variables used in cross tabulations. The fiscal ideology variable gauges the respondent's belief toward taxing and spending issues. The experience variable was measured in two ways, first by the number of year within the agency then by the number of years in the current position as agency administrator. Budget size is the total dollar figure of the agency's budget in millions, and organization size is the number of employees within the agency. Table 8 provides the modes and percentage use for the nominal independent variables and the dummy variables used in this research. The variable appointment refers to the authority that put the administrator in position, recoded with 0=other, 1=governor, 2=department head and civil service process. The variable agency type breaks out into six types of agencies; the table shows the use among each type. The control variable divided government is recoded information from the National Conference of State Legislatures (NCSL) SmartVote. It is a resource that provided post

election party control of state legislatures, this was combined with information of each state's governor. The variable divided government was coded 0=not divided and 1=divided. The variable federal aid is recoded from a ASAP survey question that asked, "What proportion of your agency's budget comes from federal funds?" Original coding was 1=under 25%, 2=25-49%, 3=50-74%, and 4=75% or more. The responses were recoded into 1=less than 49% and 2=more than 50%. The variable partisanship is a dummy variable of the political party affiliation of each state's governor in 2004. The information was taken from the National Governor's Association (NGA) website and is coded (0) for Republican and (1) for Democrat.

Table 7. Descriptions of Ordinal/Interval Variables

Variables	N	Frequencies in percent	Mean	Median	Standard Deviation
Experience(a) (years in agency) original data	923		<b>12.68</b>		10.64
Experience(a) (years in agency) *recode to quartiles	845	1- 22.5 2- 27.8 3- 24.5 4- 25.2		<b>2.00</b>	
Experience(b) (yrs in current position) original data	923		<b>5.39</b>		5.39
Experience(b) (yrs in current position) *recode to quartiles	799	1- 19.1 2- 27.7 3- 30.3 4- 22.9		<b>3.00</b>	
Budget Size original data	818		<b>1297.26</b>		27979
Budget Size *recode to quartiles	818	1- 25.1 2- 24.9 3- 24.8 4- 25.2		<b>2.50</b>	
Organization Size original data	863		<b>1168.87</b>		3324
Organization Size *recode to quartiles	863	1- 24.9 2- 25.0 3- 25.0 4- 25.0		<b>3.00</b>	

\*Recode denotes manipulated survey response data used in this research analysis.



Table 8. Descriptions of Nominal and Dummy Variables

Variables	N	Percentage	Mode
Gender	929	Male 0-74% Female 1-26%	0
Fiscal Ideology (recoded)	899	1=conservative 54% 2=moderate 24% 3=liberal 22%	1
Appointment (recoded)	931	0=other 22% 1=governor 41% 2=depthead/civserv 37%	1
Agency Type	943		
staff		9%	
human resource		23%	
natural resource		25%	
economic dev.& regulation		19%	
crime		12%	
other		13%	
Divided Government	940	0=not divided 38% 1=divided 62%	1
Partisanship	940	0=Republican 55% 1=Democrat 45%	0
Federal Aid	708	1=<49% 1-63% 2=>50% 2-37%	0

The means, medians, and modes illustrate the central tendency for the non-interval data. The standard deviations reflect the measure of dispersion or the spread

among the data. Table 9 below presents some quick facts for the independent variables based on the material presented.

Table 9. Quick Facts for Independent variables

Gender statistics	74% male, 26% female
Fiscal Ideology	Slightly conservative
Social/Moral Ideology	Slightly liberal
Years in state government	Median 17.25
Years in agency	Median 9
Years in current position	Median 3
Number of employees	Median 158
Budget size	Median \$30 million
Receipt of federal aid	78.4%
Proportion of budget from federal government	43.2% (percent with federal government funds under 25% of budget)

Male administrators outnumber female administrators almost 3:1. The majority of agency heads identify themselves as slightly fiscally conservative on monetary issues and slightly liberal on moral/social issues. The median years worked in state government is a little over seventeen, median years with the agency is nine while the median years in their current position is three. The median number of employees managed by these administrators is 158 and the median budget size \$30 million. Over three-fourths of these public administrators report that their agencies receive federal aid: 78.4% to be exact. Of the 78.4% receiving federal aid, 43.2% report receiving less than 25 percent of their budget revenue from the national government.

## Bivariate Analysis

Cross tabulations were run using SPSS to aid examination of the impact of the independent variables on each of the 8 dependent variables. Only those tables that indicate a statistically significant relationship exists at the .05 level are presented below along with their associations – chi square statistics. The Chi square statistic tests the association among the variables in this research assessing statistically significant differences that exist. A summation of chi square probabilities for all cross tabulations is presented in Table 26.

### *Gender*

Bivariate analysis show that five of the eight budget coping strategies are used more among male administrators. Of these five strategies, 2 are delayed strategies and the remaining are immediate. According to Table 10, the strategy with the most difference between the genders was found with the use of the privatization strategy. Male administrators used immediate strategies more than female administrators 3 to 2.

Table 10. Top 8 Budget Coping Strategies Used Based on Gender

Budget Strategy	Percent Used	Male	Female	Difference (male-female)
1.Hiring Freeze	76.4%	73.2%	73.1%	+0.1
2.Cut Capital Outlay	64.8%	61.9%	60.4%	+1.5
3.Freeze Salaries	63.7%	61.0%	59.2%	+1.8
4.Across-the-board cuts	60.6%	56.2%	59.6%	-3.4
5.Eliminate Programs	60.0%	57.4%	53.9%	+3.5
6.Cut least efficient subunits	58.3%	55.3%	50.2%	<b>+5.1</b>
7.Cut Maintenance Outlay	57.9%	54.3%	55.1%	-0.8
8.Contract out to Private firms	47.2%	45.1%	53.1%	<b>-8.0</b>

The first crosstabulation presents the results for gender analyzed with the budget coping strategy contract out to private firms. This is the only strategy with statistically significant differences associated with gender.

Table 11. Use of contract out to private firms by gender.

		Gender		
		Male	Female	Total
Contract out- private firms	Used	45.1%	<b>53.1%</b>	47.2%
	Not used	54.9%	46.9%	52.8%
	Total	100%	100%	100%
	N=873	N=647	N=226	N=873

Chi square= 4.265 d.f.= 1 p=.039

In viewing Table 11, a slight majority of administrators do not use contract out to private firms. Among the administrators that used this budget coping strategy, a greater

percentage of female administrators (53.1%) employed this particular strategy than male administrators (45.1%). This was one of several budget coping strategies used more often by females. The Lambda statistic is .034 signifying a weak association; the chi square shows that this cross tabulation reflects a statistically significant relationship between gender and contracting out to private firms. This result does not support the first hypothesis that females tend to use fewer budget coping strategies, however it shows for the strategy of privatization more females are willing to curb costs by contracting services out to private firms rather than cutting outlays. None of the existing literature has identified gender as a factor in the administrator's decision to contract out.

### *Fiscal Ideology*

Administrators that identify themselves as fiscally moderate used 5 of the 8 strategies more than the other two ideological types. Although some of the differences among the three ideological categories were slight, moderate had a slightly higher use of more strategies. The privatization strategy was utilized more by liberal ideologues showing the largest difference between the ideologies.

Table 12. Top 8 Budget Coping Strategies Used Based on Fiscal Ideology.

Budget Strategy	% Used				Difference (cons-high)
	Cons.	Mod.	Lib.		
1.Hiring Freeze	73.3	74.3	76.4	67.2	-2.1
2.Cut Capital Outlay	61.8	61.5	67.3	56.4	-5.8
3.Freeze Salaries	60.7	60.0	63.6	59.0	-3.6
4.Across-the-board cuts	57.2	55.7	64.5	52.8	<b>-8.8</b>
5.Eliminate Programs	56.6	54.5	59.1	59.3	-4.8
6.Cut least efficient subunits	54.5	55.7	55.0	50.8	0.7
7.Cut Maintenance Outlay	54.8	53.2	58.2	54.9	-5.0
8.Contract out to Private firms	47.1	44.5	46.4	54.3	<b>-9.8</b>

The crosstabulation results for fiscal ideology and the budget coping strategy across-the-board cuts are presented in table 13.

Table 13. Use of across-the-board cuts among fiscal ideologies.

		Fiscal ideology			Total
		Conservative	Moderate	Liberal	
Across-the-board cuts	Used	55.7%	<b>64.5%</b>	52.8%	57.2%
	Not Used	44.3%	35.5%	47.2%	42.8%
	Total	100%	100%	100%	100%
		N=483	N=220	N=195	N=898

Chi square= 6.825    d.f. = 2    p=.033

Across the board cuts as a budget coping strategy was used by 57.2% of administrators. The majority of administrators utilizing this strategy identified themselves as moderates. Most respondents however, identified themselves as conservatives. Table 13 indicates that ideological moderates were most likely to

implement this strategy (64.5%) and liberals least likely (52.8%). The greater use of across-the-board cuts by moderates may signal the desire to equitably cut costs or more attention is paid to a variety of issues. The chi square statistic is statistically significant ( $p = .033$ ) meaning the relationship is not due to chance. A greater number of administrators using this strategy identified themselves as fiscally conservative ( $N=483$ ). The additive index in Table 14 also shows greater use among conservatives. These results do not support the hypothesis that fiscally conservative administrators use budget coping strategies more. Ideological conservative administrators are greater in number but moderates use slightly more budget coping strategies

Table 14. Additive Index of all 8 budget coping strategies and use by ideological classifications.

Budget strategies used	Frequency	Conservative	Moderate	Liberal
0	49	29	9	10
1	39	18	8	10
2	59	35	12	11
3	79	42	16	17
4	108	51	32	19
5	123	65	22	34
6	135	61	44	27
7	144	79	31	27
8	97	50	26	19
Total Used	-	<b>401</b>	191	164

*Appointment*

The bivariate analysis shows a split in use among all eight strategies and the entities authorized to select agency head administrators. Administrators appointed by the governor or the department head used 4 out of 8 strategies each. Department heads used delayed strategies in accordance with two immediate strategies (cut capital outlay and across-the-board cuts). Administrators appointed by the governor showed the greatest difference in use of strategies by implementing the strategies eliminate programs and cut least efficient subunits. Contracting out to private firms was a budget coping strategy chosen by administrators appointed by the governor by a slight margin.

Table 15. Top 8 Budget Coping Strategies Used Based on Appointment.

Budget Strategy	% Used	Gov.	DeptHead/ci vserv	Other	Difference (gov-high)
1.Hiring Freeze	72.8	72.8	76.2	67.6	-3.4
2.Cut Capital Outlay	61.3	61.4	63.2	58.1	-1.8
3.Freeze Salaries	60.5	61.6	62.4	55.2	-0.8
4.Across-the-board cuts	56.9	57.9	60.6	49.0	-2.7
5.Eliminate Programs	56.4	61.6	52.9	52.4	<b>8.7</b>
6.Cut least efficient subunits	53.9	59.8	49.4	50.5	<b>9.3</b>
7.Cut Maintenance Outlay	54.3	58.2	53.8	48.1	4.4
8.Contract out to Private firms	46.8	51.1	46.1	40.2	5.0

The crosstabulation results for appointment and the budget coping strategies across-the-board cuts, eliminate programs, and cut least efficient subunits are presented in the tables below.



Table 16. Use of across-the-board cuts among appointment types.

		Appointment			
		Governor	Dept. Head/Civil Service	Others	Total
Across-the-board cuts	Used	57.9%	<b>60.6%</b>	49.0%	56.9%
	Not Used	42.1%	39.4%	51.0%	43.1%
	Total	100%	100%	100%	100%
		N=378	N=340	N=210	N=928

Chi square= 7.331 d.f. = 2 p=.026

Across the board cuts is a budget coping strategy used with a higher frequency of use among those appointed by the civil service and/or by the agency's department head (60.6%). Although the larger number of cases belonged to the governor (N=378). The Lambda statistic is .010 signifying a very weak relationship between the coping strategy across-the-board cuts and the variable appointment. The chi square statistic is statistically significant (p= .026). The table does not support the third hypothesis that administrators appointed by the governor use this budget coping strategy more than administrators appointed to their position by another entity. Those appointed by department heads and civil service used this strategy slightly more.

The crosstabulation results for appointment and the budget coping strategy eliminate programs are presented in table 17.

Table 17. Use of eliminate programs among appointment types.

		Appointment			Total
		Governor	Dept. Head/Civil Service	Others	
Eliminate programs	Used	<b>61.6%</b>	52.9%	52.4%	56.4%
	Not Used	38.4%	47.1%	47.6%	43.6%
	Total	100%	100%	100%	100%
		N=378	N=340	N=210	N=928

Chi square= 7.252 d.f.= 2 p=.027

A majority of state agency administrators (56.4%) used the budget coping strategy eliminating programs. Those appointed by the governor used this budget coping strategy the most (61.6%) while approximately half of the others used this strategy. The Lambda statistic is .000 signifying no relationship between the coping strategy eliminate programs and the variable appointment. The chi square statistic is statistically significant (p= .027). This table partially supports the third hypothesis that administrators appointed by the governor use this budget coping strategy more than administrators appointed to their position by another other entity.

The crosstabulation results for appointment and the budget coping strategy cut least efficient subunits are presented in table 18.

Table 18. Use of cut least efficient subunits among appointment types.

