

**Single Audit Act Findings and their Impact on State Funding Levels**

by

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## Abstract

Enacted in 1984, the Single Audit Act was created to improve oversight of federal aid to state and local governments. However, recent studies have called into question the quality of work performed under the SAA. Such concerns raise doubts as to the effectiveness of the SAA in achieving two notable objectives: promote audit uniformity and maximize the extent to which federal officials rely upon SAA reports. With both federal and state governments confronted with budget deficits and demand for audit information elevated, the literature has been generally silent as to how effectively SAA is meeting the aforementioned objectives at the state level.

After the SAA was amended in 1996, a comprehensive database of audit observations was created, known as the Federal Audit Clearinghouse (FAC). The FAC contains thousands of records relating to the single audit process. Using all data available for state governments since the inception of the FAC, this study explores the extent of audit uniformity by analyzing the frequency of audit findings and other trends. To determine whether single audit findings impact federal aid to states, a panel dataset is constructed using single audit observations and other determinants of federal aid. These analytical procedures are coupled with interview data. I find only limited evidence of audit uniformity and no statistically significant relationship between the total amount of federal aid distributed to state governments and single audit observations. Although the single audit process serves as an important tool for accountability, significant opportunities exist to enhance the usefulness of these reports and their impact across the states.

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## Table of Contents

Abstract.....	ii
Acknowledgments .....	iii
List of Tables .....	vii
List of Figures.....	ix
List of Abbreviations.....	xi
Chapter 1: Introduction .....	1
Overview .....	1
Literature .....	5
Statement of Problem .....	7
Research Questions .....	9
Methodological Overview .....	10
Chapter Summary.....	13
Chapter 2: Literature Review .....	14
Introduction .....	14
Evolution of the Single Audit Act.....	15
The Single Audit Act (SAA).....	33
Single Audit Act Literature .....	38

Theory.....	54
Chapter Summary .....	66
Chapter 3: Research Methodology.....	68
Introduction .....	68
Theoretical Foundation.....	68
Research Questions .....	73
Hypothesis Development.....	80
Research Methodology .....	84
Chapter Summary .....	102
Chapter 4: Descriptive Analysis.....	103
Introduction .....	103
Survey of FAC.....	103
Uniformity of Audit Results .....	110
Single Audit Findings Impact on Federal Aid.....	126
Chapter Summary .....	140
Chapter 5: Test of Hypothesis.....	141
Introduction .....	141
Test of Hypotheses .....	141
Audit Uniformity.....	142
Single Audit Observations and Federal Aid .....	153

Chapter Summary .....	178
Chapter 6: Summary.....	179
Introduction .....	179
Research Implications for Scholars .....	179
Research Implications for Practitioners.....	191
Chapter Summary .....	199
References .....	201
Appendices .....	218
Appendix A- Informed Consent Letter.....	219
Appendix B- Cover Letter .....	220
Appendix C- Structured Interview Protocol.....	221
Appendix D: Single Audit Compliance Provisions.....	224
Appendix E: Changes in Federal Aid to the States .....	227
Appendix F: Single Audit Act Opinion Analysis.....	235

## List of Tables

Table 1: SAA Compliance Provisions .....	79
Table 2: Dependent Variables .....	89
Table 3: Independent Variables.....	91
Table 4: Control Variables .....	95
Table 5: State Rank- Expenditures and Grants Reported to FAC (1997-07).....	106
Table 6: State Rank- Grants by Defining Characteristic (1997-07).....	108
Table 7: Total Single Audit Observations (1997-07).....	109
Table 8: State Rank- Average Expenditures and SAA Observations .....	111
Table 9: State Rank- Audit Observations per Grant Ratio.....	114
Table 10: State Rank- Audit Timeliness (2002-07) .....	116
Table 11: State Rank- GCO by Materiality Threshold Ratio.....	118
Table 12: SAA Observations by Federal Agency (1997-07) .....	120
Table 13: SAA Observations by Grant Type (1997-07) .....	122
Table 14: State Rank- Project vs. Formula Grants (1997-2007).....	123
Table 15: SAA Observations by Compliance Provision.....	124
Table 16: State Rank- Total Compliance Observations by Requirement .....	125
Table 17: State Rank- Percentage Change in Federal Aid in Constant Dollars (1999-08).....	129
Table 18: Significant Changes in Federal Aid per Capita Ranking (1999-07).....	130
Table 19: Percentage Increase Grant Funding .....	132

Table 20: Percentage Decrease in Grant Funding.....	132
Table 21: State Rank- Qualified Compliance Opinions (2004-07).....	137
Table 22: Pearson Correlation of SAA Observations to Expenditures.....	143
Table 23: Pearson Correlation of Audit Findings to Auditor Type .....	145
Table 24: Pearson Correlation of Audit Findings to Audit Days.....	147
Table 25: Findings by Compliance Requirement.....	152
Table 26: Summary Statistics.....	158
Table 27: Regression Results .....	159
Table 28: Rank order: Non-compliance would impact funding level.....	175
Table 29: Federal Aid to States- Real Dollars (1998-07).....	227
Table 30: Unfavorable Financial Statement Audit Opinions .....	235
Table 31: Audit Opinion Description.....	236
Table 32: Audit Submissions (Exceeding Nine Months from FYE) .....	238
Table 33: Timeliest Audit Submissions (Less than Six Months from FYE) .....	239
Table 34: Adverse Audit Opinions.....	241
Table 35: Disclaimer Audit Opinions .....	244



## List of Figures

Figure 1: Percentage of Acceptable SAA Reports- Strata I.....	50
Figure 2: Percentage of Acceptable SAA Reports- Strata II.....	51
Figure 3: Decision-Making Path Analysis .....	72
Figure 4: Industry Affiliation of Respondents .....	99
Figure 5: FAC Conceptual Data Cube .....	104
Figure 6: Percentage of States Relying on Public vs. Private Auditors (2002-2007).....	113
Figure 7: Number of Grants Distributed by Federal Agencies (1997-07) .....	119
Figure 8: SAA Observations by Grant Type (excludes unknown) .....	121
Figure 9: Growth in Federal Aid to States (1998-08) .....	128
Figure 10: Federal Outlays by Functional Area.....	128
Figure 11: Normalized Growth in Grant Dollars and SAA Compliance Observations.....	133
Figure 12: Funding Status after Compliance Observation.....	135
Figure 13: Status of Program after Qualified Opinion.....	136
Figure 14: Funding Outcome after Qualified Opinion.....	136
Figure 15: Funding Outcome after Qualified Opinion- Formula Grants .....	138
Figure 16: Funding Outcome after Qualified Opinion- Project Grants .....	138
Figure 17: Can Federal agencies exercise funding discretion?.....	154
Figure 18: Is the single audit report being relied upon by federal officials? .....	163
Figure 19: What are the consequences of SAA findings?.....	165

Figure 20: Does financial audit opinion impact funding?.....	168
Figure 21: Does the type of SAA audit opinion impact funding levels? .....	169
Figure 22: What resources are relied upon to allocate discretionary funding?.....	171
Figure 23: Which provisions impact funding levels?.....	175
Figure 24: Do single audit internal control opinions impact funding? .....	177
Figure 25: Breakdown of ARRA by Funding Priorities .....	191
Figure 26: Federal Aid to State Governments- Per Capita (FY 1999).....	229
Figure 27: Federal Aid to State Governments- Per Capita (FY 2007).....	230
Figure 28: US Map Funding Levels- Per Capita (FY 1999).....	231
Figure 29: US Map Funding Levels- Per Capita (FY 2007).....	231
Figure 30: US Map Funding Levels- Per Capita (FY 1999).....	232
Figure 31: US Map Funding Levels- Per Capita (FY 2007).....	232
Figure 32: Percentage of Aid to State Gov't by Major Agency/Program (FY 1999).....	233
Figure 33: Percentage of Aid to State Gov't by Major Agency/Program (FY 2007).....	234
Figure 34: Small Strata (<\$5,000,000,000).....	240
Figure 35: Medium Strata (\$10,000,000,000 > \$5,000,000,000) .....	240
Figure 36: Large Strata (>\$10,000,000,000).....	240

## List of Abbreviations

A-133	OMB Circular A-133
AICPA	American Institute of Certified Public Accountants
ARRA	American Reinvestment and Recovery Act
CFDA	Catalog of Federal Domestic Assistance
FAC	Federal Audit Clearinghouse
GAAS	Generally Accepted Auditing Standards
GAGAS	Generally Accepted Government Auditing Standards
GAO	Government Accountability Office
GAS	Government Auditing Standards
GASB	Governmental Accounting Standards Board
GFOA	Government Finance Officers Association
OIG	Office of Inspector General
OMB	Office of Management and Budget
PCIE	President's Council on Integrity and Efficiency
SAA	Single Audit Act
SEFA	Schedule of Expenditures of Federal Awards
SF-SAC	Standard Form - Single Audit Collection

## **Chapter 1: Introduction**

### **Overview**

The United States Census Bureau (2011) estimates that over 80,000 units of government receive federal financial assistance within the United States of America; however, state governments are among the largest total dollar recipients of federal aid. Since 2004, states have collectively relied upon more than \$400 billion each year in federal aid to finance roads, schools, health programs, and a wide assortment of other services within their jurisdiction (refer to Appendix E). Excluding educational staff, these monies support an estimated 2.5 million state employees (U.S. Department of Labor, 2011, Online) and represent a major source of economic stimulus within the states (U.S. Department of Commerce, Bureau of Economic Analysis, 2011, Online). The importance of federal aid to state governments was highlighted in the recent enactment of the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). When confronted with significant decline in economic activity, state and local governments relied upon billions of dollars in federal aid to close historic revenue shortfalls and balance their budgets. In fact, the largest portion of the \$787 billion dollar Recovery Act package was directed to state governments (Wall Street Journal, 2009, Online).

In channeling so much money to state governments, a major challenge for the legislative and executive branches is ensuring these monies are spent in accordance with their intended purposes. Throughout the history of the United States, there have been several notable cases where federal monies have been diverted to private interests, mismanaged, or misappropriated to locally favored programs.<sup>1</sup> One major area of concern has been over growing governmental expenditures within the healthcare industry, where some experts estimate that about 10 percent

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<sup>1</sup> New York City (1973), Cleveland (1975), Bridgeport (1991), Orange County (1994), and City of San Diego (2003)

of total health care spending is lost to waste, fraud, and abuse (Berek & Shetterly, 1996, p. 115). One means to curb such abuse is through a system of controls whereby non-federal entities must adhere to certain control requirements as a condition to receiving aid.

One of the foremost means of control exercised by the federal government is through the audit process.<sup>2</sup> Without complete and accurate information, the federal government may be misguided in allocating grant awards and potentially diverting money away from the most efficient and effective recipients. While financial statement audits for private businesses have been uniformly enforced since the passage of the Securities and Exchange Acts of 1933 and 1934, governmental audit activity over federal aid remained largely uncoordinated and fragmented until the passage of the Single Audit Act in 1984 (Bowsher, 1985, p. 13). To this day, the Single Audit Act remains the most comprehensive tool available to federal officials in evaluating whether sufficient control over federal aid is being exercised by recipients and sub-recipients. In fact, the Single Audit Act has been identified as the primary tool to be used in evaluating accountability over the use of Recovery Act funds.<sup>3</sup>

When enacted, the measure replaced multiple grant audits with one comprehensive audit of a government unit's activities as a whole. The single audit was intended to be an organization-wide financial and compliance audit that focused on accounting and administrative controls. These activities were to provide reasonable assurance that federal financial assistance programs were managed in accordance with applicable laws and regulations. The four SAA objectives are:

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<sup>2</sup> An audit is as an unbiased third-party assessment of the financial & non-financial representations of management.

<sup>3</sup> As the executive-level financial management coordinator, the Office of Management and Budget (OMB) has been charged with overseeing and promulgating rules associated with the collection of recipient and sub-recipient ARRA data to be submitted to [federalreporting.gov](http://federalreporting.gov). Consequently, the Office of Management and Budget (OMB) has been explicit that the "single audit process will be a key factor in the achievement of accountability" (OMB A-133 Compliance Supplement- Appendix IIV, p. 1) with respect to the use of Recovery Act funds.

1. To improve management of federally assisted programs by state and local governments;
2. To establish uniform audit requirements for these programs;
3. To promote more effective and efficient use of audit resources; and,
4. To ensure that federal organizations rely on and use the audit work performed pursuant to the Act to the maximum extent practicable (Government Accountability Office, 1988, pp.16-17).

In 1996, the single audit act was amended to encompass financial statements of “nonfederal” entities that expend \$500,000 or more of federal awards in a fiscal year and an audit of compliance of those awards determined to be major programs. It retained the four primary objectives. Under the amended version, OMB was given greater authority. According to the OMB Circular A-133 Compliance Supplement (2008), major audit objectives prescribed under the act to require: 1) auditing the entity’s financial statements in accordance with generally accepted auditing standards (GAAS) and generally accepted governmental auditing standards (GAGAS); 2) reporting on the schedule of expenditures of federal awards (SEFA); and, 3) auditing compliance over major federal award programs (pp. 9-13).

The four stated objectives of the Single Audit Act reflect core democratic values. For example, the second and third objectives are a reflection of American pragmatism.<sup>4</sup> The call for professionals to adhere to practical standards in developing conclusions that can be readily verified by independent parties relates to meaning and truth values. Meanwhile, the notion that public resources should be “effectively and efficiently” utilized is a reflection of the legalistic tradition advanced during the progressive era, a period where civic leaders attempted to separate political matters from administrative affairs. While these are important values contained within the Single Audit Act, the most important value emphasized in the measure is accountability.

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<sup>4</sup> These relate to the practical usefulness of ideas and beliefs as the criterion for their meaning and truth. For instance, William James is noted for once saying that the pragmatist will “talk about truths in the plural, about their utility and satisfactoriness, about the success with which they work” (Kuklick, 1981) generalizing only on the basis of concrete facts.