		Appointment			
		Governor	Dept. Head/Civil Service	Others	Total
Cut least efficient subunits	Used	<b>59.8%</b>	49.4%	50.5%	53.9%
	Not Used	40.2%	50.6%	49.5%	46.1%
	Total	100%	100%	100%	100%
		N=378	N=340	N=210	N=928

Chi square= 9.021      d.f.= 2      p=.011

The majority of agency administrators (53.9%) used this strategy of cutting the least efficient subunits. Those administrators using this strategy were more likely (59.8%) to be appointed by the governor than any other entity. Agency department head and/or civil service appointed the majority of administrators that chose not to utilize this strategy (50.6%). This is surprising seeing that agency department heads likely would have knowledge of the least efficient sections of the agency. The Lambda statistic is .009 signifying a very weak relationship between the budget coping strategy cut least efficient subunits and the variable appointment, but the chi square statistic is statistically significant (p= .011). This table only partially supports the third hypothesis in that administrators appointed by the governor use this budget coping strategy more than administrators appointed to their position by another other entity.

These last two budget coping strategies, eliminate programs and cut least efficient subunits, show the influence of the governor. First, programs that are not a priority on

the agenda of the governor are susceptible to termination or shelving and second, those considered underperforming sectors are in jeopardy of cuts.

*Longevity (experience/current position)*

The bivariate analysis show that administrators in the second quartile with second lowest amount of time in the current position as agency head used a slight majority of the budget coping strategies. Administrators found in the second quartile used 6 out of the 8 strategies more with one strategy hiring freeze, the only delayed strategy. The strategies with the most difference among administrators were cut least efficient subunits used by the second group of administrators and the strategy contract out to private firms, which was used more by administrators with the fewest years in the current position. Administrators in the first and second groups with fewer years in the current position dominated the use of all 8 budget coping strategies.

Table 19. Top 8 Budget Coping Strategies Used Based on Longevity- years in current position.

Budget Strategy	% Used	Quar 1	Quar 2	Quar 3	Quar 4	Difference (Q1-Q4)
1.Hiring Freeze	73.0	72.5	77.4	71.2	70.5	2.0
2.Cut Capital Outlay	61.4	58.8	67.9	57.5	60.7	-1.9
3.Freeze Salaries	60.5	65.4	63.3	56.2	58.5	6.9
4.Across-the-board cuts	56.6	56.9	63.8	56.2	48.1	<b>8.8</b>
5.Eliminate Programs	56.4	60.1	60.5	53.3	52.5	<b>7.6</b>
6.Cut least efficient subunits	54.1	57.5	61.5	49.6	48.1	<b>9.4</b>
7.Cut Maintenance Outlay	53.3	49.7	64.3	47.9	50.3	-0.6
8.Contract out to Private firms	46.2	51.7	47.6	44.5	42.3	<b>9.4</b>

The crosstabulation results for experience and the budget coping strategy across-the-board cuts are presented in table 20.

Table 20. Use of across-board-cuts based on experience- years in current position.

		Experience- years in current position				
		1 <sup>st</sup> quartile	2 <sup>nd</sup> quartile	3 <sup>rd</sup> quartile	4 <sup>th</sup> quartile	Total
Across-the-board cuts	Used	56.9%	<b>63.8%</b>	56.2%	48.1%	56.6%
	Not Used	43.1%	36.2%	43.8%	51.9%	43.4%
	Total	100%	100%	100%	100%	100%
		N=153	N=221	N=240	N=183	N=797

Chi square= 10.079      d.f= 3      p=.018

The variable years in current position was a complicated variable to test against budget coping strategies. When grouped into percentiles as reflected in the cross

tabulation above, across-the-board cuts are used most by those administrators within the second percentile with more years of service in their current position as agency administrator (63.8%) than those with the least number of years. An overwhelming majority of administrators using this strategy were found in the second and third percentile marking those in the middle of their careers in the position as agency administrator. This was not a dominant strategy used by those with the most years of service as agency administrator. In fact, a slight majority of administrators in the fourth percentile did not use this strategy (51.9%). It may be that administrators with greater experience in their current position find that using the budget-cutting strategy across-the-board cuts less feasible in achieving their budget reduction goals. The chi square statistic is statistically significant at the .05 level, ( $p=.018$ ) and Gamma is .022 revealing a very weak association among these variables. This table assists in supporting the fourth hypothesis that administrators with a greater number of years experience use budget coping strategies less than administrators with fewer number of years experience.

The crosstabulation results for experience and the budget coping strategy cut least efficient subunits are presented in table 21.

Table 21. Use of cut least efficient subunits based on experience- current position.

		Experience- years in current position				
		1 <sup>st</sup> quartile	2 <sup>nd</sup> quartile	3 <sup>rd</sup> quartile	4 <sup>th</sup> quartile	Total
Cut least efficient subunits	Used	57.5%	<b>61.5%</b>	49.6%	48.1%	54.1%
	Not Used	42.5%	38.5%	50.4%	51.9%	45.9%
	Total	100%	100%	100%	100%	100%
		N=153	N=221	N=240	N=183	N=797

Chi square= 10.278      d.f.= 3      p=.016

Administrators that have held their current position with fewer years used this strategy of cutting the least efficient subunits (61.5%). The first and second percentiles held the biggest percentages 57.5% and 61.5% respectively for use of this strategy. Notably, the majority of administrators within the third and fourth percentiles did not use this strategy. Administrators serving a shorter number of years in the current position dominated use of the strategy cut least efficient subunits. The Gamma statistic is -.141 signifying a negative and weak association between years in current position and the budget coping strategy cut least efficient subunits. The chi square statistic is statistically significant (p=.016). The more years that an administrator stays in the current position the less likely that administrator is to use the strategy of cutting the least efficient subunits. This table helps to support the fourth hypothesis that administrators with a greater number of years experience use the budget coping strategy cut least efficient subunits less than those administrators with fewer years experience.

The crosstabulation results for experience and the budget coping strategy cut maintenance outlay are presented in table 22.

Table 22. Use of cut maintenance outlay based on experience- current position.

		Experience- years in current position				
		1 <sup>st</sup> quartile	2 <sup>nd</sup> quartile	3 <sup>rd</sup> quartile	4 <sup>th</sup> quartile	Total
Cut maintenance outlay	Used	49.7%	<b>64.3%</b>	47.9%	50.3%	53.3%
	Not Used	50.3%	35.7%	52.1%	49.7%	46.7%
	Total	100%	100%	100%	100%	100%
	N=797	N=153	N=221	N=240	N=183	N=797

Chi square= 14.929

d.f.= 3

p=.002

The largest percentage of administrators (64.3%) using this strategy of cutting maintenance outlays were identified within the second percentile. Administrators with more experience (years in the current position) found in the third and fourth percentiles tend not to cut maintenance outlay. The Gamma statistic is -.075 signifying a negative and very weak association between years in current position and the budget coping strategy cut maintenance outlays. The more years experience the less likely to use this budget coping strategy. The chi square statistic is statistically significant (p= .002). This table supports the fourth hypothesis in that administrators with a greater number of years experience use the strategy cut maintenance outlays less than administrators with fewer years of experience.



*Longevity (experience/years in agency)*

Bivariate analysis shows that administrators with the least years in the agency used 5 of the 8 budget coping strategies. Administrators with the most years in the agency used the two delayed budget coping strategies freeze salaries and hiring freeze. Cut least efficient subunits was the budget coping strategy with the most difference. An important pattern that emerged in this analysis was that administrators with least and most years in the agency had higher percent use than the other administrators in the middle of their careers.

Table 23. Top 8 Budget Coping Strategies Used Based on Longevity- years in agency.

Budget Strategy	% Used	Quar 1	Quar 2	Quar 3	Quar 4	Difference (Q1-Q4)
1.Hiring Freeze	73.3	73.7	68.2	75.4	76.5	-2.8
2.Cut Capital Outlay	61.6	63.7	55.8	60.9	66.7	-3.0
3.Freeze Salaries	61.0	61.1	54.5	63.8	65.3	-4.2
4.Across-the-board cuts	56.9	60.5	54.1	54.1	59.6	0.9
5.Eliminate Programs	56.2	61.6	51.5	52.2	60.4	1.2
6.Cut least efficient subunits	53.9	64.2	48.5	49.3	54.9	<b>9.3</b>
7.Cut Maintenance Outlay	54.2	62.1	45.9	51.2	59.2	2.9
8.Contract out to Private firms	46.6	51.1	48.2	44.4	42.7	<b>8.4</b>

The crosstabulation results for experience and the budget coping strategy cut least efficient subunits are presented in table 24.

Table 24. Use of cut least efficient subunits based on experience- years in agency.

		Experience- years in agency				
		1 <sup>st</sup> quartile	2 <sup>nd</sup> quartile	3 <sup>rd</sup> quartile	4 <sup>th</sup> quartile	Total
Cut least efficient subunits	Used	<b>64.2%</b>	48.5%	49.3%	54.9%	53.9%
	Not Used	35.8%	51.5%	50.7%	45.1%	46.1%
	Total	100%	100%	100%	100%	100%
		N=190	N=233	N=207	N=213	N=843

Chi square= 12.735

d.f.= 3

p=.005

The first and fourth percentiles of administrators with the most and fewest years of experience in the agency used the strategy of cutting the least efficient subunits (64.2% within 1<sup>st</sup> percentile) and (54.9% within 4<sup>th</sup> percentile) the most. The Gamma statistic is -.079 signifying a negative and very weak association between years in this agency and the budget coping strategy cut least efficient subunits. The cross tabulation illustrates with increased number of years in the agency the less use of this strategy. The chi square statistic is statistically significant (p=.005). This table also supports the fourth hypothesis that administrators with a greater number of years experience use this budget coping strategy less.

The crosstabulation results for experience and the budget coping strategy cut maintenance outlay are presented in table 25.

Table 25. Use of cut maintenance outlay based on experience- years in agency.

		Experience- years in agency				Total
		1 <sup>st</sup> quartile	2 <sup>nd</sup> quartile	3 <sup>rd</sup> quartile	4 <sup>th</sup> quartile	
Cut maintenance outlay	Used	<b>62.1%</b>	45.9%	51.2%	59.2%	54.2%
	Not Used	37.9%	54.1%	48.8%	40.8%	45.8%
	Total	100%	100%	100%	100%	100%
		N=190	N=233	N=207	N=213	N=843

Chi square= 14.068    d.f.= 3    p=.003

In viewing the crosstabulation above, the strategy cut maintenance outlay was used mostly by the first and fourth percentiles. The highest percentage of use was (62.1%) within the first percentile among administrators with the least number of years in the agency. There was less use among the second and third percentiles although the use of this strategy did increase among those administrators in the fourth percentile. The Gamma statistic is .000 signifying no relationship between years in this agency and the budget coping strategy cut maintenance outlays. The chi square statistic is statistically significant (p=.003). This table also supports the fourth hypothesis that administrators with a greater number of years experience use the budget coping strategy cut maintenance outlay less.

Table 26. Significant chi square crosstabulation p-values

Budget Coping Strategies	N	Hiring Freeze	Cut Capital Outlay	Freeze Salaries	Across Board Cuts	Eliminate Programs	Cut Least Efficient Subunits	Cut maintenance outlays	Contract Out to Private Companies
Administrative Variables	Gender	.974	.685	.618	.352	.338	.172	.819	.039*
	Fiscal Ideology	.080	.074	.569	.033*	.362	.498	.470	.076
	Appointment	.090	.485	.210	.026*	.027*	.011*	.061	.334
	Experience (a)	.373	.116	.222	.018*	.220	.016*	.002*	.348
	Experience (b)	.200	.110	.093	.380	.066	.005*	.003*	.351
Organizational Variables	Agency Type								
	1.Staff	.657	.764	.082	.323	.962	.957	.561	.045*
	2.Human Resources	.244	.995	.485	.520	.014*	.232	.275	.123
	3.Natural Res.& Transportation	.990	.009*	.393	.386	.558	.559	.125	.018*
	4.Econdev & Regulatory	.129	.723	.967	.031*	.034*	.016*	.004*	.433
	5.Crime	.335	.956	.618	.357	.201	.005*	.032*	.812
	6.Other	.056	.005*	.224	.244	.005*	.045*	.004*	.046*
	Budget Size	.021*	.001*	.439	.015*	.000*	.000*	.000*	.000*
	Organization Size	.001*	.000*	.328	.093	.000*	.000*	.000*	.000*

\*Marked cells denote significance at the .05 level.

Table 26 shows the crosstabulation probabilities associated with the chi square statistic of each independent variable and all budget coping strategies. Hiring freeze was the only delayed strategy that showed statistically significant relationships with the organizational variables budget size and organizational size. This supports the idea that implementing a moratorium on acquiring personnel relates to the size of the organization and its budget. The privatization strategy showed associations with gender, budget size, organization budget size, and among two types of agency types. There were more female administrators that used this strategy, the constituent and distributive agency types showed statistically significant associations with the privatization strategy, agencies with greater employee size and budget size used the strategy the most. The budget coping strategies with immediate cuts to budget showed many associations with the independent variables.

Table 26 also shows that both organizational variables yielded strong associations when analyzed with the budget coping strategies. Budget size and organization size yielded significant chi square statistics when crosstabulated with 7 of the 8 budget coping strategies (budget size) and 6 of the 8 strategies (organization size- number of employees). The size of the organization and its budget is highly relevant in analyzing the types of budget strategies used by organization administrators. They both are contingent on revenue for the operation of the organization. They both are affected by decisions of how to adjust money in terms of expenditures. The only budget coping strategy that did not yield a significant chi square statistic was freeze salary. One reason may be that putting a hold on salary increases neither threatens nor safeguards organization budgets. This is the only budget strategy of the eight analyzed that both has

no immediate impact on expenditure level and no potential to increase organization expenditure.