When identifying the need for sound financial management and the call for federal officials to rely upon uniform audit assessments, Congress sought to foster an environment where the respective parties “accept responsibility and account for one’s actions” (Merriam-Webster Dictionary- Accountability, 2010, Online). Consequently, there exists an inextricable link between public accountability measures and our nation’s distrust in absolute rule. The very “concept of accountability in America is historically rooted in Anglo-Saxon values and distrust of authority” (Adair & Simmons, 1988, p. 91). Adair and Simmons (1988) point out that even the Continental Congress held their own leader, General George Washington, to account through the establishment of an inspector general to oversee his army. Wildavsky (1992) notes that many of the fiscal controls in place today, such as the appropriations process, are a reflection of original checks and balances designed during the American Revolution and discussed in the *Federalist Papers* (p. 13). Further, Caldwell (1988) highlights how America’s earliest political leaders, such as Thomas Jefferson and Alexander Hamilton, shaped the design of public controls that would eventually become a hallmark of American democracy.

Since the founding of the United States, Americans’ conceptions of accountability have evolved. By the middle of the twentieth century, scholars began arguing that public administrators should be guided by a “public-interest attitude” (Appleby, 1945, p. 120) and other “moral values” (Waldo, 1948, p. 238). More recent scholars have discussed the importance of service-oriented accountability initiatives focused on the client or customer needs (see Rourke, 1969; Krislov & Rosenbloom, 1981; Osborne & Gaebler, 1992). Although the Single Audit Act was enacted in the modern era, the measure’s emphasis on “administrative morality” forms of accountability is largely silent. For instance, the measure makes no reference to performance audits or program evaluations that could be used to evaluate client satisfaction. Instead, the

legislation draws upon legalistic notions of accountability derived from the scientific management and progressive movements of early twentieth century.

The Single Audit Act and related guidance substantially relies upon individuals' adherence to tightly drawn rules and regulations overseen by higher authorities within the chain of command. Consequently, this perspective of accountability aligns well with Weber's (1915) notions of bureaucracy, Taylor's (1911) belief that line-level staff should do as they were explicitly directed, and White's (1926) position that top officials within the hierarchy are ultimately accountable for all activities within the organization, including the management of public funds (p. 221). Accountability under the Single Audit Act focuses on limiting bureaucratic discretion through formal operating and enforcement procedures. As reflected in its stated objectives, the Single Audit Act demands uniformity and sets forth clear roles and responsibilities for the federal government and non-federal recipients of federal aid.

### **Literature**

Since its enactment, the Single Audit Act has been extensively examined by academics and practitioners alike. Over the past twenty-six years, there have been over thirty publications (Harris, 2005, pp. 154-179) on the Single Audit Act; however, the vast majority of these works were published shortly after the measure's enactment. The earliest studies focused on whether or not grant recipients were undergoing single audits and successfully meeting administrative protocols, such as report submission. Later scholars focused on more substantive issues, such as whether the quality of audit reports prepared by state and local government auditors and independent CPAs were satisfactory. These studies eventually evolved into more robust analysis regarding how successfully the Act had been in achieving its specified goals.

Many scholars have focused on examining one or more of the stated objectives of the



Single Audit Act. These studies tend to support the assertion that the single audit process has advanced accountability. For example, Jakubowski (1995) focused on the impact of the Single Audit Act within counties and cities shortly after the measure was enacted and observed improvements in financial management practices of these entities. Van Daniker and Miller (1995) found that the majority of single audit stakeholders believed that the act had resulted in improvements in financial management practices. Engstrom and Reding's (1992) research suggests that the individuals conducting the single audit, the CPAs, believed audit procedures were improving under the single audit process. In general, these studies tend to support the view that the Single Audit Act has led to improved financial management, more uniform audit requirements, and better use of audit resources. However, other scholars question this progress.

While state and local personnel believed the single audit had improved internal financial management, Van Daniker and Miller (1995) acknowledge that the Act had not eliminated audit duplication and overlap entirely. One year prior Raman and Van Daniker's (1994) study raised concerns regarding auditors' techniques in determining materiality levels for statistical sampling procedures, given widespread nonconformity across the profession. Uehling (1991) noted single audit sampling techniques were flawed in that they are based on the auditors' judgment (as opposed to relying on statistical sampling) and, as a consequence, tended to be too small. Cutler (1995) questioned the effectiveness of single audit procedures in addressing the complexities of the Medicaid program, from the programmatic functions to the information technology systems used.<sup>5</sup>

In recent years, research has focused extensively on the quality and integrity of single audit reports being performed under the Single Audit Act. This development in the research

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<sup>5</sup> Cutler (1995) argues auditors, performing work under the single audit, were challenged with inadequate time to review the broad spectrum of services offered by the program, inadequate coverage of audit requirements, and an insufficient examination of the role data processing systems play in the internal control structure.

field is best exemplified by recent studies conducted by the President's Council on Efficiency and Integrity (Higgins, 2007), as well as reports published by the Government Accountability Office since the Single Audit Act's inception. These studies have found that many single audits are not being performed in accordance with professional standards.

Although some progress has been observed since the implementation of the Single Audit Act, substantial questions remain concerning the extent to which these reports can be relied upon and used since some reports may be inaccurate or entail insufficient audit coverage. As such, the extent of audit uniformity across state government is unclear. Furthermore, only limited conclusions can be drawn concerning the extent to which federal officials rely on and use audit work performed pursuant to the Act. Only a few studies have assessed how the single audit is used by federal officials in the decision-making process. Uehling (1991) evaluated Federal officials' perceptions of the usefulness of the single audit reports and concluded that the reports were of limited value due to generalized reporting, the absence of meaningful audit findings, distinctions in fiscal years between the states and federal government, and inadequate audit testing of federal laws and regulations over non-major programs. Engstrom and Reding (1992) found consensus between both Chief Financial Officers and Certified Public Accountants within Illinois that the single audit process had not resulted in a more effective use of federal monies.

### **Statement of Problem**

Each year the federal government channels billions of dollars to state governments to achieve policy goals. In directing billions of dollars in federal aid to state governments, a major challenge for the grant officers is to demonstrate accountability. "Despite the clear progress that has been made from financial reform efforts, protecting vulnerable federal programs remains an enormous challenge" (Berek & Shetterly, 1996, p. 113). Private citizens, legislative and

oversight bodies, investors, and creditors all have a common interest in knowing whether or not federal funds are being used for the purposes for which they were intended. Furthermore, these stakeholders have a desire to obtain assurance that programs are being carried out in accordance with applicable laws and regulations. Given the fact that the federal government is not delivering services on the frontlines, they must rely upon state governments and their sub-recipients to ensure that accountability is maintained. The Single Audit Act represents one of the more significant measures undertaken to provide such assurance.

Despite the important role that the single audit process plays in ensuring accountability, recent studies have highlighted deficiencies in the quality of single audits. These studies suggest that different audit practices are being carried out under the measure. If this is indeed the case, legitimate concerns could be raised that the audit results themselves are not uniform. Moreover, substantial doubts remain over the extent to which federal officials can even rely upon the single audit reports. The measure explicitly calls for the maximum level of reliance to occur, but what exactly does this mean? Brannan (1993) notes “the single audit is strangely silent on the government manager’s responsibility” (p. 71). While accountability is a major goal of the Act, the measure is not explicit as to how accountability is demonstrated. In other words, what are the specific responsibilities of an administrator in advancing the explicit policy intent as codified in law or administrative regulations?

The Act sought to assure that federal departments and agencies, to the maximum extent possible, relied upon and used audit work performed pursuant to the Act. Additional research is needed to understand whether federal officials actually rely upon the single audit reports (as perfect or imperfect as they are) in channeling funding to state governments. This research objective can be evaluated by exploring outcomes in light of decision theory. For instance, if

recipients are unable to meet certain compliance criteria, what are the consequences of such actions? Embedded in the Single Audit legislation are numerous references to corrective action plans as a means to coerce desired results. Most grant officers have the power not only to obligate funds, but also amend, suspend, or terminate awards as a punitive measure to resolve audit findings. In general, federal grant award letters incorporate the following boilerplate language:

By acceptance of this award, the State, or Territory, agrees to comply with the terms and conditions detailed below (including a right to audit provision). Failure to comply with these terms and conditions may result in the loss of Federal funds and may be considered grounds for the suspension or termination of this grant (U.S. Dept. of Health & Human Services- *Terms and Conditions*, 2008, Online).

No empirical research studies have been undertaken to evaluate how federal agencies act upon information contained within the single audit report and whether this actually impacts federal aid to states. If a relationship were found to exist, states may have an even stronger incentive to strengthen their internal controls, including their financial systems and audit function.

### **Research Questions**

Since Brown and Burnaby (1986) first called for additional studies to determine how granting agencies use the single audit and the overall effectiveness of the Act in meeting its objectives (p. 52), a plethora of studies have examined isolated components of the law. Few studies, however, have focused on whether the Act has achieved its *raison d'être* (or reason for being). Given the fact that empirical research into the single audit has been limited in recent years, there exists a need to understand the extent of single audit report uniformity across state governments. Additionally, there are merits in knowing whether the Act is being relied upon by federal officials to the maximum extent possible. If single audit reports are not being utilized, it may be necessary to review the requirements of the single audit to determine if they need to be

amended in their present form. The following research questions seek to address these matters and serve as the basis for this study.

#### *Primary Research Questions*

*Q 1 Does the promulgation of uniform audit requirements result in similar single audit results across states?*

*Q 2 Do federal officials rely upon and use single audit reports to the maximum extent possible?*

#### *Diagnostic Research Questions*

*Q 1.a Does the use of private auditors lead to different single audit results?*

*Q 1.b Does the type of grant program increase the likelihood of obtaining single audit findings?*

*Q 1.c Are certain compliance standards more prone to being violated than others?*

*Q 2.a Do unfavorable single audit financial statement opinions impact the total amount of federal aid received by state governments in future years?*

*Q 2.b Do unfavorable audit opinions regarding major program compliance impact future funding levels of state grant programs?*

#### **Methodological Overview**

This study relies upon the assumption that the promulgation of uniform audit standards should lead to similar single audit results across government entities of a similar class. Furthermore, this study assumes that grant officers have the ability to withhold current levels of funding or impose a corrective action plan that may or may not impose limitations on future funding. To test the aforementioned research questions a mixed-method research design was employed by linking quantitative and qualitative data. Under a purely experimental design,

generalizability is limited. In general, the advantage of employing a mixed-method research design is that more generalizable results accompany valid conclusions relating causality. Further, qualitative data identifies patterns in quantitative data that are not otherwise apparent.

In analyzing published quantitative data, a panel dataset was constructed from the Federal Audit Clearinghouse (FAC). This database was used to observe trends in grant funding levels of state governments with SAA observations and other determinants of federal aid.<sup>6</sup> Forty-seven states were analyzed over a ten year period of time; three states of these states were omitted because they did not contain uniquely identifiable data. The purpose of the quantitative analysis was to determine whether funding levels changed in response to key variables. To complement the quantitative analysis and provide more significant meaning behind observed patterns in the data, qualitative techniques were also employed. This activity helped assess federal and state employees' perceptions of the primary methods utilized by grantors to ensure compliance with grant terms and conditions. To carry out this activity a semi-structured interview protocol was deployed.<sup>7</sup>

Since there is no generally accepted theory that has been historically used to evaluate the Single Audit Act (or other governmental auditing measures), it was necessary to leverage other theories of resource allocation and decision-making. In the case of this study, decision theory was especially helpful in understanding the paths that a grant officer may undertake in the event of unfavorable audit findings. While many consequences could prevail, at a basic level, decision theory suggests the grant officer could do one of three actions when receiving an undesirable report: 1. punish, 2. seek middle-ground, or 3. take no action. Under the economic

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<sup>6</sup> Schutt (2006) notes a time series design can be particularly useful for evaluating the impact of new laws and responses to administrative interventions.

<sup>7</sup> Early respondents were asked to pre-test and validate the interview instrument to ensure it was clear and understandable before it was deployed.

institutionalism framework, one emerging theory that was helpful in understanding this question was principal-agency theory (“agency theory”). Agency theory suggests that decision-making will be influenced by the computations that principals and agents make with respect to desired outcomes and implementation costs. For instance, principals may focus on establishing institutional arrangements that promote desired social outcomes through enforcement activities.

Downs (1967) argues that decision-making in bureaucracies is informed by the pursuit of self-interest. Tullock (1965) and Niskanen (1971) both draw analogies to the consequences of self-serving individuals operating within the bureaucracy. Without an enforcement capability, implementation of public policy becomes tentative at best. Under the theory, the behavior of the agent is controlled in part through monitoring activities. Etzioni (1988) argues that coercive power is often used to ensure that a bureaucrat will carry out what is required. Power (1994) notes the audit function is often used to curb abuses of the self-serving bureaucrat. In the case of the single audit, one might expect that unqualified (“clean”) single audit opinions and related compliance findings will elevate federal agencies’ (“principal’s”) confidence in transferring funds to state governments (“agents”); adverse SAA observations will decrease such transaction activity.

From an alternative viewpoint, funding decisions can also be evaluated using incrementalism. Incrementalism is a process to decision-making popularized by the works of Charles Lindbloom, Aaron Wildvasky, and other scholars. Wildvasky (1964) argued that incrementalism was not only the way things are done, but also the most pragmatic approach to budgeting. According to this widely-held view, public administrators find short-cuts in the decision making process by relying extensively upon past actions and making only small adjustments to the base using historical precedent. For example, in the traditional budgeting

context an appropriations committee may only examine the difference between the present and previous years' budgets. "Only in rare circumstances would an agency find their entire budget re-examined" (Meier, 1979, p. 139). Incrementalism offers a useful account of the interplay between the results contained within single audit reports and the federal government's decision to either increase or decrease grant awards to state governments. Incrementalism holds that decision-makers seek to accommodate or find the "middle-ground" between diverse interests.