### The 6 agency types

To recapitulate the previous research, different public policies and the agencies that execute the programs from these policies can be categorized and compared as they function differently. Based on this research, the predictor variable agency type was separated into six groups: staff, human resources, natural resource & transportation, economic development & regulatory, crime, and other. The task of associating a Lowi category to each of the FUNCAT 6 categories proved to be challenging, because there exists no precise social science method for classification of public agencies. As a result, several recoding decisions were required. Staffs of fiscal and non-fiscal agencies were combined into the staff variable used for analysis. Human resources entailed combining education, social services, and health agencies, all redistributive in nature. Natural resources contained agencies that could be classified as either regulatory or distributive. They were classified as distributive to incorporate all the Lowi typologies. Economic development included state and federal regulatory agencies, and crime entailed all agencies in the criminal justice system. The group “other” was an assortment of agencies from civil rights to women’s rights, from state library to equal employment opportunity. Table 27 presents the classification for this research analysis.

These groupings were part of the original 2004 ASAP data and were kept to assist with the ease of this analysis. The agency type variables are (0) (1) dummy variables to denote classification into a Lowi category. Table 27 shows the variable funcat 6 categories of all agencies, the count within each category, the percentage of agencies within each and the associated Lowi types.

Table 27. Grouping of state agencies using Lowi classification.

FUNCAT 6	Frequency	Percent	Lowi Agency Type
Staff	83	8.9%	Constituent
Human resources	213	22.8%	Redistributive
Natural resources & transportation	232	24.8%	Distributive
Economic development & regulation	175	18.7%	Regulatory 1
Crime	113	12.1%	Regulatory 2

The category “other” was filtered from this analysis because of the all-encompassing nature of this category. Due to this expansiveness, a definitive Lowi category would have been difficult to apply to the category other. The remaining five agency types had at least one statistically significant association with a budget coping strategy. These agency types may illustrate the varying strategies used among the groupings. The strategy chosen may help to illustrate that certain groups of agencies use certain strategies to reduce budget expenditures. Table 28 shows the percentage use of budget coping strategies among the 5 agency types.

Table 28. Percent use of strategies among agency types.

Budget Strategies	Staff	Human Resources	Natural Resource & Transp.	Economic Dev. & Regulatory	Crime
1. Hiring freeze	70.7	75.9	72.8	77.5	69.0
2. Cut capital outlay	59.8	61.3	68.5	60.1	61.1
3. Freeze salaries	69.5	58.5	62.9	60.7	58.4
4. Across-the-board cuts	62.2	59.0	59.5	49.7	61.1
5. Eliminate programs	56.1	63.7	58.0	49.1	61.9
6. Cut least efficient subunits	53.7	57.5	55.6	45.7	66.4
7. Cut maintenance outlays	57.3	57.5	58.6	44.5	63.7
8. Contract out- private firms	36.2	51.8	53.9	44.2	45.9

Table 29. Mini table of crosstabulation p-values for agency types.

	Hiring Freeze	Cut Capital Outlay	Freeze Salaries	Across Board Cuts	Eliminate Programs	Cut Least Efficient Subunits	Cut maintenance outlay	Contract out-private
Agency Type								
1. Staff	.657	.764	.082	.323	.962	.957	.561	.045*
2. Human Resources	.244	.995	.485	.520	.014*	.232	.275	.123
3. Natural Res. & Transp.	.990	.009*	.393	.386	.558	.559	.125	.018*
4. Econdev & Regulatory	.129	.723	.967	.031*	.034*	.016*	.004*	.433
5. Crime	.335	.956	.618	.357	.201	.005*	.032*	.812

In viewing the p-values in Table 29, the staff category proved statistically significant with the use of contract out to private firms. Instead of cutting programs and projects, this agency type shows statistical significance in the use of contracting services



out for budget reduction. Redistributive agencies showed statistical significance with the strategy eliminate programs. This immediate cut to budget expenditures also proves common knowledge of programs with little public support; they are prone to elimination during austere times. Distributive agencies showed statistical significance with the strategy cut capital outlays. Construction projects and other projects for structural development are budget items cut by this agency type, which brings direct and fast reduction to budget expenditures. Regulatory agencies showed significant influence with across-the-board cuts, eliminate programs, cut least efficient subunits, and cut maintenance outlays. All the immediate cut strategies except one- cut capital outlay. It may be that regulatory agencies have less structural development projects. A summary of support for all hypotheses are presented in Table 30.

Table 30. Summary of support for hypotheses.

Hypotheses	Supported or not
1. Female administrators tend to use fewer budgetary coping strategies than male administrators.	Overall hypothesis is supported. Except for privatization strategy.
2. Fiscal conservatives will utilize a greater number of budgetary coping strategies than those that identify as fiscally liberal or moderate.	Overall hypothesis <b>not supported</b> .
3. Administrators appointed by the governor will use a greater number of strategies than those appointed by civil service or department head.	Overall hypothesis <b>not supported</b> .
4. Administrators with greater number of years experience use less budget coping strategies.	Overall hypothesis only <u>partially</u> supported.
5. Administrators in regulatory agencies will use a greater number of budget coping strategies than those in any other agency type.	Overall hypothesis only <u>partially</u> supported.
6. The greater the total organization size, the greater the use of budget coping strategies.	Supported by all strategies <b>except</b> freeze salaries and across-the-board cuts.
7. As agency budget size increases, budget coping strategies will increase.	Supported by all strategies <b>except</b> freeze salaries.

### Multivariate Analysis

Binary logistic regression (LOGIT), a type of multivariate regression, was chosen for this analysis because the eight dependent variables are dichotomous, comprised of zero-one values distinguishing use of budget strategy. Logit was used to analyze simultaneously the impact of the independent variables on the dependent variables. Logit

analysis is used to predict probability outcomes and the strength of association among these variables. (Menard, 1995). The results of LOGIT are presented in tables 31 through 38.

### *Binary Logistic Regression (LOGIT)*

The administrator variables and three control variables were used in this analysis with limits to the organizational variables. The organizational variable staff was withheld from this analysis to prevent multicollinearity among the agency type variables. Collinearity diagnostics were also analyzed in SPSS to obtain the Variance Inflation Factors (VIF) for all independent variables. The VIF coefficients were all under 2.5 signifying no presence of multicollinearity in this analysis. The corresponding tolerance statistic was close to 1 showing no presence of multicollinearity among the independent variables. In addition, the agency type “others” was filtered out of this analysis through SPSS because of the expansiveness of the variable. The control variables associated with this research are divided government, proportion federal funding, and partisanship.

Only the statistically significant results of the LOGIT analyses are presented below, starting with the overall model. The tables include the predictor variables, B- the Beta statistic which shows the effect of the predictor variable on the dependent variable, the S.E.- the standard error, and the expected beta statistic which shows the expected odds ratio, which will be represented as the Exp(B) hereafter. (George & Mallery, 2006) The Exp (B) statistic is converted for explanation purposes into percent use by the

formula (odds/1+odds). The statistic is not presented in table form only addressed in the LOGIT table narratives.

A series of logit analyses were conducted on the variables associated with this research. In the first series of analysis, and for each dependent variable (budget coping strategy), the administrator, organizational, and control variables were analyzed together. The second series retained the control variables and only the administrator variables. The third series analyzed only the organizational and control variables. In each series/models, the control variables were held constant. Statistically significant results are presented below.

#### *Hiring Freeze*

This is the only budget coping strategy in which all models showed statistically significant influence. Across all three models, divided government was found to have influence on this budget coping strategy. The results shown here verify that among all variables divided government and the budget strategy hiring freeze have a statistically significant association.

Table 31. Statistically Significant Logistic Regression Predictions of Use of Budget Coping Strategy- Hiring Freeze with all variables (Model 1).

Variable	<i>B</i>	<i>S.E.</i>
Gender	-.043	.290
Fiscal Ideology	-.017	.049
Appointment Governor	-.462	.323
Appointment DeptHd/CivServ	.228	.328
Yrs current position	-.031	.024
Yrs in agency	.005	.013
Number of employees	.000	.000
Budget size	.000	.000
Human resources	.434	.676
Natural Resources	.045	.662
Economic dev. & regulation	.504	.697
Crime	-.391	.692
Proportion Federal aid	.128	.251
Gov. Party	-.188	.234
<b>Divided Government</b>	<b>.650</b>	<b>.231</b>
Constant	.727	.751

Model  $\chi^2(15)=35.703$ ,  $p=.002$  Percent predicted correctly=74.8%, N=824

Table 31 shows that in analyzing all independent variables in addition to the control variables, divided government influences the administrator's choice in deciding to use the strategy hiring freeze. The Exp(B) is 1.915, for every one-unit increase in divided government there is an increase in odds more than one and four fifths that the respondent chose hiring freeze. The odds of using this strategy when divided government exists in state government are 66%. It is more likely for agency heads working in a state with divided government to use the budget coping strategy hiring freeze.

In Model 2, administrator and control variables showed influence on this budget strategy. Table 32 shows the Exp(B) is 1.988, for every increase in divided government

there is an increase in odds slightly more than one and four fifths that the respondent chose hiring freeze. In other words, the odds of using the strategy hiring freeze in this model is 67%.

Table 32. Statistically Significant Logistic Regression Predictions of Use of Budget Coping Strategy- Hiring Freeze with administrator plus control variables (Model 2).

Variable	<i>B</i>	<i>S.E.</i>
Gender	.059	.256
Fiscal Ideology	-.008	.045
Appointment Governor	-.212	.286
Appointment DeptHd/CivServ	.407	.296
Yrs in current position	-.034	.021
Yrs in agency	.004	.011
Proportion federal aid	.223	.224
Gov. Party	-.089	.214
<b>Divided Government</b>	<b>.687</b>	<b>.210</b>
Constant	.735	.356

Model  $\chi^2(9)=24.735$ ,  $p=.003$  Percent predicted correctly=75.0%, N=824

The results of Model 3 are found in Table 33, showing the statistically significant association between the organization variables and the control variables and the influence on hiring freeze. Exp(B) is 1.945, therefore for every one-unit increase in divided government there is an increased odds that the respondent chose hiring freeze by 66%.

Table 33. Statistically Significant Logistic Regression Predictions of Use of Budget Coping Strategy- Hiring Freeze with organizational plus control variables (Model 3).

Variable	<i>B</i>	<i>S.E.</i>
Number of employees	.000	.000
Budget size	.000	.000
Human Resources	.463	.546
Natural resources	.315	.534
Economic dev. and regulation	.627	.572
Crime	.005	.570
Proportion fed aid	.105	.224
Gov. Party	-.226	.203
<b>Divided Government</b>	<b>.666</b>	<b>.205</b>
Constant	.284	.538

Model  $\chi^2(9)=23.040$ ,  $p=.006$  Percent predicted correctly=74.7%, N=824

The budget coping strategy hiring freeze has shown a strong association among the variables used in this research. Hiring freeze was also the most used strategy among agency heads. Although a delayed strategy compared to the other strategies, it is one of the most utilized for state agency budget reductions.

### *Cut Capital Outlay*

This is one of three strategies that showed no statistically significant associations across all three models. Model 1 – the overall model, model 2- administrator variables plus control variables and model 3- organizational variables plus control variables all

show that the models are not statistically significant. In all three models, four variables had a statistically significant p-value. In model 1 organizational size and budget size had statistically significant p-values. In model 2 years in this agency (longevity) showed significance. In model 3, organizational size (employees) showed a statistically significant p-value.

*Freeze Salaries*

Only two of the models showed impact on this strategy. Both of these models included the administrator variables. Model 3 showed no statistically significant associations. Table 34 shows the overall model.

Table 34. Statistically Significant Logistic Regression Predictions of Use of Budget Coping Strategy- Freeze Salaries with all variables (Model 1).

Variable	<i>B</i>	<i>S.E.</i>
Gender	-.003	.254
Fiscal ideology	-.018	.043
Appointment Governor	.101	.286
<b>Appointment DeptHd/Civserv</b>	<b>.595</b>	<b>.282</b>
<b>Years in current position</b>	<b>-.059</b>	<b>.022</b>
<b>Years in agency</b>	<b>.032</b>	<b>.012</b>
Number of employees	.000	.000
Budget size	.000	.000
Human Resources	.478	.600
Natural resources	.131	.593
Economic dev. and regulation	.632	.622
Crime	-.029	.627
Proportion federal aid	-.087	.219
Gov. Party	-.001	.206
Divided Govt.	-.249	.212
Constant	.000	.673

Model  $\chi^2(15)=26.765$ ,  $p=.031$  Percent predicted correctly=61.9%, N=824



The three administrator variables having influence on this strategy show that administrator selection and longevity in the agency have influence on the use of this strategy.

In the case of appointment,  $\text{Exp}(B)$  is 1.184, therefore for every one-unit increase in appointment there is an increased odds that the respondent chose to use freeze salaries by 54%. For years in current position,  $\text{Exp}(B)$  is .942 and  $B$  is -.059, therefore respondents who had more years in the current position were less likely to use the strategy freeze salaries by 49%. Lastly for years in agency,  $\text{Exp}(B)$  is 1.032, for every one-unit increase in years in agency there is an increased odds that the respondent chose freeze salaries by 51%.

In model 2, two of the administrator variables, years in current position and years in agency had a statistically significant association with this budget coping strategy. Years in current position had an  $\text{Exp}(B)$  of 0.949, the odds of use is 49%. Years in agency  $\text{Exp}(B)$  is 1.023, the odds of this strategy being used 51%.