Incrementalism also lends useful insight into the potential limitations of achieving audit uniformity. When applied to this study, this theory would predict that despite the promulgation of uniform audit standards, human cognitive limitations may result in non-uniformity. In essence, individuals may fall into a pattern of accepting current reports based upon historical precedent. The theory suggests that grant officers may be inclined to find compromises when encountering unfavorable Single Audit reports and postpone undertaking punitive action.

### **Chapter Summary**

While the Single Audit Act stands as the primary tool for evaluating the use of federal aid to state, local, and non-profit entities, our understanding of the extent to which information generated through the single audit process is relied upon is limited. Given the increasing levels of federal aid to states, it is imperative that further evaluation is conducted of audit uniformity and whether Single Audit Act observations impact funding levels. This study will determine if promulgation of uniform audit standards results in similar audit results by a governmental entity class and whether or not these audit reports are relied upon, to the maximum extent possible by federal officials. The findings from this study should lend useful recommendations in improving financial management practices and the overall administration of the single audit process.



## **Chapter 2: Literature Review**

### **Introduction**

The Single Audit Act (SAA) statutory provisions derive from some of the earliest American political philosophies relating to accountability. At a fundamental level, the law imposes legal restraints and obligations on the executive branch of government to hold all governments and non-profit institutions, managing substantial public funds, to account to their citizens. Contained within the measure are protocols designed to limit and restrict funding from non-compliant entities. This legalistic orientation towards accountability served as the inspiration for the Single Audit Act objectives yet continues to present an on-going challenge for administrators charged with implementing the measure.

This chapter explores in greater detail the events leading to the emergence of the Act, particularly financial management reform efforts. Bearfield and Eller (2008) note that the purpose of a literature review is multifaceted. First, the literature review is used to provide a “historical background on a given subject” (p. 62). Exploratory research into the events leading to a particular outcome represents an important function of the literature review (p. 62). Second, the technique is used to justify the relevance and theoretical basis for particular research questions. The SAA intellectual contributions are explored using an integrated research approach. According to Cooper (1989), “the integrative reviewer hopes to present the state of knowledge concerning the relation(s) of interest and to highlight important issues that research has left unresolved” (p. 13). Cooper notes that reviewing past studies represents an important step in understanding their “completeness and validity” (p. 29). As such, this chapter also focuses on scholars’ assessment of the effectiveness of the Act in meeting its stated objectives.

The final component of this chapter discusses a theory that served as the basis for the research questions used in this study.

### **Evolution of the Single Audit Act**

As the literature within this section highlights, the financial and compliance measures contained within the law evolved from a long series of piecemeal advances in financial management practices since our country's founding.

#### *1776-1887- The Birth of a Nation*

The demand for sound financial systems discussed within the Single Audit Act has existed since the American Colonial period. Burkhead (1956) notes that during the first forty years of our nation the Congress was responsible for establishing constitutional principles that undergird financial regulation to this day (pp. 1-54). Thai (1992) notes that during the early days of the Revolution and the formation of the new government, the country experienced significant problems accounting for and controlling public funds. Public funds were originally examined and controlled by the actual members of Congress. However, problems quickly arose in the absence of internal controls within the bureaucracy. In 1789, Congress established the Treasury Department and created five key officers, including the Secretary of the Treasury, a Treasurer, a Registrar, an Auditor, and a Comptroller (p. 334). This undertaking represented the first effort to create government-wide financial records (Anthony, 2000, p. 3).

During this period, grants-in-aid allocations to state and local governments were virtually non-existent (Key, 1972, p. 5) and federal spending was deemed appropriate only if "limited to financing capital projects" (Borna & Mantripragada, 1989, p. 40). For example, Thomas Jefferson's fierce opposition to public deficits was largely driven by the inherent belief that most, if not all, government spending was "wasteful" in that the activity consumed valuable private

market resources (Borna & Mantripragada, p. 39). Consequently, Thomas Jefferson was among one of the first presidents to focus on financial management reform as “war on waste emerged as the centerpiece of Jefferson’s 1800 campaign and his subsequent downsizing of government” (Light, 2006, p. 6). Jefferson’s earliest calls for accountability would influence financial reforms, such as the Single Audit Act, for years to come:

I think it an object of great importance... to simplify our system of finance, and to bring it within the comprehension of every member of Congress... the whole system [has been] involved in impenetrable fog... we might hope to see the finances of the Union as clear and intelligible as a merchant’s books, so that every member of Congress, and every man of any mind in the Union, should be able to comprehend them to investigate abuses, and consequently to control them.  
–Thomas Jefferson (Bowsher, 1987, p. 282)

The next major advancement in financial management practices would occur during the Jacksonian spoils era. By entrusting special privileges upon loyal counterparts, many individuals took advantage of Jackson’s confidence and engaged in corrupt practices. In an effort to combat this abuse, Thai (1992) notes that Jackson established the Office of Auditors of the Treasury in 1836 and appointed Amos Kendall as the first Chief Auditor (p. 334):

As opposed to merely relying upon men of integrity, Kendall focused on segregating activities and implemented a series of duplicative reviews and authorizations. While this system was effective at curbing fraud and abuse, it is difficult to determine both the costs of implementing such redundant systems and whether they truly led to greater transparency over the effectiveness of particular programs. However, this heavy handed control orientation would dominate federal financial management well into the 1930s. (Light, 2006, p. 6)

These efforts represent the establishment of the first earnest effort at administrative controls within government. Wildavsky and Caiden (2003) note that many of the fiscal procedures established during this period explain many of the practices of today.

During the Civil War era, “the collection of personal income tax and management of funds were particularly challenging” (Previts and Merino, 1998, p. 95). “Between 1802 to 1865, control over both revenues and appropriations was concentrated in the House Committee on Ways and Means... such internal unity within the Congress broke down after the Civil War with the creation of a separate House Appropriations Committee” (Pilegge, 1992, p. 69). This period would mark the first efforts of the federal government to target funding to specific local regions in an attempt to remedy certain societal problems. According to Key (1972), the inception of the federal grant-in-aid program can be traced back to the Morrill Act of 1862. It was not until the Morrill Act was amended in 1890 when sanctions were added to the bill to enforce public accountability. Despite such progress, problems in advancing public accountability and transparency would continue at the Congressional level well into the 1920s (p. 27-28).

#### *1883-1929- Progressive Reform*

America’s entrance into the progressive era would be marked by the passage of the Pendleton Civil Service Act of 1883. Enacted after the assassination of President Garfield, the Pendleton Act replaced the patronage system with a merit system. According to Van Riper (1996), “neutral competence” became the primary criterion for a national government job and by 1949 twenty-three states would follow suit by adopting their own merit-based systems driven, in part, by the need to comply with federal grant provisions. The establishment of the merit system, with its greater emphasis on efficiency and reliance on experts, would represent an important turning point in enhancing financial management practices during this period because it opened the door for the formal recognition of an accounting and auditing profession (p. 16).

Rubin (1996) points to the work of the Progressives in the early part of the century, who “had great faith that if the public was educated to the issues and given sufficient information of

good quality, they would demand good, well-managed government, and would do so effectively” (p. 115). Progressives held an underlying optimism that by making information public, accountability and transparency would be advanced (p. 117). Their efforts established the first accounting and auditing standards designed for state and local governments.

Previts and Merino (1998) argue progressive efforts were much needed around the turn of the century. Municipal governments were controlled by political “bosses” and appointees were not structurally or educationally equipped to solve mounting social, environmental, and crime problems resulting from fast growing urban developments (p. 97). Key (1972) notes financial practitioners provided progressive reformers with cause for eliminating the corruption and inefficiency that lay at the root of social ills in the public sector. In 1894, the National Municipal League was established to promulgate uniform municipal reporting formats and in 1901, the Bureau of Municipal Research published municipal accounting standards.

By the mid-1920s most major American cities had undergone a more or less thorough reform in governmental accounting. The pace of adoption of uniform accounting and reporting was accelerated in the 1920s by the passage of the Eighteenth Amendment and the corresponding loss of municipal revenue from taxes on the sale of alcoholic beverages, and by demands for more and expanded municipal programs. (Thai, 1992, p. 242-243)

In addition to accounting and budgeting reform, notable progress would be made with regard to auditing. Harris (1964) notes outmoded arrangements of the nineteenth century were reformed in 1894 with the Dockery Act (p. 130). Key (1972) finds that the first legislative audit provisions were originally incorporated in 1895 when the Hatch Act was amended. Provisions were established that gave the Secretary of Agriculture the right to “inspect” state accounts and “ascertain” whether expenditures were in accordance with the provisions of the Act (p. 110). However, Lee, Johnson, and Joyce (2004) point out that despite such authority, it would take

another twenty years before Congress would resolve the lack of uniform standards and evaluate all public transactions through the enactment of the Budget and Accounting Act (p. 117).

Until 1921, auditing was deemed largely an executive function. However, the Budget and Accounting Act (BAA) of 1921, which still remains a cornerstone of the federal financial management system today, granted new powers to Congress. The BAA of 1921 brought about several notable reforms including the notion of an independent audit, expansion of audit responsibilities beyond mere accuracy and legality, powers granted to the Comptroller General to inspect receipt, disbursement, and application of all public funds. In essence, these new powers helped Congress control the executive branch's authority over auditors (Adair & Simmons, 1988, p. 94). In addition to these measures, the Act also abolished the Treasury auditors and Comptroller while establishing the Comptroller General. Government Accounting Office (GAO) was declared to be 'independent of the executive departments,' the comptroller was given a term of 15 years (Harris, 1964, p.131). The creation of uniform auditing standards called for in the Single Audit Act would not exist without the establishment of the GAO.

#### *1929-1964- The New Deal and World War II*

In the late 1920s, a speculative boom had taken off within the stock market. According to Lacey, George, and Stoltenberg (2005), no legislation was enacted during the 1920s to protect investors despite the fact this period "marked the era of the widest participation, up to that time, of the small purchaser in the American securities market" (p. 407). This failure ultimately gave rise to the Great Stock Market Crash of 1929. After the stock market crash and as the country drifted into the Great Depression, Franklin Roosevelt was elected President. With the support of Congress, he enacted sweeping new regulations as part of the New Deal to stabilize the economy. The 1930s would be dominated by a demand-side theory of economics proposed by

John M. Keynes.<sup>8</sup> Keynes' economic philosophy would heavily influence Roosevelt's New Deal policies and influence intergovernmental aid programs for years to come. Wildavsky (1992) noted that the period following the executive budget reform movement was dominated by the Keynesian doctrine, an effort "to balance the economy at full employment, not necessarily balancing the budget" (p. 41).

In addition to attempting to improve labor market conditions, the New Deal era brought about several reforms in the areas of investing and financial management. For example, the Securities and Exchange Commission (SEC) Act made it unlawful for an initial public offering statement to contain untrue material fact or to omit material fact, which ensured that the average prudent investor should be informed. This law would ultimately influence the financial statement disclosure requirements contained within the Single Audit Act. Schilit (2002) notes another positive result of the SEC Act is that companies are now required to commission an annual financial audit (p. 248). In addition the legislation's impact on the private sector, the Securities Act also influenced governmental reforms. Greathouse (1985) points out that, in 1934, the Municipal Finance Officers Association was formed to provide professionals in municipal finance with guidance on questions of accounting and financial reporting, including municipal securities (p. 23).

In 1937, the Brownlow Committee released a report that sought ways to modernize the efficiency of government through reorganization and empowerment. One notable finding from the report was that fiscal and auditing systems were inadequate. The committee ultimately recommended "a complete fiscal system and means for holding the executive accountable for his

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<sup>8</sup> Keynes argued that an economy would not come back to equilibrium until the economy achieved full employment and a high level of income flowing to those possessing various elements of production. "As Keynes saw it, the economic and budgetary role of government was to 'fine-tune' the national economy: stimulating aggregate demand when aggregate supply exceeded potential. Thereby, government could assure the maintenance of full employment, high income, and stable prices" (Stapleton, p. 403).

program” (Brownlow, Merriam, & Gulick, 1937, p. 100). In doing so, the committee would “declare the functions of prescribing the accounting system, settling the accounts of disbursing officers, and rendering overarching rulings on proposed expenditures to be executive functions, and return them to the Treasury Department” (Harris, 1964, p. 132).

New Deal policies helped grow accounting demand during the 1930s and there was also the emergence of uniform accounting systems for universities, hospitals, and other not-for-profit industries. Meanwhile, World War II presented new challenges for the accounting profession. “Fixed fee and cost-plus contracts during World War II brought significant interaction between CPAs and the government; after the war, this area of practice would expand dramatically expertise of leaders and defense contract accounting standards” (Previts & Merino, 1998, p. 254). Pilegge (1992) finds new external pressures for modernization of the audit profession, as well as legislative oversight mechanisms occurred during this period (p. 82).

In the late 1940s and 1950s, two reports were issued under the Hoover Commission. The first report found that the President was responsible for overseeing too many agencies and that he lacked qualified staff support. Oversight was poorly coordinated and fixated on rigid statutes and regulations. According to the report, one of the major reasons that the President lacked sufficient authority was problems in budget systems and non-uniform accounting principles. The report found that a central accounting system would be essential to management and fiscal control. Recommendations of the first Hoover Commission would lead to the creation of the Budget and Accounting Procedures Act. Thai (1992) notes the Accounting and Auditing Act of 1950 required federal agencies to maintain systems of accounting and internal control, and authorized GAO to evaluate agencies’ accounting and internal control systems (p. 338). In addition, the measure made GAO responsible for developing accounting principles.



### *1963-1973 The Great Society Era*

Arguably, the decade of the 1960s would be one of the most tumultuous periods in American history. The passage of many entitlement<sup>9</sup> programs under the Great Society program, such as Medicare, Medicaid, Food Stamps, and Supplemental Security Income expanded government spending. However, the Vietnam War would ultimately dominate the domestic spending agenda (Ross, 1967, Box 7). According to Pilegge (1992), as the size of government increased markedly in the years following World War II, so did the federal budget. It grew in ways unanticipated by earlier reformers, not only in size but in complexity (p. 83). Much of this growth was attributed to the Baby Boom generation moving through the public school systems and the on-going expansion of interstate highway system. Total government expenditures “grew from about one-fourth of gross domestic product in 1955 to one-third in 1975” (Rosenfeld, 1989, p. 38). Between the mid-1950s and late 1970s federal aid showed a virtually unbroken upward trend. State and local governments increasingly came to expect on-going federal aid. “Once a particular grant continues for a few years it becomes an integral part of state and local budgets and constitutes one of the assumed sources of revenue in the process of budgetary planning” (Federal Budget, 1967, Box 37).

Previts and Merino (1998) note that the growth of government spending through the Great Society program created unique challenges for the Federal government. For example, the need for hospital accountants exploded with the passage of Medicare. Some practitioners began to argue that traditional accounting measurements were not adequate to assess the effectiveness and efficiency of government programs. The Comptroller General of the United States, as one

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<sup>9</sup> “Entitlements are legal obligations created through legislation that require the payment of benefits to any person or unit of government that meets the eligibility requirements established by law” (Wildavsky & Caiden, 2003, p. 187). Entitlements constitute nearly 2/3rds of the federal budget and significantly limit discretionary spending (p. 195). Entitlements are difficult to eliminate or reduce because costs are typically automatically adjusted, the base of eligible recipients continues to grow (p. 201) and “beneficiaries mobilize to defend their rights” (p. 212).

example, called for “operational audits” that focused on evaluating the achievement of program goals (pp. 330-331). With more federal aid being pushed out into the states, another area of concern became how to coordinate federal grants effectively to maximize the impact within local communities while at the same time ensuring that federal dollars were not wasted and laws were not violated. Many of the compliance provisions contained within the Single Audit Act, such as Civil Rights provisions, are a result of the political goals of this era.

As program funding and federal oversight began to increase, state and local governments became increasingly concerned about the administrative and audit requirements tied to federal aid. The Government Accounting Office (2000) notes that federally funded programs during this period were being scrutinized by multiple auditors at multiple levels of government who often failed to coordinate activities effectively. The lack of audit coordination led to several problems for federal, state, and local officials alike. For instance, some grants were being audited by multiple auditors, which lead to excessive audit expenses. In other cases, so much audit activity was being focused on certain grants that other federally assisted programs were entirely overlooked from audit scrutiny; thereby, reducing the extent to which audit reports could be relied upon (p. 1-19).

In response to these problems, the federal government undertook a series of administrative reforms that would eventually lay the foundation for the Single Audit Act. While some staff members within the Johnson administration called for “reducing of the number of government entities by as much as 80%” (Fowler, 1967, Box 95, p. 4), most supported the call to strategically prioritize funding to those entities with greatest need. One the most effective means for achieving this goal was to streamline the audit process and simplify grant administration. At one point in time, staff pushed the idea of having a single state agency manage all federal grants.

In a Memorandum for Mr. Nimetz, Charles Warden wrote that the “President realizes that a proliferation of Federal grant programs can lead to administrative complications and that there is the ever present need for careful management and procedures to assure the effectiveness of Federal programs and the full accomplishment of their objectives” (Gaither, 1966, Box 17, p.2).

In 1965, the Johnson administration issued OMB Circular A-73 to promote intergovernmental audit cooperation. The Circular sought to curtail unnecessary Federal audit work, eliminate the practice of Federal audit staffs performing work at the same location, and advanced closer coordination and cooperation between federal agencies and non-federal recipients (Cater, 1965, Box 95). The following excerpt was incorporated into the audit section of OMB A-73:

Where grantee practices are considered to be acceptable under such standards, Federal audit will be oriented toward establishing the adequacy of the system and controls in operation, supported by a testing of transactions to verify the reliability of the system. Where the grantee’s internal management control system does not meet these standards, Federal agencies will encourage the grantee to review existing practices and bring about necessary improvements, and will cooperate by lending such assistance as may be feasible in developing an appropriate system and orienting grantee staff. (Panzer, 1965, Box 358, p. 2)

Shortly thereafter, Circular A-80 was issued to standardize Federal planning provisions relating to boundaries, statistics, and staff (Ross, 1967, Box 7, p. 13). In 1967, a Report on Budget Concepts was commissioned to ensure that the fiscal consequences of governmental decisions were fully disclosed in the most understandable way (Budget Concepts, 1967, Box 2, pp. 1-10).

All of these measures were undertaken to promote better execution, planning, and efficient coordination of individual grant programs within the same functional area. The milestone legislation, however, was the Intergovernmental Cooperation Act (ICA) of 1968. The ICA focused on the conduct of specialized and technical services. The measure sought to

eliminate unnecessary duplication and provide reimbursement to state and local governments who engaged technicians in carrying out federal programs. OMB Circular A-95 further provided for the establishment of area-wide and state clearinghouses for reviewing and commenting on proposed projects. The main focus during this period was to reduce processing and red-tape typically involved with the grant application process. Consequently, only limited attention was focused on how effectively grantees were achieving program results.

In 1971, the Office of Management and Budget (OMB) issued Circular A-102, Uniform Administrative Requirements for Grants-in-Aid to State and Local Governments. OMB A-102 outlined standards for financial management systems of grant-supported activities of state and local government. Attachment G to OMB Circular A-102 required that audits of financial and compliance requirements be conducted by the grantee at least every two years. While conceptually sound, most of these measures failed to carry the authority of the law (Brown & Burnaby, 1986, pp. 48-50). Also, many state governments were reluctant to pay for auditors.

In addition to the advances occurring at the federal level, state and local government began undertaking a series of financial reforms. “In the late 1960’s, the legislature began to take control of the post-audit function, removing it from the executive branch and, to some extent, from the elected arena, and making it a key part of the oversight function” (Walton & Brown, 1990, p.4). Previts and Merino (1998) find that during this period of time only six states had statutes that required independent audits, yet the number of federal grant programs exploded (p. 330-331). Meanwhile, several governmental professionals recognized the need to develop a coherent body of standards relevant to governmental agencies. While the MFOA sponsored a series of committees in the 1960s, 1968 represented a landmark year when the *Governmental Accounting, Auditing, and Financial Reporting (GAAFR)* was published, which “marked the

beginning of a new era in state and local accounting and reporting” (Greathouse, 1985, p. 23).

Brown and Copeland (1985) note that the GAO became a stronger force in American public finance during this period (p. 4). The apex of such influence was marked by the issuance of new government auditing standards in 1972 (commonly referred to as the “Yellow Book”). The purpose of this audit standard initiative was to establish “a single set of auditing standards that were similar to the AICPA statement of generally accepted auditing standards (established in the wake of the SEC Acts of 1933 and 1934), but also included broader standards to reflect the unique auditing and operating environments of governments,” (Hay, Kattelus, & Wilson, 2001, p. 513) including operational audits. The standards established protocols for independence, due care and professional conduct (U.S. Government Accountability Office, 2007, p. 29-35). Today, auditors conducting work for federal departments/agencies and governments/non-profit agencies who receive substantial federal financial grants and loans must comply with the standards set forth within the GAO Yellow Book. Audits performed under the Act must adhere to Yellow Book standards.

#### *1973-1984: Devolution Revolution*

The beginning of the 1970s would be marked by the break-in of the Democratic Headquarters at the Watergate Hotel, which was an effort to help steal secrets that would help to re-elect President Nixon. While Nixon would successfully negotiate a cease-fire agreement in Vietnam, he would not see the Vietnam War come to a close as President. After several of Nixon’s top officials were indicted in the Watergate scandal, Nixon would be forced to resign from office in 1974 (one year before the official close of the war). In his report “Watergate: Implications for Responsible Government,” Mosher (1974) argues that the primary driving purpose behind the Watergate crimes was to sustain powers vested in the President. “It is

evident that the imperative to re-elect was so driving as to override many other considerations, including the public interest and normal ethical and legal constraints” (Mosher, 1974, p. 345). Ultimately, the panel concluded that public officials “obligations to the public as a whole entail an additional and more rigorous set of standards and constraints associated with the concept of public trust” (Mosher, 1974, p. 348). Consequently, Nixon’s departure had a direct impact on the financial reform initiatives he launched during his Presidency.<sup>10</sup>

By the end of the era, two major themes had emerged in the private and public sector. The private sector observed a movement towards deregulation, demonstrated by the easing of the Glass-Steagall restrictions of commercial banking and investment activities. The public sector observed a movement known as devolution. Thompson (1985) notes Nixon started the concept through the successful passage of a new general revenue sharing program, which distributed federal funds to all 50 states and to about 39,000 local governmental units, many for the first time. Consequently, one of the few administrative requirements of the Revenue Sharing program was for the submission of a report (not an audit report) on the uses of federal funds. However, efforts to audit programs and prevent financial crisis during this era largely fell short.

In the beginning of the 1970s decade, all fifty states had different accounting procedures, and only one or two were in compliance with the existing authoritative literature. This problem ultimately spurred a movement within the auditing profession to improve standards across all governments. Shortly after New York City requested a Federal bailout to resolve its financial crisis in 1974, Greathouse (1985) notes the Senate Banking and Finance Committees were

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<sup>10</sup> With Nixon’s departure so too would end some of his budgeting initiatives, such as the management by objectives (MBO) approach. MBO placed less emphasis on long-range planning and consisted of the following three components: 1) departmental personnel determine measureable, results-oriented objectives linked to budget request; 2) milestones and periodic reviews; 3) results evaluated. When Richard Nixon flew west into temporary exile in California, management by objectives lost its champion in the White House, was buried by other administrative reforms during the Ford administration, and phased-out with zero-based budgeting in 1979 (Pilegge, p. 78).

engaged to design new forms of legislation to better control federal aid to states.

In the early 1970s, state and local governments that had traditionally enjoyed a high reputation for financial stability were called into question by numerous highly publicized financial crises of governmental units, such as Cleveland and New York City. Critics were quick to blame poor accounting and financial reporting. Unless the profession moved swiftly to respond to such criticisms, government appeared likely to step in to set minimum standards. (Greathouse, 1985, p. 24)

In an effort to remedy this problem, a task force was created to establish authoritative accounting standards, which led to the creation of the Governmental Accounting Standards Board (p. 25-26).<sup>11</sup>

Originally, the Senate sought to create a governmental accounting standards board within the federal government itself, meaning that government would have begun to regulate the accounting profession. Not only did the profession fight this legislation vigorously, but it was joined in the struggle by state and local governments who saw such federal regulation as an abridgment of state rights guaranteed by the constitution. (Greathouse, 1985, p. 27)

While ceding authority to the accounting profession in the establishment of state and local government accounting standards, Congress made other important strides in financial reform legislation during this era. One example is the Congressional Budget Impoundment and Control Act (CBICA) of 1974. Despite growth and complexity in the Federal budget process, until 1974 the Congressional budget process remained decentralized, fragmented, and uncoordinated. To remedy these problems Congress enacted CBICA, which:

1. Sharply curtailed the President's impoundment powers by creating procedures whereby Congress could block such measures.
2. Established the Congressional Budget Office and created standing committees on the budget in each house with their own staff.
3. Altered the legislative budget process in substantial ways including, a new fiscal year and more rigid budget timeframe (Pilegge, 1992, p. 86-86).

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<sup>11</sup> GASB established as an initial agenda a study of the needs of users of financial statements; comprehensive projects on financial reporting (including objectives of financial reporting); a study of measurement focus and basis of accounting; pension disclosures and accounting and reporting; fixed assets and infrastructure; and targeted projects on special assessments, public authorities, and deferred compensation (Fountain, p. 95).

Fisher (1975) notes that by subjecting proposed impoundments to congressional review and concurrence, “the executive’s discretionary use of this fiscal policy tool was sharply curbed” (p. 200). Lee, Johnson, and Joyce (2004) argue the CBICA of 1974 “beefed up” the congressional role in the budgetary process by adding committees and staff. Ford, the first President affected by the law, attempted to withhold funds on policy grounds, but faced stiff opposition from Congress. “Of some \$9 billion of rescissions requested, 86 percent were rejected” (LeLoup, 1978, p. 176).<sup>12</sup> Despite its success in curbing Presidential impoundment power, CBICA was ineffective at resolving deficit spending and ultimately gave rise to Gramm Rudman Hollings (GRH) Act of 1986 and Budget Enforcement Act (BEA) of 1990.

An even more notable piece of legislation that also consequently served as a forerunner to the Single Audit Act was the Inspector General Act (IGA) of 1978. Adair and Simmons (1988) highlight that the legislation was inspired after a series of scandals and abuses within government starting with the Nixon administration, as well as the need to integrate investigative information into the House Appropriation budget process. “The IGA was enacted in large measure due to the inattention to internal audit findings, insufficient financial auditing, and low priority given to fraud detection and prevention” (Adair & Simmons, 1988, p. 95).