#### *Across-the-board cuts*

This is the second of three strategies that showed no statistically significant associations across all three models. Model 1 – the overall model, model 2- administrator variables plus control variables and model 3- organizational variables plus control variables all show that the models are not statistically significant. In model 1, two

variables had a statistically significant p-value. In model 1, years in current position and divided government had statistically significant p-values.

*Eliminate Programs*

Only two of the models showed impact on this strategy. Both of these models included the organizational variables. Model 2 was not statistically significant but the variables fiscal ideology and years in current position showed statistically significant p-values. Table 35 shows the overall model.

Table 35. Statistically Significant Logistic Regression Predictions of Use of Budget Coping Strategy- Eliminate Programs with all variables (Model 1).

Variable	<i>B</i>	<i>S.E.</i>
Gender	-.030	.257
<b>Fiscal Ideology</b>	<b>.096</b>	<b>.044</b>
Appointment Governor	.105	.298
Appointment DeptHd/Civserv	-.270	.285
<b>Years in current position</b>	<b>-.051</b>	<b>.022</b>
Yrs in agency	.013	.011
Number of employees	.000	.000
Budget size	.000	.000
Human resources	.437	.618
Natural resources	-.030	.607
Economic dev. and regulation	-.201	.630
Crime	.378	.646
Proportion federal aid	-.204	.219
Gov. Party	-.351	.207
Divided Government	-.125	.212
Constant	.521	.687

Model  $\chi^2(15)=29.031$ ,  $p=.016$  Percent predicted correctly=62.1%, N=824

The two administrator variables having influence on this strategy show that administrator ideology and longevity in the agency have influence on the use of this strategy.

In the case of fiscal ideology,  $\text{Exp}(B)$  is 1.101; therefore for every one-unit increase in appointment there is an increased odds that the respondent chose to use the budget strategy eliminate programs by 52%. For years in current position,  $\text{Exp}(B)$  is .951, respondents who had more years experience in the current position were less likely to eliminate programs by 49%. These results corroborate findings in the bivariate analysis and will be discussed in summary. In model 2, the same two administrator variables, fiscal ideology and years in current position had a statistically significant association with this budget coping strategy. Model 3 was found to be significant with no variable associations.

#### *Cut least efficient subunits*

This is the third of the three strategies that showed no statistically significant associations across all three models. Model 1 – the overall model, model 2- administrator variables plus control variables and model 3- organizational variables plus control variables all show that the models are not statistically significant. In model 1 and model 2, one variable had a statistically significant p-value, years in current position. In model 3 human resource agency type, natural resource agency type, and crime agency type had statistically significant p-values.

*Cut maintenance outlay*

Only two of the models showed impact on this strategy. Both of these models included the organizational variables. Model 2 was not statistically significant but the variables years in agency and years in current position showed statistically significant p-values. Table 36 shows the overall model.

Table 36. Statistically Significant Logistic Regression Predictions of Use of Budget Coping Strategy- Cut maintenance outlay with all variables (Model 1).

Variable	<i>B</i>	<i>S.E.</i>
Gender	.251	.256
Fiscal ideology	.079	.044
Appointment Governor	.039	.293
Appointment DeptHd/Civserv	.053	.283
Yrs in current position	-.037	.022
Yrs in agency	.021	.011
<b>Number of employees</b>	<b>.000</b>	<b>.000</b>
Budget size	.000	.000
Human resources	.067	.611
Natural resources	.273	.602
Economic dev. and regulation	-.490	.625
Crime	.163	.634
Proportion federal aid	.040	.218
Gov. party	-.339	.206
<b>Divided government</b>	<b>.531</b>	<b>.210</b>
Constant	-.577	.680

Model  $\chi^2(15)=44.257$ ,  $p=.000$  Percent predicted correctly=65.7%, N=824

In the case of organizational size,  $\text{Exp}(B)$  is 1.000, therefore for every one-unit increase in size there is an increased odds that the respondent chose to use the budget

strategy cut maintenance outlay by 50%. Divided government Exp(B) is 1.701, therefore for every one-unit increase there is an increased odds that the respondent chose to use this strategy by 63%. In Model 3 the overall fit was statistically significant, with number of employees and divided government as the only two variables with statistical significance. These organizational variables are statistically significant in the influence of the agency head to utilize this type of immediate reduction strategy.

Table 37. Statistically Significant Logistic Regression Predictions of Use of Budget Coping Strategy- Cut maintenance outlay with all variables (Model 3).

Variable	<i>B</i>	<i>S.E.</i>
<b>Number of employees</b>	<b>.000</b>	<b>.000</b>
Budget size	.000	.000
Human resources	.104	.501
Natural resources	.362	.491
Economic dev. and regulation	-.343	.516
Crime	.493	.527
Proportion federal aid	.022	.196
Gov. party	-.278	.182
<b>Divided government</b>	<b>.439</b>	<b>.187</b>
Constant	-.238	.496

Model  $\chi^2(9)=40.965$ ,  $p=.000$  Percent predicted correctly=62.6%,  $N=824$

In the case of organizational size in Table 37 above, Exp(B) is 1.000, therefore for every one-unit increase in size there is an increased odds that the respondent chose to use the budget strategy cut maintenance outlay by 50%. Divided government Exp(B) is 1.552, therefore for every one-unit increase there is an increased odds that the respondent chose to use this strategy by 61%.

*Contract out to private firms*

This last strategy that showed no statistically significant associations across two models. Model 1 – the overall model shows statistical significance, however, model 2- administrator variables plus control variables and model 3- organizational variables plus control variables both show that the overall models are not statistically significant. In model 1, two variables had a statistically significant p-value, natural resource agency type and development and regulation agency type. In model 3, only natural resource agency type had a statistically significant p-value.

Table 38. Statistically Significant Logistic Regression Predictions of Use of Budget Coping Strategy- Contract out to private firms with all variables (Model 1).

Variable	<i>B</i>	<i>S.E.</i>
Gender	.251	.249
Fiscal Ideology	.078	.043
Appointment Governor	.474	.292
Appointment DeptHd/Civserv	.196	.282
Years in current position	-.023	.022
Yrs in agency	-.010	.011
Number of employees	.000	.000
Budget size	.000	.000
Human resources	1.322	.618
<b>Natural resources</b>	<b>1.745</b>	<b>.709</b>
<b>Economic dev. and regulation</b>	<b>1.572</b>	<b>.729</b>
Crime	1.309	.737
Proportion federal aid	-.075	.215
Gov. Party	-.205	.204
Divided Government	.239	.209
Constant	-1.976	.785

Model  $\chi^2(15)=26.114$ ,  $p=.037$  Percent predicted correctly=58.7%, N=824

In the case of natural resources agency type, Exp(B) is 5.724, therefore the odds of using the strategy contract out to private firms for the natural resource agency type is 85%. For the economic development and regulation agency type Exp(B) is 4.816, therefore the odds of using this strategy for this agency type is 83%.

Table 39 below summarizes the findings from Logit analyses.

Table 39. Statistically Significant Associations within LOGIT model types.

<b>Budget Coping Strategies</b>	<b>Model 1</b> All variables	<b>Model 2</b> Only administrator and control variables	<b>Model 3</b> Only organizational and control variables
1. Hiring Freeze	<b>Significant</b> Divided government	<b>Significant</b> Divided government	<b>Significant</b> Divided government
2. Cut Capital Outlay	-	-	-
3. Freeze Salaries	<b>Significant</b> Appointment, yrs current position and years in agency	<b>Significant</b> Appointment, yrs current position and years in agency	-
4. Across-the-board cuts	-	-	-
5. Eliminate Programs	<b>Significant</b> Fiscal ideology and years current position	-	<b>Significant</b> (no variables)
6. Cut least efficient subunits	-	-	-
7. Cut maintenance outlay	<b>Significant</b> Organization size and divided government	-	<b>Significant</b> Organization size and divided government
8. Contract out to private firms	<b>Significant</b> Agency types: natural resource and Economic dev	-	-

## Discussion

### *Organizations*

Research findings from the bivariate and multivariate analysis show that there are more associations between the organizational variables and the budget coping strategies. Organization size (employees) and budget size proved to have more influence on agency heads' choice of strategies than any other variables used in this research. The organization influences how the administrator reacts in every situation (March & Simon, 1958; Lowi, 1972, 1985; Moe, 1984). These findings illustrate the meaning of Miles' Law. The administrator is limited to the parameters set by the organization and acts within that structure to make decisions that prolong organizational health. Administrators must act within the organization structure, and two major facets to any organization are its size and budget. This analysis explored administrator decisions into budget coping strategies that are tools directly linked to an organization's finances. It is no surprise that the budget size and the number of employees influence administrator decisions on agency budget.

Research has confirmed that the type of agency also influences the activities of the administrator and the organization (Lowi, 1972, 1985; Brudney & Hebert, 1987; Thompson & Felts, 1992). Although not a big factor in the multivariate analysis, agency types did differ among the types of budget coping strategies employed by agency administrators. The results of bivariate analyses showed that regulatory agencies used a mix of direct and immediate cuts, strategies included across-the-board cuts, eliminate



programs, cut least efficient subunits, and cut maintenance outlays. These strategies are immediate reduction of budget expenditures, which control organization spending, they seem characteristic of regulatory agencies. Regulatory policy controls our daily activities by enforcing sanctions and penalties for failure to comply with federal government laws. The policy and practice show this control over budget actions. Distributive agencies showed strong association with the budget coping strategy cut capital outlay. Most agencies within this agency type deliver benefits and services to the public. Therefore, resources and investments would be scaled back or cut to preserve the agency budget. Redistributive agencies showed associations with the strategy eliminate programs. These agencies promote equity by redirecting income into the delivery of services to disadvantaged segments of the population. The use of this strategy by redistributive agencies illustrates that in austere times unfunded or low-priority programs will be terminated to reduce agency budget expenditures. Lastly, constituent agencies propensity to contract out to private firms was substantiated with a statistically significant bivariate association. This agency type reduces budget expenditures by paying another firm to execute government services and maintaining oversight, this shows that this type of contracting out service helps to alleviate budget woes.

### *Budget coping strategies*

The research into administrator choice of budget coping strategies yielded many key findings. First, the most utilized budget coping strategy was a delayed strategy-hiring freeze. It is a strategy used with high frequency by agency administrators. Administrators are more apt to use this strategy than to cut services or budget items. Instead of reducing programs or cutting elements of the organization, administrators would rather put a moratorium on new employees. This strategy is also used when divided government influences the administrator. Second, the two delayed budget coping strategies in this research (hiring freeze and freeze salaries) were found to have associations with model 1 and model 2. The similarity in these models being the presence of administrator variables within these models. Third, the budget coping strategy freeze salaries had association with administrator appointment, years in the current position, and years in the agency. This is a strategy influenced by administrator characteristics, more importantly the more years in the current position the less likely the administrator is to implement the strategy. Fourth, the strategy to eliminate programs, characteristic of redistributive agencies, was influenced by organizational variables in the models, and showed associations with two administrator variables- administrator fiscal ideology and years in current position. This may show the administrator's ideology interacting with the responsibility to serving the least among us. The more years in the current position as agency administrator, the less likely the administrator is to use this strategy. Last, the strategy to cut maintenance outlay, characteristic of regulatory agencies, was influenced by the organization's size and divided government. This ability

of an organization to reduce expenditures and preserve the organization on limited funds allows for the retention of services and programs.

### Anticipated Results

The research results identified the budgetary coping strategies used by state agency administrators in the most recent economic recession of 2004. There was a difference in the types of budget strategies used by state administrators and among agency types. These differences were based on appointment, the type of agency, the size of the agency budget, and the size of the organization. Largely organization characteristics influence administrator decisions on choice of budget coping strategy. Gender had an influence on one of the strategies- privatization. In concurrence with Bernard (1968) the 2004 ASAP data contained less elected officials and had majority appointed heads to state agencies.

Both the administrators and organizations influence the use of these budget coping strategies, but more statistically significant relationships were established between the organizational variables, organizational size and agency budget size, and the budget coping strategies. When administrator influence was statistically significant it was primarily in the form of administrator experience. The meaning of Miles' Law is empirically supported by these results. It is the organization and the organizational variables that exert more influence on the administrator's use of budget coping strategies.

## Unanticipated Results

The original premise of administrator influence as the primary influence on the budget strategies was not fully supported. The results show that the primary influence on budget coping strategies is from organizational variables; they have pronounced impact specifically organization size and agency budget size.

The findings surrounding the administrator ideology variable was also surprising. The lack of statistical significance was disappointing because administrator ideology was believed to have a significant role in administrator choice of budget coping strategy.

The analyses showed the overwhelming use of the budget coping strategy hiring freeze and the influence of the organization on administrator decisions. The empirical findings from this research promote increased knowledge among students of public administration into the budget coping strategies of public agencies.

## Conclusion

Chapter 4 provided the findings and analysis of this research and concluded with the brief overall results of the research findings. Chapter 5 provides the conclusion to this research.

## **CHAPTER FIVE**

### **CONCLUSION**

This chapter summarizes the research analysis providing a discussion of the limits to the model, direction for future research, and concludes with the research contribution to the field of public administration and public policy.

#### Summary of Research

This dissertation has provided an empirical investigation into the influences on state agency budget coping strategies. The importance of this study is the empirical investigation confirming the differences and influence that organizational characteristics have on budget coping strategies used by state agency administrators. The research definitively supports the literature on organizations, specifically the significance of size. The research into current budget coping strategies show the types of tools used by state agency administrators, and allow for more investigation into other budget-reducing alternatives. The purpose of this study was to identify the types of strategies, use among administrators, and compare the influences of individual and agency characteristics on

administrator choice of budget strategies. The instrumentation used in this research was the data results from mail survey respondents of the 2004 American State Administrators Project (ASAP).