In addition, there had been documented instances where investigators were kept from looking into suspected irregularities, serious shortages of audit and investigative personnel, and potential fraud cases which had not been sent to the DOJ for prosecution. All of these matters served as an impetus for the act. (Bowsher, 1985, p. 39-40)

The IGA empowered auditors to conduct whatever investigations and audits they considered necessary to determine accountability and inspector generals were provided unlimited access to records, personnel, agency heads, and Congress (Bowsher, 1985 p. 40). “With the

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<sup>12</sup> Later, President Reagan faced similar opposition from a democratically controlled Congress. “Of \$20 billion in rescissions requested between 1983 and 1988, Congress approved only \$400 million (2%)” (Pilegge, p. 87).



advent of the IG Act came a change in the role of auditors and investigators, particularly with regard to their prevention and detection roles” (Bowsher, 1985, p. 42). Given these broad powers to access information, IGs “were specifically prohibited from accepting any program operating responsibilities” (Brown, 1985, p.16). Under the Act, IG’s were placed within each major Federal agency and their duties and responsibilities included:

- Conducting and coordinating audits and investigations of agency operations;
- Reviewing proposed laws and regulations to determine their impact on the economy and efficiency of agency operations.
- Keeping the agency head and Congress informed about significant fraud and abuse problems within the agency. (OIG Act)

The Act also required an IG to prepare a semiannual report that described significant internal control defects, as well as propose a corrective action agenda. Once this occurs, “the report is sent to the agency head (who may add comments but not change the report). Then the report is sent to Congress” (Adair & Simmons, 1988, p. 92).

While the financial and administrative reforms represent logical progressions toward the ultimate enactment of the Single Audit Act, a full appreciation of the driving force behind the legislation cannot be reached without understanding the economic and political events of this era. The period was dominated by a movement known as supply-side economics.<sup>13</sup> Wildavsky (1992) notes that “what was new in the 1970s was that they [economists] had developed new ideas- monetarism, supply-side economics- at variance with by-then conventional Keynesian wisdom. Stagflation brought these ideas to the fore” (p. 96).

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<sup>13</sup> “Supply-side economists believed that the supply of money was an important determinant of an economy’s performance. Monetary policy is defined as deliberate government actions taken to alter the money supply and/or interest rates, which are controlled by the Federal Reserve. Monetarists, a school of economists lead by Nobel laureate Milton Friedman, held that business swings were attributable to erratic changes in the nation’s money supply and changes in price levels. The monetarists argued that merely adjusting the interest rate compounded economic inefficiencies and led to government productivity falling short of private sector productivity hindering economic growth” (Stapleford, p. 407-411).

Shortly after Jimmy Carter took office in 1976, the country was faced with high unemployment and rising inflation. These emerging fiscal problems and a resurgent supply-side conservatism movement forced Carter to impose restraints on the flow of aid to the states. President Carter, who had previously implemented Zero-Based Budgeting while the Governor of Georgia, would effectively lobby to reduce the amount of Federal grants to state and local governments. Rosenfield (1989) finds that 1977 was the first year where grants stopped growing on a constant dollar basis (p. 76).<sup>14</sup>

After several decades of growth in intergovernmental aid, state and local governments became increasingly dependent upon these funds for operating expenses as well as capital improvements. “By 1980, an estimated 36.0 percent of state and local capital expenditures were being paid for with federal aid. Intergovernmental transfers became the lifeblood not only of older declining cities of the northeast and north central states, but also of the rapidly growing cities of the south and southwest” (Rosenfield, 1989, p. 75). The impact of these budget cuts on “poor communities that received aid” cannot be understated (Schneider & Moon Ji, 1990, p. 418). Moreover, “reductions in aid and the move away from targeting, which resulted from changing conditions and shifting ideologies at the national level, clearly affected the incentives and propensities of local governments to apply for aid” (Schneider & Moon Ji, 1990, p. 409).

When Reagan entered office, he was not afraid to pursue two main goals: reducing tax rates and increasing defense spending. To carry out these two objectives, Wildavsky (1992) notes that Reagan would rely heavily upon OMB Director David Stockman to become an influential political player in the budgetary process. As such, the OMB became the master of presenting “rosy projections.” In addition, the Reagan administration found it necessary to

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<sup>14</sup> Ultimately, federal outlays would fall 7% between 1978 and 1986 by the elimination of counter cyclical spending programs and General Revenue Sharing payments to state government (Haughwout & Richardson, p. 12).

substantially reduce grants-in-aid and other domestic spending in an effort to finance tax cuts and increased defense spending. “The 1981 Omnibus Budget Reconciliation Act left few intergovernmental grants untouched by the budget ax” (Rosenfield, 1989, p. 74).

Reagan sought to shift financial and programmatic responsibility for certain domestic programs to state and local governments (Bowman & Kearney, 2010, p. 38). During the Reagan era, several categorical programs were consolidated. “In 1981, 57 categorical grants were replaced by 9 block grants: four health care block grants, one each for education, community services, community development, social services, and energy assistance” (Haughwout & Richardson, 1987, p. 13).

Then, in 1982, President Reagan began pushing the idea of audit reform as means to cutting excess from government. He commissioned the President’s Council on Integrity and Efficiency (PCIE) to explore why prior efforts to improve the intergovernmental grant auditing network had failed. In that same year, he worked with Congress to successfully pass the Federal Managers’ Financial Integrity Act of 1982, which amended the Accounting and Auditing Act of 1950 and required that each executive agency establish internal accounting and administrative controls in accordance with standards prescribed by the GAO and that the agency conduct annual reviews to determine the extent of compliance with those standards (Hildreth, 1993, p. 80).<sup>15</sup> After the successful passage of Federal Managers’ Financial Integrity Act (FMFIA), the audit profession came to the realization that the time for the single audit process had come. Unlike prior administrative orders, this time such reform would need to carry the authority of the law (Steinberg, Miller, & Menzel, 1981, pp. 55-66).

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<sup>15</sup> Lee, Johnson, and Joyce (2004) note a Supreme Court ruling determined the GAO would be in conflict to instruct agencies so the Office of Management and Budget (OMB) is ultimately responsible for this role (p. 363). As such, guidelines for compliance with FMFIA are set forth in OMB A-123, *Management Accountability and Control*.

## **The Single Audit Act (SAA)**

### *History of the Single Audit Act*

As discussed previously, the concept of the single audit ultimately began in 1977 with an amendment to Attachment G of Circular A-102, which required an “examination to be conducted on an organization-wide basis to test the fiscal integrity of financial transactions, as well as compliance with terms and conditions of the federal grants” (Thompson, 1985, p. 89). The Inspector General Act and Joint Financial Management Improvement Program both heightened the awareness of the need to address audit duplication and overlap, normalize audit practices, and standardize audit standards. However, GAO studies conducted during the period found that billions of dollars were being overlooked from audit scrutiny. While the federal government expressed concerns that audit activity was insufficient, state governments became frustrated at the sheer number of auditors (e.g., state, agency, OIG, GAO, etc.) scrutinizing individual grant programs and were concerned about audit expenses.<sup>16</sup>

Attachment P to OMB Circular A-102 represented the first documented effort to advance a comprehensive audit solution. While the administrative directive was similar to Attachment G, it added three new components: 1) auditors were required to use the new “yellow book”, 2) supplemental guidance was issued outlining special test work procedures for major programs, and 3) grant recipients were assigned a cognizant federal agency (OMB A-102, Attachment P, p.92). While the effort was an important first step to improving audit practices and coordination, little improvement was observed in the immediate years following the administrative directive (Brown and Burnaby, 1986, p. 49). One major problem with Appendix P was that it did not carry the weight of the law (Brannan, 1994, p. 67). All of these problems were highlighted in a

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<sup>16</sup> This statement was made by one of the confidential interview participants of this study.

June 1981 article entitled “The Single Audit in Government: An efficient way to audit federal grants to state and local governments” within the *Journal of Accountancy* by Steinberg, Miller, and Menzel. In this article, the authors outlined their justification for the need for the single audit process, including: the existence of a cognizant agency, definition of terms, uniform audit guidelines from GAO, and elimination of separate audits of individual grant programs. The President’s Council on Integrity and Efficiency (PCIE) report of 1982 also highlighted the deficiencies of Attachment P and questioned the usefulness of single audit reports that had been issued under the measure.

### *Enactment of the Single Audit Act*

#### *SAA of 1984*

Under increasing pressure from the GAO, legislation was first introduced during the ninety-seventh Congress (1981-1982) to make the single audit a legal requirement. Due to political forces and limited momentum within the House of Representatives, it would take two more years, in 1984, before the Single Audit Act was passed. Although there was strong support for the measure at the federal level, one interview participant in this study noted that one of the foremost roadblocks to implementing the single audit concept related to the issue of intergovernmental cooperation and audit reimbursement procedures. In other words, who would carry the burden of increased audit scrutiny? While federal agencies demanded greater audit scrutiny of grants, state and local governments were concerned about the time and costs associated with auditing these programs. Resolution to this problem came when the Reagan Administration pushed the idea for a comprehensive audit to prevent the questionable use of federal funds.

Reagan viewed the single audit concept as an important step to ensure state and local government entities receiving federal grants would be held to a greater level

of accountability and reduced spending levels. Likewise, the democratically controlled Congress viewed the measure as an opportunity to reduce fraud, waste, and abuse. (Brannan, 1993, p. 69)

The GAO also played a major role in getting single audit legislation introduced and enacted.

When Congress enacted the Single Audit Act, their primary motive was control of the recipients (agents) through a clear account of how money was being spent and the success in implementing specific programs. However, Congress, like the President, was also interested in rooting out fraud, waste, and abuse of federal funds... Congress wanted detailed scrutiny of recipients of federal money. The information was to be utilized by Congress and federal managers in the execution and evaluation of the various programs. The overriding concern of Congress was the need to contain what many felt was rampant waste and abuse of federal funds. (Brannan, 1993, p. 69)

With its enactment, the measure replaced multiple grant audits with one comprehensive audit of a government unit's activities as a whole. The new single audit was intended to be an organization-wide financial and compliance audit that focused on accounting and administrative controls, as well as providing reasonable assurance that federal financial assistance programs were managed in accordance with applicable laws and regulations. The four primary purposes of the original Act were to:

1. improve management of federally assisted programs by state and local governments;
2. establish uniform audit requirements for these programs;
3. promote more effective and efficient use of audit resources; and,
4. ensure that federal organizations rely on and use the audit work performed pursuant to the Act to the maximum extent practicable.

(Government Accountability Office, 1988, pp.16-17)

The Act was the first measure to require internal control and compliance testing over budgetary laws, regulations, statutes, and ordinances. The Single Audit Act also unified accounting and auditing standards, such as GAAP and GAGAS, and led to the creation of other regulatory guidance, including OMB circular A-123, OMB Circular A-128, and OMB Circular A-133. The single audit was designed to be comprehensive and conducted on an organization-

wide level with a “focus on recipients expending the largest amounts of federal financial assistance” (Government Accountability Office, 2000, p. 10).

After the Act’s enactment, all state and local governments that received federal financial assistance of \$100,000 or more were subject to a comprehensive annual audit. Each audit contained separate reports attesting to the fact that:

- 1) the financial statements of the governmental entity were fairly stated in accordance with generally accepted accounting principles,
- 2) the audit entity has complied with laws and regulations that may have a material effect on the financial statements,
- 3) the audited entity has an internal control structure that provides reasonable assurance that federal financial assistance programs are managed in compliance with applicable laws and regulations<sup>17</sup>, and;
- 4) the audited entity has complied with laws and regulations that may have a material effect upon each major federal assistance program. (SAA, 1984)

To conduct effectively a single audit, an individual is required to have working knowledge of a broad spectrum of topical areas from governmental accounting standards to understanding the host of compliance standards established under audit guidelines and agency regulations. For instance, the auditor must be familiar with standards promulgated by a host of regulatory authorities including: the United States General Accounting Office, the American Institute of Certified Public Accountants (AICPA), Government Accounting Standards Board, and the Office of Management and Budget.

#### *SAA of 1996*

In February 1993, the National State Auditors Association (NSAA) issued a position paper. In this paper, the committee expressed concerns about the single audit process, including single audit administration, reporting and the need for a risk-based approach. In September

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<sup>17</sup> Thai (1997) notes the Single Audit Act of 1984, which required reports on the audited internal control structure, defined internal controls as a plan of organization, methods, and procedures adopted by management to ensure that: 1) resource use is consistent with laws, regulations, and policies; 2) resources are safeguarded against waste, loss, and misuse, 3) reliable data are obtained, maintained, and fairly disclosed in reports (p.324).

1993, the President's Council on Integrity and Efficiency (PCIE) standards subcommittee completed a comprehensive two-year study, entitled *Improving the Single Audit Process*. This study looked at perceived problems with audits of state and local governments' programs (Ramsey & Rippey, 1994, pp. 83-88). Some recommendations were adopted, but others were overlooked.<sup>18</sup>

According to the Government Accountability Office (2000), the major change contained in the 1996 Act was a requirement to extend single audits to all states, local governments, and not-for-profit institutions receiving federal aid over a specific threshold. In addition to lifting the threshold for all "nonfederal" entities that expend \$500,000 or more of federal awards in a fiscal year, the amended Act sought to ensure a more cost-beneficial approach, employ a risk-based approach to audit planning, improve the timeliness of reporting, and create a repository for audit results (in essence, the creation of the Federal Audit Clearinghouse). The amended Act also added a fifth objective of "reducing [audit] burdens on state and local governments, Indian tribes, and nonprofit organizations" (104<sup>th</sup> Congress, 1996, p.2). In addition, the following technical changes were made to the Act:

- Increased federal expenditure dollar threshold to \$300,000 in federal funds (giving future increases at the discretion of OMB Director); thereby, easing the burden for management;
- Entity's management can choose to have a program-specific audit;

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<sup>18</sup> Respondents called for raising the single audit dollar threshold from \$100,000 to \$250,000 and enabling managers to cluster related programs and commission program specific audits, improve the determination of major vs. non-major programs, and improve audit coverage through a risk-based approach, simplify reports, and strengthen audit testing guidance, such as statistical sampling. Suggestions overlooked included:

- Requiring management to include with single audit reports an assertion on the status of prior findings and require the auditor to attest to the accuracy of management's assertion.
- Setting up a process for nonfederal auditors to report directly to federal agencies voluntarily when they see design problems in federal programs.