Administrator characteristics in combination with organizational characteristics were analyzed to identify the impact of administrator and organizational characteristics on the use of budget coping strategies. The literature on state administrator influences is limited but the literature on budget theory and cutback management provided a basis from which investigation into other areas was achieved. As previously stated, among the recent supportive research on Levine's thesis [cutback management] (Savage and Schwartz, 1998; Bowling and Burke, 2006) scholars find that observers and reformers responses to fiscal stress will vary. The research presented here illustrates this variation with the analysis of eight budget coping strategies, and the associations among both administrator and organizational variables. Research findings show the primary strategy used among state agency administrators is hiring freeze, not an immediate cut to some aspect of agency operations. More women used the privatization strategy than any other type of strategy. Organizational characteristics were found to have more influence on the type of strategy chosen by state agency administrators, thereby empirically corroborating the meaning of Miles' Law. Lastly, administrators across four agency types were found to use distinct budget coping strategies.

This research provided an investigation into the influences of administrator choice in use of budget coping strategies. The numerous tables in chapter four provided detail of the many relationships that exist between the type of budget coping strategy and the administrator and organizational variables.

Crosstabulation results and binary logistic regression analyses were utilized to show association among the many variables. These empirical results confirmed the scholarly works of Caiden (1980) and Savage & Schwartz (1999) that stated there are multiple remedies to fiscal austerity. In 1965, Sharkansky offered that there were multiple elements affecting the choice of strategy used by the agencies' top executives. (p.268) The same holds true today. This research confirms what scholars have stated; and the question of which variables had greater influence on the budget coping strategy was conclusive. Organizational variables such as organizational size and agency budget size showed statistical significance with all budget coping strategies excluding the strategy freeze salaries. The administrator variables had minimally concentrated associations among four or five of the budget coping strategies. Both sets of variables exhibited statistical significance, however, organizational variables exhibited the most influence on state agency budget coping strategies.

### Hypotheses and Findings

Seven hypotheses with two-prong questions were developed to support this research:

*H1a. In comparing state agency administrators, female administrators tend to use fewer budget coping strategies than male administrators.*

*H1b. In comparing male and female state agency administrators, female administrators are more likely to use delayed budget coping strategies than male administrators.*

The first part of this hypothesis was supported. The research analysis found that of the top eight budget coping strategies, male respondents use budget coping strategies at a rate slightly higher than female administrators. In viewing the results of the analyses, female administrators showed less usage percentage than do male administrators among five of the eight budget coping strategies. This provides evidence that fiscal management and fiscal decision-making among the genders will vary. The second part of this hypothesis was not supported by the research. There was no difference between the uses of the two delayed budget coping strategies in regard to gender.

*H2a. In comparing state agency administrators, those administrators that identify themselves as fiscally conservative will utilize more budget coping strategies than administrators that identify themselves as fiscally liberal or moderate.*

*H2b. In comparing state agency administrators, those administrators that identify themselves as fiscally conservative will utilize immediate budget coping strategies more than administrators that identify themselves as fiscally liberal or moderate.*

The first part of this hypothesis was not supported. Those identifying themselves as fiscally moderate primarily used six of the eight strategies. The majority of state administrators that responded to the survey identified themselves as fiscally conservative, however, research showed a higher percentage of use among moderates. Fiscal ideology used as a predictor variable did not support this hypothesis. In fact, more use of these



strategies was found among moderates than liberals or conservatives. The second part of the hypothesis was also not supported by the data; again, moderates used more immediate cuts than conservative administrators.

*H3a. In comparing state agency administrators, those appointed by the governor will use more budgetary coping strategies than administrators appointed by the department head or civil service process.*

*H3b. In comparing state agency administrators, those appointed by the governor will use immediate budget coping strategies while those appointed by boards or the legislature will use delayed strategies.*

This hypothesis was not supported by the research. The research results show that the governor appointed more administrators, but their use of these strategies were not more than any other group. This does not confirm the previous notion that the dominant force responsible for the administrator's placement has marked influence on the administrator's agenda. Results show variation among the strategy choices of state agency administrators and their use of budget coping strategies. The second part of this hypothesis was also not supported. Administrators appointed by the governor did not use more immediate cuts.

*H4a. In comparing state agency administrators, administrators with a greater number of years of experience will use fewer budget coping strategies.*

*H4b. In comparing state agency administrators, administrators with increased longevity will use budget coping strategies classifies as immediate cuts.*

The first part of this hypothesis is partially supported. Experience was analyzed by years in current position and by years in agency. The results of years in the agency did not support the hypothesis; however, results supported the other aspect of the variable experience, years in the current position. Based on years in current position as administrator, the fewer number of years the greater the use of all strategies. Based on a combination of the statistical results, the fourth hypothesis that administrators with a greater number of years of experience will use less budget coping strategies is only partially supported. The research by Egeberg (2003) is observed, “. . . length of service can qualify as a real organization factor among the demographic variables” (118). The first part of this hypothesis is fully supported if only viewing the number of years the administrator has served in the current position as agency administrator. The second part of this hypothesis is not supported, there is no conclusive evidence regarding the type of budget cut.

*H5a. In comparing state agency administrators, those administrators operating in agencies categorized as regulatory will use more budget coping strategies than any other agency type.*

*H5b) In comparing state agency administrators, budget coping strategies will differ among regulatory, distributive, redistributive, and constituent agency types.*

This hypothesis is fully supported. The results of the research showed that regulatory agencies yielded many more statistically significant relationships with the budget coping strategies. Based on the results from the bivariate analysis, the fifth hypothesis that administrators operating in agencies categorized as regulatory will use

more budget coping strategies than any other agency type was supported. The second part of this hypothesis was also supported. There was a difference in types of strategies used among agency types. The information found in this research corresponds with the works of Newman (1994), Wechsler and Backoff (1986), and Hill and Plumlee (1984). Leadership and agency type matter in the administration of budget cuts. These agency types act in distinctive ways and budgeting in times of austerity is no different.

*H6a. In comparing state agency administrators, the greater the total number of agency employees, the greater the use of budget coping strategies.*

*H6b. In comparing state agency administrators, budget coping strategies will differ among the organization size.*

Both parts of this hypothesis were supported by the analysis. There was a positive and statistically significant relationship between agency size and administrator use of budget coping strategies. A pattern emerged in cross tabulation tables that showed an increase in percentage use from quartile one through quartile four. The administrators in the biggest agencies used budget coping strategies more than those in smaller agencies. The research findings paralleled the scholarly works of Rainey (2003) and Egeberg (2003). Size is relevant and statistically significant.

*H7a. In comparing state agency administrators, as agency budget size increases, budget coping strategies will increase.*

*H7b. In comparing state agency administrators, budget coping strategies will differ among the budget size of administrator organizations.*

Both parts of this hypothesis were supported by the analysis. A pattern emerged among use of strategies and budget size, there was an increase from quartile one to quartile four. This shows that the larger the budget the more strategies are used to curb expenditures. A positive and statistically significant relationship exists between agencies with bigger budgets and the agency administrator's use of budget coping strategies.

In summary, three of the seven hypotheses were fully supported by the research. Two of the hypotheses were partially supported because the research variable was split between two ways of measuring administrator's experience and two aspects of strategy use among agency types. Lastly, the two hypotheses involving administrator ideology and administrator appointment yielded unsatisfactory results and could not be supported.

#### Limitation of the Model

The conclusions drawn from this research analysis are valid and reliable, there was no presence of multicollinearity among the variables in the research, and the overall fit of the model was shown as statistically significant. The variable agency type can be refined by the creation of another index to investigate how the four types of agencies

function. Due to time constraints the variable functional category 6 was used in the analysis and Lowi classifications were assigned to these data.

### Future Research

This research can be refined with the use of a time series model incorporating the responses of state administrators from previous years ASAP surveys. This could provide information into strategies used over time, changes in respondents and their use, and emerging strategies. The dependent variable can be minimized by the amount of variety or by the creation of a new variable that would contain the vastness of this research.

Further research is promoted into the significance of agency budget size and organization size. These two variables have proven to influence an array of budget strategies. Several authors have noted the complexity of organizational size; more research that is empirical in nature would expand the base of knowledge for public administration scholars, students, and practitioners alike.

### Conclusion

The findings of the research conclude that organizational variables, not administrator variables, have the most influence on administrator choice of budget coping strategy. During times of fiscal austerity, it is important that public organizations seek

alternatives to supplement the decreasing revenue in their yearly budgets. Presently, there does not exist any cataloguing of budget strategies used by top public agency administrators, nor any documentation comparing agency budget strategies. This research provides empirical evidence into the budget coping strategies used by state agency administrators using 2004 ASAP data. The research shows that by cutting expenditures, organizations can control activities, preserving its health and longevity. Reducing expenditures may take the form of freezing employment of new hires, freezing salaries, and privatization techniques. This research provided an original account of the budget strategies used in the year 2004 by administrators and their organizations. The research presented an original analysis into an area of state administration that previously has been undocumented, providing detailed analysis of budget coping strategies, and administrator and organizational influences.

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## APPENDIX A

### The 2004 American State Administrator's Project Survey

# American State Administrators Project 2004<sup>1</sup>

STATE AGENCY HEADS: EXECUTIVE LINCHPINS OF AMERICAN GOVERNANCE

The American State Administrators Project is an ongoing survey tracking the attributes, attitudes, and activities of state agency heads since 1964. YOU are the only source of this important information! We invite YOUR participation in this survey about you, your agency, roles and relationships, programs and perspectives on a variety of important issues, including:

## PROGRAM CHANGES? FISCAL AUSTERITY? IMPACTS OF 9-11?

[Signature appeared here]

[Signature appeared here]

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The following questions are brief, direct, and can be answered with simple designations. The questionnaire is self-returning — no stamps or envelope needed! Responses are confidential. Only aggregate results will be reported.

### A. Questions about Programs and Priorities

1. Do you think that the current overall level of programs, services, and expenditures by **your state** should be expanded and increased:  Yes;  No  
**IF YES:** by how much?  up to 5%;  5-9%;  10-14%;  15% or more  
**IF NO:** by how much reduced?  none;  up to 5%;  5% or more
  2. Regarding the specific programs and services performed by **your agency**, should these be expanded and increased?  
 Yes;  No  
**IF YES:** by how much?  up to 5%;  5-9%;  10-14%;  15% or more  
**IF NO:** by how much reduced?  none;  up to 5%;  5% or more
  3. Within the past four years what **changes or shifts** have taken place in the ordering of priorities **among programs** within your agency?  
 none;  minor shifts;  moderate shifts;  major shifts
- 3a. Were any shifts in program priorities the result of policy initiatives or actions originated by any of the following? (check wherever applicable)

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<sup>1</sup> Basic question layout, font, and content are as they appeared in the original survey. Page locations vary from the survey and the signature line has been removed.

legislators                       local gov't officials                       other interest groups  
 governor                               nat'l gov't officials                       news media  
 agency staff                               clientele groups                       state courts

3b. Approximately what proportion of the shifts or changes in programs and priorities occurred because of *financial cutbacks*; that is actual reductions in outlays, not merely cuts in budget requests?

under 25%;  25-49%;  50-74%;  75% or more

**B. Your Position and Your Agency**

1. Please indicate (check) the nature of the appointment or approval process by which you came to your present post.

Governor with legislative consent                      Department head  
 Governor without legislative consent                      Popular election  
 Board/commission with governor's consent                      Civil service process  
 Board/commission without governor's consent                      Other (please indicate) \_\_\_\_\_

2. Is your position covered by a civil service (merit) system? Yes;  No

3. How large is the agency which you head?

3a. Total number of employees? \_\_\_\_\_

3b. Size of current annual budget? (in millions of dollars) \_\_\_\_\_ million(s)

4. How do you divide your time - in approximate percentage terms -among:

a. Internal Management: routine administration

b. Policy Development: with governor, legislators, and boards

c. Public Support: with clientele and interest groups

Total = 100%

**C. Agency Relationships**

1. Generally speaking, do you find that the governor or the legislature exercises greater control and oversight over your agency?

Governor;  Legislature;  Each the same

2. Suppose your State's governmental structure were reorganized and you were able to select who would exercise the greater control and oversight over your agency. Which one of the following would you choose?

Governor;  Legislature;  Independent commission

3. Who exercises the more detailed review of your agency's budget requests?

Governor;  Legislature;  Each the same

4. Who has the greater tendency to reduce your budget requests?

Governor;  Legislature;  Each the same

5. In making various agency decisions it is usually possible to identify and weigh several major sources of influence. Among these are: (1) governor, (2) legislators, (3) state courts, (4) clientele groups, (5) professional associations and (6) agency career officials. Please indicate below (by circling) the degree of influence each source has on decisions your agency makes in the following decision areas.

5a. Total agency budget level:	Degree of Influence			
	None	Slight	Moderate	High
Governor	N	S	M	H
Legislators	N	S	M	H
State courts	N	S	M	H
Clientele groups	N	S	M	H
Professional associations	N	S	M	H
Agency career officials	N	<b>S</b>	M	H

**5b. Budgets for specific programs:**

Governor	N	S	M	H
Legislators	N	S	M	H
State courts	N	S	M	H
Clientele groups	N	S	M	H
Professional associations	N	S	M	H
Agency career officials	N	S	M	H

**5c. Major policy changes:**

Governor	N	S	M	H
Legislators	N	S	M	H
State courts	N	S	M	H
Clientele groups	N	S	M	H
Professional associations	N	S	M	H
Agency career officials	N	<b>S</b>	M	H

**5d. Agency rules /regulations:**

Governor	N	S	M	H
Legislators	N	S	M	H
State courts	N	S	M	H
Clientele groups	N	S	M	H
Professional associations	N	S	M	H
Agency career officials	N	S	M	H

6. Who do you find more sympathetic to and supportive of the purposes and aims of your agency?  
 \_\_\_\_\_ Governor; \_\_\_\_\_ Legislature

7. Please make similar assessments for different gubernatorial and legislative actors that interact with you and your agency in two areas: (a) budgeting for specific programs and (b) creating agency rules and regulations. Please indicate (circle) the degree of influence actually exerted over these two agency activities by the relevant actors: (N=None, S=Slight, M=Moderate, H=High, and VH=Very High).