This study also recommended that all current general requirements (except those concerning civil rights and a drug-free work place) be combined with the specific requirements as a single category named "programmatic compliance." However, the committee disagreed with recommendations on internal control and compliance testing. A specific concern was that setting minimum standard sample sizes would increase audit cost substantially and not provide the additional evidence desired. The committee also strongly disagreed with a recommendation to require auditors to disclose materiality levels for each major program (Ramsey & Rippey, 1994, p. 86).



- Changed the major program determination to one based on OMB’s risk-based criteria;
- Auditor required to conduct specific internal control test work;
- Auditor must create a summary schedule of prior audit findings and questioned costs;
- Auditor must report conditions in internal control and material matters of noncompliance.

In addition, OMB combined two audit circulars and issued a revised Circular A-133, which served as the administrative base for uniform audit requirements for the nonfederal entities administering federal awards. This guide provided auditors with information on compliance requirements relevant to specific federal programs, suggested audit procedures for these programs, and included general audit procedures for programs lacking specific procedures.<sup>19</sup>

## **Single Audit Act Literature**

### *Introduction*

Since the enactment of the Single Audit Act nearly twenty-five years ago, the Act has been extensively examined by academics and practitioners alike. Harris (2005) notes that over the past twenty-six years, there have been over thirty publications on the Single Audit Act; however, the vast majority of these works were published prior to 1990 (p. 161). The primary emphasis of researchers has been placed on evaluating compliance with reporting activities, assessing the quality of audit reports, or evaluating the effectiveness of audit coordination under the Act. Harris (2005) discusses the evolution of research around the topic:

The post-adoption discourse of the late 1980s shows numerous issues arose and were resolved. In the early 1990s, discourse shifted to the utility of single-audit data for federal managers and to ways for reshaping reporting to maximize its utility. In particular, the use of the single-audit approach for Medicaid programs posed special problems... In 1996, the Single Audit Act was amended, and in 1998, Circular A-133 was revised. The discourse shows that with almost every change there is advocacy and then a subsequent need for guidance. (Harris, p. 171)

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<sup>19</sup> Melton (1998) discussed the implications of the 1996 Act on audit systems and provided specific monitoring related recommendations for ensuring compliance.

The literature suggests that although the topic was researched extensively shortly after the Act's enactment, recent research appears limited. The vast body of research on the Single Audit Act can be organized around various researchers' attempts to evaluate the Act's overall effectiveness in meeting one or more of the four original stated objectives, which are outlined below:

1. improve management of federally assisted programs by state and local governments;
2. establish uniform audit requirements for these programs;
3. promote more effective and efficient use of audit resources; and,
4. ensure that federal organizations rely on and use the audit work performed pursuant to the Act to the maximum extent practicable. (GAO, 1988, 16-17)

Given this tendency to evaluate the Act in this manner, the literature in this section has been organized around these stated objectives.

*Objective 1: Promote sound financial management, including effective internal controls, with respect to federal awards administered by nonfederal entities*

One area where the Single Audit Act has been relatively effective is in regard to advancing internal control integrity. Brannan (1989) assessed whether the Act improved an entity's ability to meet compliance standards. His dissertation surveyed members of the Intergovernmental Auditing Forum with single audit experience. Using factor analysis, Brannan's study found that the organization's ability to meet compliance standards had improved. However, stakeholders' opinions of the overall effectiveness of the measure varied across different levels of government. "The question of interest is no longer whether there has been any improvement but rather whether compliance has improved enough" (Brannan, 1989, p. 186).

In his second publication on the single audit process, Brannan (1993) constructed a survey and issued it to 413 auditors and accountants (the majority, 59 percent, were from state and local governments). His study had two major aims: first, to determine individuals'

perceptions of the responsibilities of the auditor and governmental manager in improving compliance; second, to determine how effective the SAA had been in improving the quality and incidence of compliance. With regard to the first research question, the vast majority (80 percent) disagreed that this was not the role of the auditor but rather the role of management. However, Brannan notes that this observation essentially conflicts with Congressional intent who sought to make the auditor the chief agent of control. His survey concludes that there is “virtual consensus” among respondents that management is responsible for compliance. Concerning the second research question, the vast majority of respondents (60 percent) felt that compliance was improving as a consequence of the SAA and several individuals (80 percent) felt that governmental units were complying with rules and regulations (p. 72). However, he concludes that “for those holding high expectations, the degree of achievement may well appear to be too small” (Brannan, p. 73).

Jakubowski also published two works on the Single Audit Act. For his dissertation in 1988, he examined single audit reports submitted by over 200 cities and counties during the first two years the Act went into effect. In this work, he noted that while internal controls had improved in both counties and cities, disparities between the two types of governments exist. He also found that the frequency of internal control observations tend to decrease as time passes. In 1995, Jakubowski published a closely related work where he examined a randomly generated sample of SAA audit reports, and in doing so paid specific attention to compliance matters related to internal control. He notes a 25 percent decline in material internal control weaknesses over the four-year period (p. 62). Despite the study’s significance, Jakubowski’s was unable to establish a causal link between the single audit and financial management improvements.

Additionally, Jakubowski’s study found that counties were more prone to control

weaknesses than cities. Jakubowski (1995) also found that the frequency in which control observations were reported appeared to be influenced by the type of auditor, such as a CPA firm vs. a state auditor, engaged on the project. “State auditors reported significantly more material control weaknesses than both large and small CPA firms” (p. 69). He suggests this may be due, in part, to the fact that private entities are reluctant to issue highly critical audits in an effort to retain the client; whereas, state auditors will conduct the audit regardless of audit findings from the prior year. Jakubowski, et al. (2002) find similar audit quality problems at the county level in the wake of the amended version of the SAA of 1996.

Miller (1994) examined the effectiveness of the Single Audit Act in meeting certain stated objectives for his dissertation, including improvements in internal control structures. Based on a survey of state and local government managers, he concluded the Single Audit Act had a moderate impact on improving financial management practices of non-federal recipients of aid, particularly within county governments. With that said, survey responses suggested that opportunities existed to make the single audit process more beneficial to state and local government. His research also suggested that duplicative federal program audit activity remained problematic despite the enactment of the SAA.

Van Daniker and Miller (1995) summarize Miller’s prior doctoral research. While state and local personnel had indicated that the SAA improved internal financial management, Van Daniker and Miller found that the Act had not eliminated audit duplication and overlap. “The most likely causes of audit duplication and overlap are the limited usefulness of single audit reports and the length of time before publications” (Van Daniker and Miller, p. 59). The authors note that one of the original intents of the Act was to serve as an early warning system for deficient internal controls (p. 56) and a gateway towards future audits. From this standpoint, the

intent of the Act was not to identify every improper payment.

A 1994 GAO report buttressed these findings by concluding that the single audit process had “contributed to improving state and local government financial management practices” (GAO, 2000, p. 5). The report, *Single Audit: Refinements Can Improve Usefulness*, was the result of surveys from single audit report users, and discussions with representatives of state and local governments and organizations, such as the AICPA and the National State Auditors Association, as well as the analyses of other sample reports and research. According to this report, state and local government officials were implementing new accounting systems that conformed to the Act and GAAP, oversight capabilities had improved, and entities had begun issuing comprehensive annual financial statements in the appropriate format as a direct result of the single audit process.

Despite those reported improvements, the GAO identified several issues that burdened the single audit process, hindered the usefulness of its reports, and limited its impact. Moreover, the report highlighted the need for an automated database containing federal audit data.<sup>20</sup> These recommendations eventually led to the emergence of an amended version of the Act in 1996 and the creation of the Federal Audit Clearinghouse.<sup>21</sup> According to the GAO (2000), “the intended objectives of the first two 1996 amendments have, for the most part, been accomplished.” While noteworthy progress has been made with respect to items three through six, “there is not yet

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<sup>20</sup> To remedy the problems the GAO recommended raising the dollar thresholds for determining which recipients were required to have a single audit, adding program risk criteria to the process for selecting programs to be audited, and compiling single audit results so that oversight officials and program managers can easily access and analyze them. These recommendations were similar to the recommendations made by Ramsey and Rippey (June 1994) who argued for a series of changes to the Single Audit Act of 1984.

<sup>21</sup> Consequently, the following objectives were added to the amended version of the act: 1) extend the law to cover all recipients of federal financial assistance, 2) ensure a more cost-beneficial threshold for requiring single audits, 3) focus audit work on programs that present the greatest financial risk to the federal government, 4) provide for summary reporting of audit results, 5) promote better analyses of audit results through the establishment of a federal clearinghouse and an automated database, 6) provide for timely reporting of audit results, and 7) further streamline the audit process and make it more useful.

enough experience to evaluate the prospects for achieving the objective of the seventh amendment” (p. 2) relating to streamlining the audit process and making it more useful.

*Objective 2: Establish uniform requirements for audits of federal awards administered by nonfederal entities*

The Single Audit Act’s second stated goal has been largely achieved through the issuance of uniform OMB guidance, as well as standards promulgated through the Government Accountability Office (GAO). In general, there appears to be consensus within the academic community that uniform audit requirements for financial and compliance testing, in the strictest terms, indeed exists as a consequence of the Act. During the three years preceding the Act, McKee and Jackson’s (1988) study on the types and nature of single audit findings in Tennessee, supported the position that the measure helped advance consistent compliance findings from year to year as a consequence of uniform audit standards. Meanwhile, Irvine (1989) focused on how effectively small CPA firms, which had previously been plagued by quality review issues, were leveraging the new single audit’s standards. Based on his survey, Irvine did not find any evidence that small firms had failed to comply with professional standards.

Despite these encouraging studies, Raman and Van Daniker (1994) raised concerns regarding single auditors’ statistical sampling techniques used to determine materiality levels. The authors argue that the need for “materiality guidelines may be greater in government than in a corporate context” (p. 71) because the single audit process expands the scope of the traditional financial statement audit. After issuing a survey to CPA firms and state auditors, the authors found that professionals were using different bases<sup>22</sup>, estimates, percentages, thresholds, and stratification methods for determining materiality. One factor that influenced estimates included

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<sup>22</sup> Most often from the larger of total revenue or total assets, but total expenditures may also be used for compliance testing.

“perceived level of exposure risk associated with the audit engagement” (Raman and Van Daniker, p. 76). The authors recommend that materiality standards, especially quantitative guidelines, be promulgated to all auditors.

Shortly after the Single Audit Act was enacted, the GAO began a two phase review of the quality of audits performed by nonfederal auditors. The first GAO report (1985) focused on an evaluation of the monitoring systems that federal inspector generals used in evaluating the work of CPA firms. The report found that Inspector Generals had numerous reporting problems and had used inconsistent policies and practices to review independent audits in the forty-six regional offices within seven agencies. The second phase of the GAO study (1986) focused on the quality of all CPA audits and found significant deficiencies, particularly within smaller CPA firms. “The report found that 34 percent of the 120 randomly sampled governmental audits conducted by CPAs were unsatisfactory and did not comply with all the appropriate governmental auditing standards” (GAO, 2000, p. 16). In many cases, it appears that pressure was placed on the quality of the audit work due to demand to keep low audit fees by reducing audit hours.<sup>23</sup> Brown (2005) notes that many National CPA firms refuse to do governmental auditing because of the low fees paid by governmental entities.

Fees at 50 percent or even less of usual fees are not uncommon for governmental work. Whatever the reasons for the lower fees there may also be a further reason to do substandard audit work as firm partners and staff rush to stay within the lower budget. (Brown, 2005, p. 28)

A subsequent President’s Council on Integrity and Efficiency (PCIE) study conducted in

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<sup>23</sup> In response to the GAO quality-of-audit studies, the AICPA established a task force on the quality of audits of governmental units. The objectives of the task force were to study the problems, identify the causes, and develop a plan to improve audit quality. The task force developed twenty-five recommendations that fell into five broad groups, referred to as the five “E”s: education of auditors, engagement of auditors with sufficient knowledge, evaluation of audit quality, enforcement of standards, efficiency (GAO, 2000, p. 22).

1989 also found that many single audit reports could not be relied upon. Based upon desk reviews, ten percent of independent CPA firms' SAA reports and four percent of reports prepared by government auditors, required major changes before they could be accepted by federal agencies. "When the working papers of some of these auditors were reviewed, the percentage of substandard reports jumped from ten percent to forty percent" (Uehling, 1991, p. 76). Consequently, few studies have examined whether substandard audit work has led to potential disparities in audit results across different organizations.

*Objective 3: Promote the efficient and effective use of audit resources*

While the Single Audit Act is believed to have led to "moderate" improvements with regard to most of the stated objectives, considerable debate still remains concerning what constitutes true progress. Furthermore, many scholars question whether single audits are sufficient to evaluate program compliance. For instance, Cutler (1995) argues single audit procedures are limited in scope. When applied to the Medicaid program, he finds auditors' lack of knowledge over programmatic functions and information technology systems lead to substandard audit conclusions.<sup>24</sup> A joint study by the GAO, the Health and Human Services's OIG, and Health Care Financing Administration (HCFAs) that re-performed six audits, found the single audit process had failed to identify:

- \$8.1 million in outstanding receivables;
- \$10.5 million in unrecovered denied claims;
- \$200,000 state liability to the federal government;
- Excessive payments made to Medicaid contractors;
- Improper application of the federal financial participation rate on a \$100 million program;
- Control deficiencies in the personal care services program that had not been resolved (Cutler, 1995, p. 50).

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<sup>24</sup> Cutler's observations came predominately from his role as the Chief of the Financial Policy Branch in Health Care Financing Administration (HCFA's) Medicaid Bureau, where he was responsible for financial management review processes and disallowing specific claims based on audit findings.