	A. Budgets for Specific					B. Agency Rules and Regulations				
Governor (personally)	N	S	M	H	VH	N	S	M	H	VH
Governor's staff	N	S	M	H	VH	N	S	M	H	VH
Legislative chamber leaders	N	S	M	H	VH	N	S	M	H	VH
Legislative staff units	N	S	M	H	VH	N	S	M	H	VH
Relevant legislative committees	N	S	M	H	VH	N	S	M	H	VH
Individual rank-and-file legislators	N	S	M	H	VH	N	S	M	H	VH

8. Numerous persons and groups influence the policy decisions of your agency. Some exert a great deal of influence while others have very little influence. Listed below are several actors with different degrees of influence over your agency on *major policy decisions*. On a scale of 1 to 4 indicate your estimate of the level or degree of influence each **one actually exerts** and also how much influence you think they **should exert**. (1=little/no influence; 2=slightly influential; 3 =moderately influential; 4=highly influential)

	<b>Influence Actually Exerted on Major Policy Decisions</b>				<b>Influence That Should Be Exerted on Major Policy Decisions</b> (1=low, 2,3,4=high)			
	1	2	3	4	1	2	3	4
Governor	1	2	3	4	1	2	3	4
Legislators	1	2	3	4	1	2	3	4
Federal Courts	1	2	3	4	1	2	3	4
State Courts	1	2	3	4	1	2	3	4
Clientele groups	1	2	3	4	1	2	3	4
Professional assoc'ns	1	2	3	4	1	2	3	4
Citizens-at-large	1	2	3	4	1	2	3	4
State news media	1	2	3	4	1	2	3	4
Agency employees	1	2	3	4	1	2	3	4
You, as agency head	1	2	3	4	1	2	3	4

**D. Contacts and Program Relationships**

1. On the average, how often do you personally have phone or face-to-face contacts with the following persons during the course of carrying out your official duties? (circle contact frequency)

<b>Persons</b>	<b>Less than</b>				
	<b>Daily</b>	<b>Weekly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Never</b>
Governor	D	W	M	LM	N
Governor's staff	D	W	M	LM	N
Legislators	D	W	M	LM	N
Legislative staff	D	W	M	LM	N
Other state agency personnel	D	W	M	LM	N
Clientele groups	D	W	M	LM	N
Citizens--public at large	D	W	M	LM	N
Officials in other states	D	W	M	LM	N
Local officials	D	W	M	LM	N
National officials	D	W	M	LM	N

2. In contacts with the following persons, about what percentage of the contacts do you initiate?

<b>Persons</b>	<b>Circle the % of contacts you initiate</b>						<b>No Contacts (Check here)</b>	
	0	20	40	60	80	100	_____	_____
Governor	0	20	40	60	80	100	_____	_____
Governor's staff	0	20	40	60	80	100	_____	_____
Legislators	0	20	40	60	80	100	_____	_____
Legislators' staff	0	20	40	60	80	100	_____	_____

3. State administrators are usually aware of program developments and achievements in their field in other states. Insofar as your own program(s) or function(s) are concerned, would you please identify and **rank other States** (by name or abbreviation) according to your best judgment on:

3a. Which States have the most OUTSTANDING program(s) in your field?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

3b. Which States are ones you COMPARE WITH in assessing your program progress or performance?

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

**E. Agency Budgets and Fiscal Austerity**

Your agency requires adequate funding to carry out its mission(s). Please reflect on your agency's most recent budget

process; that is, the sequence by which your agency's current year's agency budget was decided.

1. In your **initial request** to the governor (or relevant budget authority) did you propose a  
 Decrease,  Increase, or  No change from previous year?  
 1b. If an Increase or Decrease, what percentage change did you propose from the previous year? \_\_\_\_\_%
2. What did the **governor** (or relevant budget authority) recommend to the legislature?  
 Decrease,  Increase, or  No change from previous year?  
 2b. If an Increase or Decrease, what percentage change was recommended from the previous year? \_\_\_\_\_%
3. What did the **legislature** appropriate for the current year?  
 Decrease,  Increase, or  No change from previous year?  
 3h. If an Increase or Decrease, what percentage change was appropriated from the previous year? \_\_\_\_\_%
4. Considering **next year's budget**, will you propose (or have you proposed) a:  
 Decrease,  Increase, or  No change from previous year?  
 4b. If an Increase or Decrease, what percentage change will you request (or have you requested)? \_\_\_\_\_%
5. Balancing budgets in times of fiscal stress and austerity presents major challenges. To what degree has your agency experienced any actual reductions in expenditures at any time during the **past three years**? Please indicate the approximate percentage cutback(s) experienced in each of the **past three years**.

Fiscal Year	Percentage Reductions	Some Reductions (Extent unknown)	No Reductions
2001-02	_____ %	_____	_____
2002-03	_____ %	_____	_____
2003-04	_____ %	_____	_____

6. Fiscal austerity and expenditure reductions have been met by state agencies using a variety of coping strategies. Among the strategies listed below, please indicate (by circling) the relative importance **in terms of dollars saved** of each strategy used by your agency at any time in the **past three years**.

Type of Coping Strategy	Degree of Importance				
	High	Moderate	Slight	None	Not Used
a. Across-the-board cuts	H	M	S	N	NU
b. Cut least efficient subunits	H	M	S	N	NU
c. Hiring freeze	H	M	S	N	NU
d. Personnel layoffs	H	M	S	N	NU
e. Freeze salaries / wages	H	M	S	N	NU
f. Reduce salaries / wages	H	M	S	N	NU
g. Contract out – private firms	H	M	S	N	NU
h. Contract out – local gouts.	H	M	S	N	NU
i. Contract out – nonprofit firms	H	M	S	N	NU
j. Shift programs / functions to local gouts.	H	M	S	N	NU
k. Improve productivity	H	M	S	N	NU
l. Eliminate programs	H	M	S	N	NU
m. Cut capital outlays	H	M	S	N	NU
n. Cut maintenance outlays	H	M	S	N	NU

## F. Intergovernmental Relationships: Federal Aid, Regulation, Devolution, and 9-11.

### Federal Aid and Federal Regulations

1. Has Federal Aid led to National interference in affairs that are the appropriate domain of the State?  
 Yes;  No
2. Does Federal Aid tend to unbalance or skew the overall character of your State's program?

\_\_\_\_ Yes; \_\_\_\_ No

3. With respect to overall State finances, do you think that Federal Aid has \_\_\_\_ increased, \_\_\_\_ decreased, or \_\_\_\_ had no effect on the overall level of funds raised by your State?
4. In practice, are agencies that receive Federal Aid less subject to supervision by the governor and legislature in federally financed activities than in activities financed solely by State funds?  
\_\_\_\_ Yes; \_\_\_\_ No
5. In the past four years have National legal /regulatory actions (court decisions, statutes, regulations) infringed on the reserved powers of the States? \_\_\_\_ Yes; \_\_\_\_ No; \_\_\_\_ Don't know

**IF YES:** 5a. On a scale of 1 (low) to 5 (high) indicate (circle) the degree of infringement or intrusion. (low) 1 2  
3 4 5 (high)

6. In the past four years have National legal/regulatory actions altered your State's program and policy priorities? \_\_\_\_ Yes; \_\_\_\_ No; \_\_\_\_ Don't know

**IF YES:** 6a. On a scale of 1 (low) to 5 (high) please indicate (by circling) the degree to which National legal/regulatory actions have altered your State's program/policy priorities.  
(low) 1 2 3 4 5 (high)

7. In your opinion, how would you rate, negatively or positively, the impact of the following types of National actions **on your agency?** (Check applicable impact)

	No Impact	Very Negative	Negative	Neutral	Positive	Very Positive
a. Administrative regulations	_____	_____	_____	_____	_____	_____
b. Mandates (statutory or admin.)	_____	_____	_____	_____	_____	_____
c. Statutory preemptions (assertion Nat'l authority)	_____	_____	_____	_____	_____	_____
d. Federal court decisions	_____	_____	_____	_____	_____	_____

of total

**Devolution and 9-11 Impacts on State Government**

Recent "devolution" actions have been intended to give greater power and discretion to the States. At the same time, September 11 after-effects have had varied impacts. Please respond with your views and opinions below.

1. First, with respect to *your state*, thinking on a statewide basis over the past four years, have you observed an increase, decrease, or no changes in state-national relationships in the following areas? If you check Increase or Decrease, please circle the degree of change, on a scale from 1 (small) to 5 (great) changes.

	Increase	Decrease	No Change	Small	Great
a. State discretion in program/policy choices	_____	_____	_____	1 2 3 4 5	
b. Federal regulations	_____	_____	_____	1 2 3 4 5	
c. Federal unfunded mandates	_____	_____	_____	1 2 3 4 5	
d. Discretion in use of federal funds	_____	_____	_____	1 2 3 4 5	

2. Second, with respect to *your agency*, have you observed or experienced changes over the past four years in the following relationships with National officials?

	Increase	Decrease	No Change	Small	Great
a. State discretion in program/policy choices	_____	_____	_____	1 2 3 4 5	
b. Federal regulations	_____	_____	_____	1 2 3 4 5	
c. Federal unfunded mandates	_____	_____	_____	1 2 3 4 5	
d. Discretion in use of federal funds	_____	_____	_____	1 2 3 4 5	



3. Please share your opinion or views on the effects of 9-11 (11 September 2001). What changes have 9-11 prompted in the following areas? If you check **Increase or Decrease**, please indicate (circle) the degree of change on a scale from 1 (small changes) to 5 (great changes).

	Increase	Decrease	No Change	Small					Great				
a. National government mandate	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
b. National government preemptions	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
c. Federal aid	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
d. Intergovernmental cooperation	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
e. Competition among agencies for resources	_____	_____	_____	1	2	3	4	5	1	2	3	4	5

4. Has your **agency or state** responded to 9-11 events by taking any actions to improve preparedness to respond to terrorist threats, emergencies, or disasters? What changes, if any, have occurred in the following areas? Additionally, indicate the extent of any changes from 1 (small) to 5 (great).

	Increase	Decrease	No Change	Small					Great				
a. Your agency's preparedness	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
b. Your agency's ability to pursue its mission	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
c. Coordination among state agencies	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
d. State funding for preparedness	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
e. State-local coordination for preparedness	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
f. State funding to localities for preparedness	_____	_____	_____	1	2	3	4	5	1	2	3	4	5
g. State unfunded mandates for preparedness	_____	_____	_____	1	2	3	4	5	1	2	3	4	5

5. Has your state reorganized or shifted functions among state agencies to improve emergency preparedness?

\_\_\_ No    \_\_\_ Yes, slight changes    \_\_\_ Yes, moderate changes    \_\_\_ Yes, major changes

### G. Receipt of Federal Aid

Does your **agency** receive any federal aid or other federal fiscal assistance?

\_\_\_\_\_ **Yes**    **IF YES, please answer questions 1-6 below;**  
 \_\_\_\_\_ **No**    **IF NO, please skip to Section H on the next page under overleaf.**

**IF YES** (Questions for Administrators Receiving Federal Aid)

- Please indicate what types of financial assistance your agency receives from the Federal government. (Check wherever applicable)
 

___ formula grant(s)	___ contract(s)	___ shared revenues
___ project grant(s)	___ any non-matching grants	___ technical assistance
___ block grant(s)	___ loans or loan guarantees	___ other
- From how many different Federal departments and agencies does your agency receive financial assistance? (Circle appropriate number)
 

1            2            3            4            5            6            7 or more
- What proportion of your agency's budget comes from Federal funds?
 

\_\_\_ under 25%;    \_\_\_ 25-49%;    \_\_\_ 50-74%;    \_\_\_ 75% or more
- In place of categorical Federal Aid, if your agency were given an equal amount of money without "strings" attached, would you allocate the money differently from the way Federal funds are now allocated?
 

\_\_\_ Yes, allocate differently;    \_\_\_ No, same allocation as now

4a. **IF YES**, how different would your reallocation be?