In many respects, these findings were astonishing when considering that only six programs were evaluated in a single fiscal period. Cutler attributes the shortcomings of the single audit process to the following auditor limitations: inadequate time to review the broad spectrum of services offered by the program, inadequate coverage of audit requirements, and an insufficient examination of the role data processing systems play in the internal control structure. To save audit costs and reduce reliance upon the reports, Cutler proposes that the single audit process be used merely to evaluate the state's internal control structure since auditors are unable to be relied upon as experts in the statutory, regulatory, and policy guidelines associated with the program. In fact, Cutler's findings led him to the bold conclusion that the single audit process should not be "used in evaluating states' Medicaid claims for federal reimbursement" (p. 48). He argues that specialized Medicaid auditors would be better positioned to evaluate program performance.

According to Uehling (1991), the source of audit problems is multi-faceted. First, sampling techniques are flawed in that they are based on auditors' judgments (as opposed to relying on statistical sampling) and, as a consequence, tend to be too small (a critique echoed by Raman & Van Daniker, 1994).<sup>25</sup> Second, he criticized the auditors' abilities to determine cost-allowability (however, this was prior to the revision of a more detailed OMB A-87 Circular guidance). He also questioned the overall effectiveness of auditors' in evaluating prime recipient's monitoring systems over their sub-recipients. Since most local governments submit their audit reports to the states, these reports are often overlooked by the federal agency. Moreover, "recipients without cognizant agencies are less likely than other recipients to have detailed desk reviews and quality control reviews performed at the federal level" (p. 76).

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<sup>25</sup> Bacon (2003) examines the most frequent SAA deficiencies as being: failure to audit high-risk Type A programs as major programs, errors in determining the major program dollar threshold, failure to audit all programs in a cluster, failure to meet percentage-of-coverage requirements, failure to apply governmental auditing standards or A-133 requirements, deficiencies in compliance and internal control testing, deficiencies in engagement letters, failure to attach schedule of expenditures of federal awards, and audit documentation deficiencies.

Adhizer and Lampe (1997) evaluated the competitive bidding process in relation to questioned costs and the impact of audit tenure in relation to audit findings. They find that both factors appear to influence audit results. More specifically, cities that engage in competitive bidding procedures and rotate their auditors every five years tend to engage auditors that detect more single audit observations. In addition to these strategic decisions, they argue that wide variation exists within the industry behind what constitutes a material error and compliance deficiency. As a result, “the auditor’s ability to discover and report material compliance deficiencies does not seem to have improved” (p. 48) between the years 1987 through 1991.

*Objective 4: Ensure that federal departments and agencies, to the maximum extent practicable, rely on and use audit work done pursuant to the Act*

In light of these recent studies questioning the quality of single audit processes and work of the auditors, perhaps it should come as no surprise that the extent to which reports are relied upon by federal departments and agencies appears to be mixed. As early as 1989, PCIE Standards Subcommittee revealed that fourteen percent of the Single Audit reports required major changes before they could be accepted by federal agencies or were so deficient that they could not be relied on by report users. In 2007, the GAO found that the current design of the federal oversight structure “did not include a designated function or entity for monitoring whether or how federal awarding agencies are implementing single audit requirements” and led to “variations across federal agencies in performing key functions of the single audit process such as quality control reviews (QCR) and use of the FAC” (p. 20).

Engstrom and Reding (1992) focused on evaluating the usefulness of the single audit process by questioning officials and auditors in local government (p. 13-23). The research team issued surveys to fifty-one local government CFOs and sixteen CPAs within Illinois for the

purpose of assessing their level of satisfaction with the SAA, identifying potential problems with the process, and making recommendations for improvements. The research findings suggested that the individuals conducting the single audit, the CPAs, believed that single audit procedures were improving and more effective than audits conducted prior to the Act; however, the majority of governmental financial managers did not concur. Both CPAs and CFOs believed the single audits were neither useful nor helpful to managers or elected officials (p. 16).

Meanwhile, Uehling (1991) evaluated Federal officials' perceptions of the usefulness of the single audit process. In general, he concludes that single audit reports are of limited value due to generalized reporting, the absence of meaningful audit findings, distinctions in fiscal years between the states and federal government (in some cases, distinctions between the auditees' SAA program year and fiscal year), and inadequate audit testing of federal laws and regulations over non-major programs. "FY 1988 single audit reports included recommended refunds totaling only \$28 million for HHS programs... representing less than one percent of the \$50 billion awarded, HHS audit experience with state and local governments indicates that the incidence of noncompliance is higher than these amounts reflect" (p. 73). He recommends several steps should be undertaken by the federal community and CPAs to make the single audit process more useful to federal officials. These proposed steps include improving audit sampling techniques, monitoring recipients and sub-recipients more closely and referring substandard audit work to appropriate disciplining bodies (p. 14).

Federal managers can help to improve audit coverage and increase audit findings by working closely with the auditees and their respective auditors. Close contact between federal managers, auditors, and the Inspectors General is necessary to ensure that (1) audit work is comprehensive in desired scope, (2) such work is not duplicated by federal, state, or local auditors, (3) findings are resolved to all parties' satisfaction, and (4) follow-up is performed by federal managers and/or the next auditor to ensure that findings are resolved. Where additional coverage is warranted, program managers can then conduct their own reviews or obtain additional audit work. (Uehling, p. 79)

Van Daniker and Miller (1995) maintain similar findings to Uehling regarding the usefulness of the single audit reports. They note “some oversight officials and program managers do not rely on single audit reports, and may in some cases have their own audits conducted” (p. 63). These findings are consistent with a recent GAO (2000) report that found achievement of “effectively communicating audit results remain insufficiently explored” (p. 2).

One cause of the problem was highlighted by Brannan (1993), who observed an apparent discrepancy between Congressional intent behind the Single Audit Act and the roles and responsibilities among practitioners. After issuing a survey to financial managers and audit professionals, Brannan found that practitioners did not see the auditor as having a role in the improvement of compliance. Nor did the respondents feel that the auditor had any responsibility for improving compliance. “Congress sees the audit as the chief means of control employed by the federal government,” which means in the authors mind that the “auditor, if not the chief agent of control, is then at least an important player in the control process” (p. 70). As a consequence, the intent of Congress and the perceptions of people working day to day with the Single Audit Act do not seem to be in congruence and likely warrant further investigation.

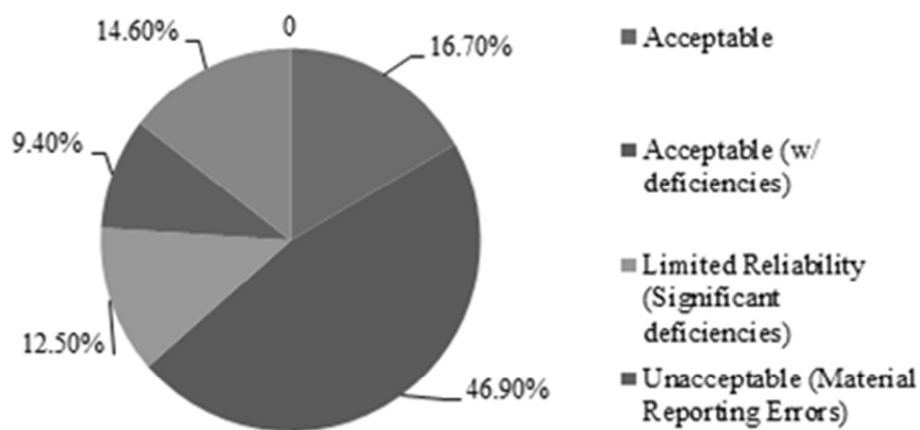
#### *Modern Research Agenda*

In the early 1990s, research activities focused on emerging audit challenges relating to the Act and potential solutions (see Ramsey & Rippey, 1994). Scholars also emphasized the importance of extending the Act to non-profit entities who relied upon federal aid. After the Single Audit Act was amended in 1996, research has increasingly focused on the quality and integrity of single audit reports being produced under the Act. This development in the research field is best exemplified by recent studies performed by the President’s Council on Efficiency and Integrity (2007) as well as reports published by the Government Accountability Office.

These studies offer a consistent theme that many single audit reports are not being performed in accordance with professionally recognized standards. Consequently, only a few studies have evaluated how federal agencies act upon information contained within the single audit report and whether these responses impact funding decisions.

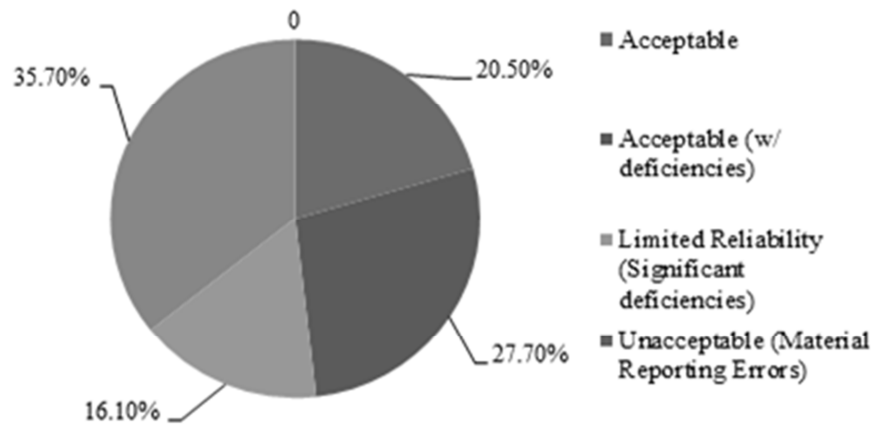
Monaghan (2007) offers an assessment of the President’s Council on Integrity and Efficiency (PCIE) report of 2007. The PCIE study concluded that only forty-nine percent of all single audits are acceptable, but large entities issue higher quality reports (PCIE, p. 3). In essence, this observation was consistent with prior GAO studies (1985, 1986, 1989, 1994, and 2000). The study sampled 208 reports from a total population of 38,000 single audits submitted between 2003 and 2004. Figure 1 reflects Stratum I (96 were from 852 entities expending Federal Awards of greater than \$50 million) and Stratum II (112 were from 37,000 entities expending between \$500k-\$50 million).

Figure 1: Percentage of Acceptable SAA Reports- Strata I



Source: PCIE (2007)

Figure 2: Percentage of Acceptable SAA Reports- Strata II



Source: PCIE (2007)

The Council called for improvements in many areas of the single audit process including: understanding and testing of internal control, documentation, due professional care, sampling, compliance testing, testing of the SEFA, unreported findings, and materiality reporting. In essence, the report recommended that the auditor should be properly trained to employ specialized skills such as analytical procedures, internal control testing, and communication in the conduct of the audit. The PCIE findings were reaffirmed in a 2007 GAO study, which called for federal agencies to assess the efficiency and effectiveness of the systems used to carry out their single audit responsibilities.

Keating, et al. (2005) conducted one of the few studies that has analyzed the frequency of Single Audit Act findings within the Federal Audit Clearinghouse (FAC). Their study focused exclusively on non-profit organizations during the timeframe 1997 to 1999, which consisted of 11,841 audits (p. 290). Using descriptive statistical techniques, they find that certain types of service providers were more prone to unfavorable Single Audit Act observations. For instance, smaller entities and those new to the single audit process were more likely to encounter adverse audit findings. Further, NGOs with a “public/societal benefit,” such as health organizations, had

a higher frequency of audit findings (p. 296). Keating et. al. (2005) conclude that the five largest “accounting firms were the most likely to have clients classified as low-risk auditees and they were also the most likely to render a clean opinion on the financial statements” (p. 300). This finding differs from the Ashbaugh-Shaife et. al (2007) auditor quality results for public companies (Petrovits, et al., 2011, p. 330). Meanwhile, organizations with smaller federal grants received significantly more clean opinions than those with large grants (p. 303).

Lopez and Peters (2010) focus on the association between auditor type and the likelihood of auditor-disclosed internal control concerns in single audit reports within U.S. cities and counties between the years 2004-2006. The authors argue that many factors may have resulted in improved audit quality in 21<sup>st</sup> century, especially the enactment of the Sarbanes-Oxley Act. The authors find “CPA firm auditors are significantly more likely to disclose reportable conditions and material weaknesses than are audits performed by government auditors (Model 1 estimate = .297, p-value = .001)” (p. 491). Furthermore, auditors with more experience or larger market share (e.g., Big 4 audit reforms) perform higher quality audits and more likely to use control exceptions than are governmental and local CPA firm auditors (p. 496). Their study, which was funded by the KPMG Foundation, was unable to control for self-selection bias or improvements in internal control structures. The findings of the study represent a significant departure from prior studies that have concluded that public auditors were more likely to detect single audit compliance observations.

In *Creating an Interactive Database*, Miller (2010) describes in detail a working group’s effort to enhance the usefulness of the FAC database. The research team explores a number of potential technologies, such as Extensible Business Reporting Language (XBRL) and electronic referencing tools, designed to facilitate data mining activities. The team also sought to more

effectively link audit findings to recommendations contained within reports. Miller argues that the FAC represents an untapped resource that contains a wealth of federal program data, but until “the lack of standardization of the auditor’s reports” (p. 4) and electronic links are resolved adoption of the tool will be limited. According to the authors, two fundamental issues limit the FAC: timeliness, accessibility, and reliability. The reports would be “almost invaluable for assessing and overseeing the management and performance of funds received...if they could be easily accessed and readily consumable” (p. 6).