\_\_\_ slight; \_\_\_ moderate; \_\_\_ substantial; \_\_\_ radical

5. Should Federal Aid for **existing grant programs** to your agency be:  
\_\_\_ increased; \_\_\_ decreased; or \_\_\_ stay the same?
6. Should Federal Aid be expanded to include support of **new programs** for your agency?  
\_\_\_ Yes; \_\_\_ No

**H. Administrative Changes and Reforms: Contracting and Reinvention**

1. In recent years, some state agencies have used contracts (or contracting out) to deliver services to the public. Does your agency use such contracts? \_\_\_ Yes, \_\_\_ No; **(IF NO, SKIP TO QUESTION 5)**

**IF YES:**

- a. Currently, about what percentage of your agency's budget is allocated to contracts for delivering services to the public?  
\_\_\_ 5% or less; \_\_\_ 6-10%; \_\_\_ 11-20%; \_\_\_ 21-30%, \_\_\_ 31-40%, \_\_\_ over 40%

- b. Does your agency contract with any of the following sources to deliver goods and services to the public? *Over the past four years, has the amount of contracting with each source changed?* (circle below)

Source	Current Contract(s) (circle one)		Change over Last 4 years (circle one)		
			Increased	Decreased	No Change
Other governments	Yes	No	1	2	3
Non-profit organizations	Yes	No	1	2	3
For-profit businesses	Yes	No	1	2	3

2. How has contracting out affected:
 

	Increased	Decreased	No effect
a. The quality of services your agency delivers to the public?	_____	_____	_____
b. The cost to your agency of delivering services to the public?	_____	_____	_____
c. Your agency's ability to respond to the needs of the public?	_____	_____	_____
d. Agency accountability for contracted service delivery?	_____	_____	_____

3. How would you characterize or rate:
  - a. The extent of competition among the contract providers your agency uses?  
\_\_\_ very high \_\_\_ high \_\_\_ moderate \_\_\_ low \_\_\_ very low
  - b. Public satisfaction with agency services provided by your contractors?  
\_\_\_ very high \_\_\_ high \_\_\_ moderate \_\_\_ low \_\_\_ very low
  - c. Your agency's ability to monitor contract provisions?  
\_\_\_ very high \_\_\_ high \_\_\_ moderate \_\_\_ low \_\_\_ very low

4. Please reflect on your agency's past (or continuing) decisions to contract out important service delivery programs. How controversial or contentious were (are) these decisions?  
(On a 1 – 5 scale, please circle the degree of controversy.)  
(Low/Routine)    1    2    3    4    5    (High/Controversial)

5. Recently, some states have undertaken changes or "reforms" that go by such names as "reinventing government," "redesigning government," or "entrepreneurial management." Regardless of the exact name applied, has **your state** experienced such reforms? \_\_\_ Yes; \_\_\_ No **(If No, Skip to Section I)**

**IF YES:** 3a. In general, how would you rate the overall results of the reforms?

\_\_\_\_\_ poor; \_\_\_\_\_ fair; \_\_\_\_\_ good; \_\_\_\_\_ excellent

3b. Did the reform effort directly affect your agency?

\_\_\_\_\_ Yes; \_\_\_\_\_ No; \_\_\_\_\_ Don't know

**IF YES:** Were the effects on your agency:

\_\_\_\_\_ poor; \_\_\_\_\_ fair; \_\_\_\_\_ good; \_\_\_\_\_ excellent

## I. Career and Professional Experience

1. Would you please indicate the number of years you have been employed:

Ia. In State government in this State? \_\_\_\_\_ (years)

Ib. In this agency? \_\_\_\_\_ (years)

Ic. In your current position? \_\_\_\_\_ (years)

2. What is the annual salary of the current position you hold? \$ \_\_\_\_\_

3. How many hours per week (on average) do you work? \_\_\_\_\_ (hours)

4. For how many years did you hold the position **immediately prior** to your present post? Please indicate the number of years before the type of prior position you held.

_____ Subordinate post, this agency	_____ State legislature
_____ Another agency in this State	_____ U.S. military
_____ Agency in another State	_____ Private industry
_____ Local government	_____ Self-employed
_____ Federal government (non-military)	_____ None of these
_____ Non-profit organization	

5. In how many **other** agencies of this State's government have you served?

(Circle appropriate number) 0 1 2 3 4 5 or more

6. Have you ever held a position in State government in some other State(s)? \_\_\_\_\_ Yes; \_\_\_\_\_ No

**IF YES:** 6a. For how many years? \_\_\_\_\_ (years)

7. Have you ever held a position in the private (for profit) sector? \_\_\_\_\_ Yes; \_\_\_\_\_ No

**IF YES:** 7a. For how many years? \_\_\_\_\_ (years)

8. Have you ever held a position in the Non-profit sector? \_\_\_\_\_ Yes; \_\_\_\_\_ No

**IF YES:** 8a. For how many years? \_\_\_\_\_ (years)

## J. Background Characteristics and Education

1. In what state (or foreign country) were you born? \_\_\_\_\_

2. When were you born? (year) \_\_\_\_\_

3. What is your gender? \_\_\_\_\_ Male; \_\_\_\_\_ Female

4. What is your race (or ethnic group)?

_____ African American	_____ Caucasian	_____ Native American
_____ Asian	_____ Hispanic	_____ Other (including multi-racial)

5. Generally speaking, do you consider yourself to be a

\_\_\_\_\_ Democrat; \_\_\_\_\_ Republican; or an \_\_\_\_\_ Independent?

5a. **IF INDEPENDENT**, are you closer to the \_\_\_\_\_ Democratic or \_\_\_\_\_ Republican party? \_\_\_\_\_ Neither?

6. On a scale of 1 to 7, with 1 being very conservative and 7 being very liberal, please indicate (by circling) how you

rate or rank yourself on (a) social and morality issues, and (b) taxing and spending issues.

	<b>Conservative</b>					<b>Liberal</b>	
6a. Social and moral issues	1	2	3	4	5	6	7
6b. Taxing and spending issues		1	2	3	4	5	6 7

7. Did your mother or father hold any elected or appointed governmental positions? (Check any that apply)  
 Mother: \_\_\_No/none; \_\_\_Yes, elected; \_\_\_Yes, appointed; \_\_\_Yes, elected and appointed.  
 Father: \_\_\_No/none; \_\_\_Yes, elected; \_\_\_Yes, appointed; \_\_\_Yes, elected and appointed.

8. How much formal education have you, your mother, and father completed? (Check highest level attained)

	<b>Yourself</b>	<b>Mother</b>	<b>Father</b>
High school (or less)	_____	_____	_____
Some college	_____	_____	_____
Bachelor's degree	_____	_____	_____
Graduate study	_____	_____	_____
Graduate degree	_____	_____	_____

9. If you hold a college or university degree(s), please indicate the degree(s), field(s), and year(s) received.

Degree(s)	Major Field(s)	Date (Year) Received
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Thank You Very Much For Your Cooperation**

*Instructions: Please fold over the back flap, wet the gummed edge, seal, and drop in the mail.*

## APPENDIX B

Crosstabulation Statistics for all 14 strategies

Crosstabulation percentages of all 14 budget coping strategies and the independent variables.

### Gender

Budget Strategy	Male	Female	Chi Square Statistics		N
Improve Productivity	90.6	92.5	.697	p=.404	878
Hiring Freeze	73.2	73.1	.001	p=.974	927
Cut capital outlays	61.9	60.4	.164	p=.684	927
Freeze salaries/wages	61.0	59.2	.248	p=.618	927
Across-the-board cuts	56.2	59.6	.867	p=.352	927
Eliminate programs	57.4	53.9	.918	p=.338	926
Cut least efficient subunits	55.3	50.2	1.868	p=.172	927
Cut maintenance outlays	54.3	55.1	.052	p=.819	927
Contract out- private firms	45.1	53.1	4.265	p=.039	873
Personnel layoffs	38.1	41.4	.766	p=.381	875
Contract out- non profit firms	23.6	37.8	16.892	p=.000	869
Shift programs/functions to local governments	22.7	25.3	.624	p=.429	867
Contract out- local governments	16.6	24.0	6.075	p=.014	870
Reduce salaries/wages	9.3	13.4	2.971	p=.085	868

### Fiscal Ideology

Budget Strategy	Cons.	Moderate	Liberal	Chi Square Statistics		N
Improve Productivity	90.4	91.9	91.8	.594	p=.743	853
Hiring Freeze	74.3	76.4	67.2	5.044	p=.080	898
Cut capital outlays	61.5	67.3	56.4	5.210	p=.074	898
Freeze salaries/wages	60.0	63.6	59.0	1.126	p=.569	898
Across-the-board cuts	55.7	64.5	52.8	6.825	p=.033	898
Eliminate programs	54.5	59.1	59.3	2.030	p=.362	897
Cut least efficient subunits	55.7	55.0	50.8	1.393	p=.498	898
Cut maintenance outlays	53.2	58.2	54.9	1.510	p=.470	898
Contract out- private firms	44.5	46.4	54.3	5.153	p=.076	849
Personnel layoffs	38.3	38.9	41.3	.505	p=.777	852
Contract out- non profit firms	24.0	31.2	30.6	5.212	p=.074	846
Shift programs/functions to local governments	21.3	27.8	24.4	3.384	p=.184	844
Contract out- local governments	16.9	20.0	19.8	1.250	p=.535	847
Reduce salaries/wages	10.8	12.1	7.7	2.174	p=.337	845

Experience- years in agency

Budget Strategy	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Chi Square Statistics	N
Improve Productivity	92.1	89.7	91.0	92.6	1.320 p=.724	803
Hiring Freeze	73.7	68.2	75.4	76.5	4.645 p=.200	843
Cut capital outlays	63.7	55.8	60.9	66.7	6.025 p=.110	843
Freeze salaries/wages	61.1	54.5	63.8	65.3	6.418 p=.093	843
Across-the-board cuts	60.5	54.1	54.1	59.6	3.079 p=.380	843
Eliminate programs	61.6	51.5	52.2	60.4	7.187 p=.066	842
Cut least efficient subunits	64.2	48.5	49.3	54.9	12.735 p=.005	843
Cut maintenance outlays	62.1	45.9	51.2	59.2	14.068 p=.003	843
Contract out- private firms	51.1	48.2	44.4	42.7	3.277 p=.351	799
Personnel layoffs	46.1	34.8	34.5	35.7	7.411 p=.060	800
Contract out- non profit firms	33.0	23.7	25.6	27.3	4.572 p=.206	795
Shift programs/functions to local governments	22.6	17.8	30.2	23.6	8.941 p=.030	794
Contract out- local governments	22.2	15.0	18.7	19.2	3.491 p=.322	796
Reduce salaries/wages	14.1	8.2	10.1	10.6	3.736 p=.291	794

Experience- years in current position

Budget Strategy	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Chi Square Statistics	N
Improve Productivity	87.0	95.7	91.2	88.1	10.357 p=.016	761
Hiring Freeze	72.5	77.4	71.2	70.5	3.121 p=.373	797
Cut capital outlays	58.8	67.9	57.5	60.7	5.916 p=.116	797
Freeze salaries/wages	65.4	63.3	56.2	58.5	4.391 p=.222	797
Across-the-board cuts	56.9	63.8	56.2	48.1	10.079 p=.018	797
Eliminate programs	60.1	60.5	53.3	52.5	4.411 p=.220	796
Cut least efficient subunits	57.5	61.5	49.6	48.1	10.278 p=.016	797
Cut maintenance outlays	49.7	64.3	47.9	50.3	14.929 p=.002	797
Contract out- private firms	51.7	47.6	44.5	42.3	3.297 p=.348	757
Personnel layoffs	38.4	45.5	35.0	29.9	10.742 p=.013	757
Contract out- non profit firms	32.7	28.5	21.4	26.1	6.220 p=.101	754
Shift programs/functions to local governments	24.1	26.7	20.0	20.5	3.484 p=.323	752
Contract out- local governments	23.3	21.2	13.3	16.6	7.658 p=.054	754
Reduce salaries/wages	17.9	10.1	7.6	8.6	11.242 p=.010	751

## Appointment

Budget Strategy	Others	Governor	Dept. Head/Civil Service	Chi Square Statistics	N
Improve Productivity	90.4	92.5	90.0	1.415 p=.493	878
Hiring Freeze	67.6	72.8	76.2	4.809 p=.090	928
Cut capital outlays	58.1	61.4	63.2	1.447 p=.485	928
Freeze salaries/wages	55.2	61.6	62.4	3.125 p=.210	928
Across-the-board cuts	49.0	57.9	60.6	7.331 p=.026	928
Eliminate programs	52.4	61.6	52.9	7.252 p=.027	928
Cut least efficient subunits	50.5	59.8	49.4	9.021 p=.011	928
Cut maintenance outlays	48.1	58.2	53.8	5.607 p=.061	928
Contract out- private firms	40.2	51.1	46.1	6.224 p=.045	872
Personnel layoffs	29.9	44.5	38.9	11.655 p=.003	874
Contract out- non profit firms	21.8	27.2	30.5	4.625 p=.099	868
Shift programs/functions to local governments	16.7	24.2	26.5	6.849 p=.033	866
Contract out- local governments	9.1	22.3	20.5	15.513 p=.000	869
Reduce salaries/wages	7.6	12.1	10.2	2.824 p=.244	866

## Organization Size

Budget Strategy	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Chi Square Statistics	N
Improve Productivity	84.6	92.2	94.1	95.5	18.928 p=.000	818
Hiring Freeze	63.3	72.1	78.2	78.1	16.313 p=.001	861
Cut capital outlays	48.8	61.9	63.9	72.6	26.240 p=.000	861
Freeze salaries/wages	57.7	59.1	65.7	61.9	3.444 p=.328	861
Across-the-board cuts	53.5	52.6	59.7	62.8	6.405 p=.093	861
Eliminate programs	40.5	55.3	61.9	69.3	39.491 p=.000	860
Cut least efficient subunits	43.7	47.9	56.0	69.3	32.987 p=.000	861
Cut maintenance outlays	42.3	47.0	57.9	71.2	42.831 p=.000	861
Contract out- private firms	38.6	39.7	48.8	57.6	19.423 p=.000	815
Personnel layoffs	29.8	34.0	41.1	48.0	16.827 p=.001	817
Contract out- non profit firms	19.4	21.0	30.0	35.8	18.978 p=.000	813
Shift programs/functions to local governments	18.5	22.2	25.0	25.1	3.341 p=.342	811
Contract out- local governments	13.1	14.2	18.5	26.1	14.422 p=.002	813
Reduce salaries/wages	6.9	11.7	9.5	11.9	3.770 p=.287	812



## Organization Budget Size

Budget Strategy	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Chi Square Statistics	N
Improve Productivity	84.8	90.7	95.9	94.8	18.980 p=.000	779
Hiring Freeze	65.4	70.6	77.7	76.1	9.683 p=.021	816
Cut capital outlays	51.7	62.3	64.4	70.7	16.354 p=.001	816
Freeze salaries/wages	57.6	60.8	65.3	60.0	2.708 p=.439	816
Across-the-board cuts	55.1	48.5	62.9	61.0	10.416 p=.015	816
Eliminate programs	43.9	49.8	63.4	70.2	36.656 p=.000	815
Cut least efficient subunits	44.9	43.6	64.4	62.9	30.992 p=.000	816
Cut maintenance outlays	43.9	49.0	60.9	65.4	24.843 p=.000	816
Contract out- private firms	37.9	38.3	51.6	55.2	18.740 p=.000	777
Personnel layoffs	32.3	28.8	42.1	46.4	16.720 p=.001	778
Contract out- non profit firms	17.2	21.4	29.7	37.8	25.192 p=.000	775
Shift programs/functions to local governments	19.9	22.9	22.4	25.4	1.689 p=.639	773
Contract out- local governments	13.7	14.6	18.1	25.8	11.902 p=.008	776
Reduce salaries/wages	7.7	10.9	11.9	9.4	2.245 p=.523	774

## Agency Type- Staff

Budget Strategy	Used	Chi Square Statistics	N
Improve Productivity	91.0	.003 p=.953	887
Hiring Freeze	70.7	.197 p=.657	938
Cut capital outlays	59.8	.090 p=.764	938
Freeze salaries/wages	69.5	3.019 p=.082	938
Across-the-board cuts	62.2	.976 p=.323	938
Eliminate programs	56.1	.002 p=.962	937
Cut least efficient subunits	53.7	.003 p=.957	938
Cut maintenance outlays	57.3	.337 p=.561	938
Contract out- private firms	36.2	4.036 p=.045	882
Personnel layoffs	41.8	.323 p=.570	884
Contract out- non profit firms	10.1	12.805 p=.000	878
Shift programs/functions to local governments	16.9	1.938 p=.164	876
Contract out- local governments	8.9	5.388 p=.020	879
Reduce salaries/wages	6.3	1.466 p=.226	876

### Agency Type- Human Resources

Budget Strategy	Used	Chi Square Statistics		N
Improve Productivity	92.3	.378	p=.539	887
Hiring Freeze	75.9	1.355	p=.244	938
Cut capital outlays	61.3	.000	p=.995	938
Freeze salaries/wages	58.5	.488	p=.485	938
Across-the-board cuts	59.0	.415	p=.520	938
Eliminate programs	63.7	5.984	p=.014	937
Cut least efficient subunits	57.5	1.431	p=.232	938
Cut maintenance outlays	57.5	1.189	p=.275	938
Contract out- private firms	51.8	2.384	p=.123	882
Personnel layoffs	48.0	9.053	p=.003	884
Contract out- non profit firms	47.7	53.851	p=.000	878
Shift programs/functions to local governments	23.4	.001	p=.981	876
Contract out- local governments	23.5	4.052	p=.044	879
Reduce salaries/wages	10.8	.067	p=.796	876

### Agency Type- Natural Resources

Budget Strategy	Used	Chi Square Statistics		N
Improve Productivity	93.2	1.532	p=.216	887
Hiring Freeze	72.8	.000	p=.990	938
Cut capital outlays	68.5	6.799	p=.009	938
Freeze salaries/wages	62.9	.729	p=.393	938
Across-the-board cuts	59.5	.753	p=.386	938
Eliminate programs	58.0	.343	p=.558	937
Cut least efficient subunits	55.6	.341	p=.559	938
Cut maintenance outlays	58.6	2.357	p=.125	938
Contract out- private firms	53.9	5.638	p=.018	882
Personnel layoffs	36.9	.453	p=.501	884
Contract out- non profit firms	31.1	2.160	p=.142	878
Shift programs/functions to local governments	32.0	12.303	p=.000	876
Contract out- local governments	29.2	22.024	p=.000	879
Reduce salaries/wages	12.8	2.080	p=.149	876

### Agency Type- Economic Development & Regulation

Budget Strategy	Used	Chi Square Statistics	N
Improve Productivity	90.4	.159 p=.690	887
Hiring Freeze	77.5	2.309 p=.129	938
Cut capital outlays	60.1	.126 p=.723	938
Freeze salaries/wages	60.7	.002 p=.967	938
Across-the-board cuts	49.7	4.645 p=.031	938
Eliminate programs	49.1	4.493 p=.034	937
Cut least efficient subunits	45.7	5.853 p=.016	938
Cut maintenance outlays	44.5	8.135 p=.004	938
Contract out- private firms	44.2	.615 p=.433	882
Personnel layoffs	32.9	2.926 p=.087	884
Contract out- non profit firms	18.4	7.853 p=.005	878
Shift programs/functions to local governments	18.3	2.818 p=.093	876
Contract out- local governments	10.4	8.723 p=.003	879
Reduce salaries/wages	10.4	.005 p=.942	876

### Agency Type- Crime

Budget Strategy	Used	Chi Square Statistics	N
Improve Productivity	87.4	2.307 p=.129	887
Hiring Freeze	69.0	.931 p=.335	938
Cut capital outlays	61.1	.003 p=.956	938
Freeze salaries/wages	58.4	.248 p=.618	938
Across-the-board cuts	61.1	.850 p=.357	938
Eliminate programs	61.9	1.636 p=.201	937
Cut least efficient subunits	66.4	7.986 p=.005	938
Cut maintenance outlays	63.7	4.625 p=.032	938
Contract out- private firms	45.9	.057 p=.812	882
Personnel layoffs	43.2	1.055 p=.304	884
Contract out- non profit firms	23.4	.915 p=.339	878
Shift programs/functions to local governments	23.4	.000 p=.984	876
Contract out- local governments	16.5	.339 p=.560	879
Reduce salaries/wages	8.3	.549 p=.459	876

Agency Type- Others

Budget Strategy	Used	Chi Square Statistics	N
Improve Productivity	89.9	.261 p=.609	887
Hiring Freeze	65.5	3.637 p=.056	938
Cut capital outlays	49.6	7.892 p=.005	938
Freeze salaries/wages	55.5	1.480 p=.224	938
Across-the-board cuts	52.1	1.355 p=.224	938
Eliminate programs	44.5	7.732 p=.005	937
Cut least efficient subunits	45.4	4.026 p=.045	938
Cut maintenance outlays	42.0	8.238 p=.004	938
Contract out- private firms	38.0	3.981 p=.046	882
Personnel layoffs	27.5	6.660 p=.010	884
Contract out- non profit firms	11.2	15.757 p=.000	878
Shift programs/functions to local governments	18.9	1.319 p=.251	876
Contract out- local governments	9.3	6.824 p=.009	879
Reduce salaries/wages	9.4	.092 p=.761	876

## APPENDIX C

### Listing of Public Agencies, Categories, and Agency Types

American Administration Project (ASAP) 2004  
 State Agencies and Agency Codes (N=100)

Num	Alpha	Category	Num	Alpha	Category
01	AJGN	Adjutant General	56	PUBA	Social Service (Public Assistance)
02	AF+G	Administration	57	PUBU	Public Utility Regulation
03	ADVT	Tourism (Advertising)	58	PUBW	Public Works
04	AERO	Aeronautics	59	PRCH	Purchasing
05	AGE	Aging	60	SECU	Securities
06	AGRI	Agriculture	61	SWMG	Solid Waste Management
**			62	TAX	Revenue
09	AUDT	Post Audit (Legislative Auditor)	63	TRAN	Transportation
10	BANK	Banking	64	TREA	Treasurer
11	BUD	Budgeting	65	WRMG	Water Resources
12	CDEF	Emergency Mgmt (Civil Defense)	66	WELF	Welfare
13	CRCE	Commerce	67	WCOM	Workers Compensation
14	CAFF	Community Affairs	68	SCYS	Secretary of State
15	CMPT	Comptroller	69	ATGN	Attorney General
16	CPRO	Consumer Affairs	**		
17	CORR	Corrections	71	ENGY	Energy
**			72	FEDS	Federal Liaison (federal-state)
19	CJUS	Criminal Justice Planning	**		
20	DRUG	Alcohol and Drug Abuse	74	MASS	Mass Transportation
21	ECDE	Economic Development	75	MEDI	Medicaid
22	EDUC	Education	76	OSHA	Occupation Health and Safety
23	ESEC	Unemployment Insurance/Comp	77	PREA	Pre-Audit
24	ENVI	Environmental Protection	78	VOED	Vocational Education
25	FISH	Fish and Wildlife	79	VORE	Vocational Education
26	FOOD	Food and Drugs	**		
27	FORE	Forestry	81	HRES	Human Resources (Human Services)
**			82	MANP	Job Training/Workforce
29	HEAL	Health	83	SOIL	Soil Conservation
30	HIED	Higher Education	84	STLO	State-Local Government Relations
31	HIWA	Highways	85	SPOL	State Police
32	HSAF	Highway Safety	86	EMPS	Employment Services
33	HFAG	Housing Finance Agency	**		
34	HUMR	Civil Rights (Human Rights)	89	CHILA	Child Labor
35	INFO	Information Systems	90	CHSU	Child Support Enforcement
36	INSU	Insurance	91	CHYO	Children and Youth Services
37	JDEL	Juvenile Rehabilitation	92	COZO	Coastal Zone Management
38	LA+M	Labor-Arbitration and Mediation	93	EMSE	Emergency Medical Service
39	L+IR	Labor (Industrial Relations)	94	EEOP	Equal Employment Opportunity
40	LAW	Law Enforcement	95	GESE	General Services
41	LIBR	State Library	96	GRMA	Groundwater Management
42	LICE	Licensing	97	HZWM	Hazardous Waste Management
43	LIQC	Alcoholic Beverage Control	98	INTR	International Trade
**			99	LOTT	Lottery
45	MENR	Mental Health and Retardation	100	MILR	Mined Land Resources
46	MINE	Mining Safety	101	SMBA	Small and Minority Business
47	MVEF	Motor Vehicle Registration	102	SPED	Special Education
48	NATR	Natural Resources	103	TELE	Telecommunications
49	O+G	Oil and Gas Regulation	104	WOME	Women
50	PARK	Parks and Regulation	105	FINC	Finance
51	PARO	Parole and Probation	106	ELAD	Election Administration
52	PERS	Personnel	107	CVCO	Crime Victims Compensation
53	PLAN	Planning	108	SSEC	State Security
54	PC-A	Air Quality(Pollution Ctrl)	109	PUBS	Public Safety
55	PC-W	Water Quality(Pollution Ctrl)	110	DVDI	Development Disabilities

\*\*Numbers omitted indicate agencies surveyed in only one or two prior ASAP Survey Years

AMERICAN STATE ADMINISTRATORS PROJECT (ASAP)

A. State Administrative Agencies Classified by Functional Categories

(13 – Category Grouping—FUNCAT 13 for 1998 ASAP survey) \*retyped

1. Elected Officials	7. Natural Resources	11. Regulatory
09 AUDIT	06 AGRI	10 BANK
64 TREA	25 FISH	16 CPRO
68 SCYS	27 FORE	26 FOOD
69 ATGN	46 MINE	36 INSU
	48 NATR	38 LA&M
	50 PARK	42 LICE
2. Staff: Fiscal	83 SOIL	57 PUBU
02 AF&G	92 COZO	60 SECU
11 BUD	96 GRMA	67 WCOM
15 CMPT	100 MILR	76 OSHA
62 TAX		89 CHLA
77 PREA		90 CHSU
105 FINC	8. Environment & Energy	97 HZWM
	24 ENVI	12. Transportation
3. Staff: Non-Fiscal	49 O&G	04 AERO
35 INFO	54 PC-A	31 HIWA
52 PERS	55 PC-W	32 HSAF
53 PLAN	61 SWMG	47 MVEH
59 PRCH	65 WRMG	63 TRAN
72 FEDS	71 ENGY	74 MASS
84 STLO		
95 GESE	9. Economic Development	13. Other
103 TELE	03 ADVT	01 AJGN
4. Income Security & Social Services	13 CRCE	12 CDEF
05 AGE	14 CAFF	34 HUMR
23 ESEC	21 ECDE	41 LIBR
56 PUBA	33 HFAG	43 LIQC
66 WELF	39 L&IR	58 PUBW
75 MEDI	98 INTR	94 EEOP
79 VORE	99 LOTT	104 WOME
81 HRES	101 SMBA	
86 EMPS		
91 CHYO		
5. Education	10. Criminal Justice	14. Unspecified agencies
22 EDUC	17 CORR	106
30 HIED	19 CJUS	107
78 VOED	37 JDEL	108
82 MANP	40 LAW	109
102 SPED	51 PARO	110
	85 STOP	
6. Health		
20 DRUG		
29 HEAL		
45 MENR		
93 EMSE		

6 Research Categories (FUNCAT 6)	Grouped Categories from 13 functional categories	Agency Type
1. Staff	2,3	Constituent
2. Human Resources	4,5,6	Redistributive
3. Natural Resources	7,8,12	Distributive
4. Economic Development & Regulation	9,11	Regulatory 1
5. Crime	10	Regulatory 2
6. Other	13	-