One of the most recent studies of the Single Audit Act, published in February 2011, examines the “causes and consequences of internal control deficiencies in the nonprofit sector using a sample of 27,495 public charities from 1999 to 2007” (Petrovits, et al, 2011, p. 325). The study has similar research aims to this dissertation in that the research team attempts link the level of donor support and government grants to adverse single audit observations. Similar to prior research the authors find that “more complex financially distressed, smaller, and/or rapidly growing organizations” (p. 326) are more likely to disclose an internal control problem. Meanwhile, there is a lower probability of a Big 4 disclosing an internal control problem. The authors suggest that Big 4 “audit firms may selectively contract with certain high-quality nonprofit organizations” (p. 345). The most important finding to this study is the observation that public support and governmental grant funding decline moderately (3%) in light of single audit observations (p. 350-351). In terms of governmental grants, the authors used local, state, and federal funding sources. They acknowledge that their study does not address the specific type of donor who responds to internal control information, which leaves open the possibility that this information is not being used by federal grant officers.



## Theory

Attempting to combine public financial reform, such as the Single Audit Act, into one theory is difficult because prevailing theory in this social science specialty area is still emerging. Rubin (1992) argues that public financial management does not currently have a theory with high predictive value. “One paradigm- a set of hypotheses and a methodological approach- dominated the field for a while, but that dominance is now over. Budget [and financial management] theory today is fragmented and incomplete” (p. 3). By revisiting this former theory and introducing an emerging theory, this study contributes to this debate. Another stated goal of this research effort is to obtain a better understanding of how information generated from the single audit process is used. Serious concerns have been raised regarding the uniformity and quality of single audit reports; therefore, this study looks at how the data contained within the single audit reports influences decision-makers within federal agencies.

Theory is leveraged to offer explanatory power into the behavior of single audit participants. For example, how would a federal official react to unfavorable audit findings or compliance observations contained within single audit reports? If empowered to do so, would a federal official be inclined to cut the amount of grant funding that a particular state program would traditionally receive and how much funding might they cut from the budget? If such persons were not inclined to cut funding, what remedial actions might a federal official undertake if grantees fail to comply with notable grant provisions? In addressing these questions, many theories within the public administration field could be leveraged; however, this study focuses on incrementalism and principal agent theory.

### *Incrementalism*

One of the most prominent classical theories of budgeting is that of incrementalism. While incrementalism is well known in the budget context, incrementalism is ultimately a form of decision theory inspired by the works of Herbert Simon and Charles Lindblom. Decision theory is concerned with how decision makers select choices from among various alternatives. Under the positivist paradigm that dominated during the scientific management era, there existed an underlying belief that humans, if properly disciplined, were capable of making rational-comprehensive decisions. Such discipline was demonstrated through specified procedures for making well-considered decisions that maximize the attainment of goals, such as identification of all suitable alternatives, an assessment of the costs and benefits, and a ranking of alternatives in relation to their merits. This school of thought assumed that goals, values, and objectives could be readily identified by the decision-maker and that humans were capable of perfectly rationale thought processes.

In his work *Administrative Behavior*, Simon (1945) argued that the rational-comprehensive model was flawed. He postulated that humans are not completely rational actors, but rather limited by certain cognitive and other external constraints within their environments. He outlines a series of reasons for why humans are incapable of such purely rationalistic thought, including: limitations of memory, short attention spans, inability to perfectly predict future outcomes, and difficulty in weighting all possible alternatives (p. 78-85). According to Simon, decision-makers do not operate with complete information; therefore, the possibility of using the disciplined rational-comprehensive model to finding optimal decisions was virtually impossible (in absence of computers). Instead “Simon characterizes decision-making by ‘administrative man’ as operating in a world of bounded rationality and as motivated by satisficing, rather than

maximizing: this means that man makes decisions which are not derived from an examination of all the alternatives” (Parsons, 1995, p. 278). Under the satisficing model, humans attempt to find the best solution given easily accessible information.

Charles Lindblom applied Simon’s concepts to introduce his own model of decision-making. Lindblom argues that decision-making within the public sector is incremental in nature, which he terms “successive limited comparison.” From this standpoint, he applauds the piecemeal approach that simplifies analysis and expands upon the “variable limits” discussed by Simon. However, Lindblom argues that an administrator’s capacity to consider all such variables is simply not viable due to the scarcity of information and fact that he/she does not have an indefinite amount of time or resources to dedicate to a decision-making task. He argues that decision-makers often have the tendency to intertwine means and ends. Lindblom proposes an alternative approach, known as the “branch method.” In outlining the branch method, he establishes a framework for incrementalism. Under the theory, the decision-maker must narrow the set of alternatives associated with a particular course of action. “The only values relevant to a decision-maker are these increments by which two policies differ (Lindblom, 1959, p. 180).

According to Lindblom, “muddling through” is not only what is done, but the method is what should be done because one can correct for inevitable human mistakes (p. 184). As opposed to relying on some abstract calculation of all possible alternatives, the successive limited decision-making process enables interested administrators to negotiate and reach agreement on the appropriate means-ends to be employed by limiting policy alternatives. This process not only simplifies problems, but also ensures that solutions remain relevant (p. 182). The approach directs attention to alternatives that require only small modifications to existing policies; thus, encouraging decision-makers to select alternatives that may have been successful

in the past. As a decision-theory, Simon and Lindbloom's work has important implications on the Single Audit Act's call for audit uniformity. The theory suggests that auditors and administrators may experience difficulty in applying audit procedures "one best way." Given human limitations, audit uniformity within all government entities may be difficult to achieve.

While Simon and Lindblom's groundbreaking works lay the intellectual foundation for incrementalism, Wildavsky (1992) was among the first scholars to apply and test the decision theory to an actual practice within the field of public budgeting. He argues that the budgetary process is "specialized, incremental, fragmented, and sequential" (p. 145). According to Wildavsky's (1992) incrementalist view, the formal and informal budget process involves negotiations among groups of stakeholders such as legislators, budget officers, agency heads, as well as interest groups. Each stakeholder assumes politically-motivated acting roles: the agency (advocate), the OMB (defender), House Appropriations Committee (guardian), and Senate Appropriations (court of appeals). The budget serves to balance political demands. Consequently, incrementalism serves as the best process for "discovering and enforcing such preferences" (p. 309).

For much of Wildavsky's career he struggled with operationizing the incrementalism concept. Early in his career, incrementalism was broadly defined as a budgeting process that proceeded from a historical base and was guided by agreed notions of equity. In later works Caiden and Wildavsky (2003) defined the concept as follows: "at any one time, after past commitments are paid for, a rather small percentage- seldom larger than thirty percent, often smaller than five- is within the realm of anybody's discretion as a practical matter" (p. 47). Wildavsky and Caiden (2003) define the base as the "general expectation that programs will be carried on at close to the going level of expenditures" (p. 46).

Despite its popularity and widespread acceptance in the 1960s and 1970s, incrementalism would eventually lose favor within the field. LeLoup (1978) attacked the theory by focusing on some apparent analytical problems. At the core of his argument is the fact that the term itself remains poorly defined and has “taken on a host of non-theoretical meanings” (p. 501). While incrementalism has been used as predictive theory to the budgetary process, there exists a lack of consensus regarding what percentage threshold constitutes incremental progress. LeLoup highlights contradictions among incremental theorists, such as Sharkansky, Fenno, and Wildavsky, regarding their assertions that agencies impact budgetary outcomes (p. 495). In a later work, LeLoup (1978) argues that Congress, which receives limited consideration under incrementalism, is among the most important stakeholder in evoking funding changes (p. 238).

Berry (1990) buttresses LeLoup’s assertions by providing compelling evidence that incrementalism is conceptualized in so many different ways that it has lost its “analytical usefulness” (p. 168). For example, Berry finds several different meanings of the term:

Lindblom describes it as restricting the number of alternatives, restriction to non-innovative alternatives, sequential consideration of alternatives, limited assessment of policy consequences, dependency of ends on means; Wildavsky mentions it as a form of decision making focused on the change from the base; and others have described incrementalism as simple decision rules, smallness of the ultimate change, negotiation between people of narrow roles, absence of competition, regularity of relationships, and lack of effect of external variables. (Berry, pp. 170-172)

Ultimately, Berry argues that three general definitions can be derived from the theory: regularity of relationships, simple decision rules, and lack of effect of external variables. However, he remains adamant that there are serious challenges to testing the theory.<sup>26</sup> Berry notes that

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<sup>26</sup> Berry notes that these definitions are effectively too simple and broad to provide help in “guiding fruitful empirical research about the nature of public budgeting” (p. 178). No longer are data about budgetary outcomes sufficient. He argues that data about the goals of actors in the process (and how they change over time), the alternatives that are considered but not selected (and perhaps the order in which they are examined), and the criteria decision makers use to judge alternatives (Berry, p. 194).

longitudinal case studies of budgetary decision making that involve interviews or surveys of participants, appear to be the only realistic alternative to incrementalism (p. 194).

### *Principal-Agent Theory*

Given the potential limitations of incrementalism, an alternative theory of institutional behavior is explored: principal-agent theory (or “agency theory”). Agency theory is a subcomponent of public choice theory (PCT),<sup>27</sup> whose origin is in the field of economics. PCT holds that people, whether they are voters, politicians, lobbyists, or bureaucrats, are motivated mainly by self-interest. The theory also assumes that individuals can make rational calculations when choosing alternative preferences that maximize their interests. According to agency theory, the problem between organizations is ensuring that “agents” do what they are supposed to do in accordance with “principal” demands. In other words, agents may elect to subvert their commitments or work by exploiting uncertainty and inadequate information. From a political context, this theory suggests that Congress and the President may have an incentive to demonstrate public accountability, but they are faced with the challenge of controlling the bureaucracy. To overcome these tendencies of human nature, principals will be incentivized to delegate to institutions with strong monitoring infrastructures.

The earliest contributions to agency theory came in the 1960s when Buchanan and Tullock (1962) were among the first scholars to identify the need for a logical model of the consequences for possible decision-making rules that involved collective choices. By designing

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<sup>27</sup> While agency theory branches off of PCT and economic institutionalism framework, Parsons ties the theory more closely to transaction cost economics. “TCE argues that efficiency involves the idea of low transaction costs by removing as much uncertainty and maximizing the capacity to monitor and control transactions” (Parsons, p. 329). The basic premise is that the costs of engaging in decisions to buy or sell (participating in markets) is not without costs because entities need to get information, establish terms and conditions, and monitor the contracts. If organizations can lower transaction costs by having more certainty, then this leads to greater efficiency in the organization (Parsons, p. 329-324).

systems and control structures with thoughtful consideration, principals could control agents more effectively. One mechanism for achieving this end is by monitoring agent activities, similar to the auditing activities undertaken by the single audit process. Using theoretical models, the authors demonstrate how oversight serves as the mechanism for gathering information and preserving a suitable balance in the incentive structure system.

In subsequent works, Tullock (1965) would use these models as an impetus for downsizing and decentralizing the federal bureaucracy. According to Tullock bureaucrats are interested in maximizing their own self-interest, rather than that of the public. He argues such that deal-making simply leads to bigger budgets and that the most effective means for controlling bureaucratic power is through the introduction of market forces and monitoring mechanisms. Olson (1965) and other scholars of this period also made notable contributions to this agency theory.<sup>28</sup>

While these early contributions were notable, Anthony Downs would make greater strides in applying agency theory to the public service realm. In *An Economic Theory of Democracy*, he argues that political parties formulated whatever policies necessary to win them the most votes, while voters seek to maximize the portion of their preferences that could be realized through government action. This model has the tendency to move political parties

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<sup>28</sup> Olson (1965) contributes the idea that economic payoffs are more persuasive for large groups than small ones. Olson “was centrally concerned with the logic of free-riding [in society—such as not paying taxes but enjoying the benefits that tax revenues provide]. If economic, political, or social good is provided regardless of whether one contributes to its provision, the rational individual will consume it without contributing” (Shapiro, et al.). Olson’s central thesis was that “only a separate and ‘selective’ incentive will stimulate a rational individual in a latent group to act in a group-oriented way” (Olson, 1965, 51). In essence, individuals only join groups to achieve goals they cannot achieve by themselves. According to his book, there are two types of common problems in Public Policy—(1) actions with private benefits entail social costs (e.g. discharging industrial wastes into a lake is a cheap method of disposal for a factory owner but it ruins the water for everyone); and (2) social benefits necessitate private sacrifices (e.g. maintaining a quality school system requires higher individual property tax payments). He also discusses how an individual will only join a group if he or she believes the benefit from belonging to the group will outweigh the cost of being in that group in his or her own self-interest.

towards the policy center ground. Downs (1967) also extends this model to decision-making behaviors in bureaucracies. Just like voters, bureaucratic officials have different goals, motives, and interests. This tends to lead to different motivating factors, such as the desire for organizational power, prestige, promotion, salary, job security, and loyalty.<sup>29</sup> As such, some bureaucrats will become risk-averse in an effort to ensure that the institution survives. This was an important step in helping to explain the evolution and purpose of institutional controls.

Vincent Ostrom (1989) would leverage Downs' theories to argue that overlapping governments create redundancy and errors. He argues that centralization or concentration of power does not always produce efficient results. Ostrom's solution is to allow individuals to pursue their self-interests through public choice. In essence, he notes that public choice takes the same principles that economists use to analyze people's actions in the marketplace and applies them to people's actions in collective decision making. If an individual stimulates people or institutions, they can become very resourceful, creative, clever and productive, and ultimately raise the level of economic well-being of society. Ostrom advocates introducing competition into the model by letting consumers choose and pick the appropriate market for services. These early works set the theoretical foundation for principal-agent theory; however, several decades would pass before robust models were tested within the public service realm.

In addition to evaluating incentive structures and control activities used to advance certain outcomes, principal-agent theory offers guidance with regard to punitive measures the principal may undertake when the agent is non-compliant. Baiman and Demski (1980) contend that additional monitoring activities are often used as a punishment tactic with more risk-averse

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<sup>29</sup> Downs identifies five different personalities within organizations including: 1) zealots 2) advocates, 3) statesmen, 4) climbers, and 5) conservers. He links individual interests to the lifecycle of a government agency. For example, when agencies reach optimal growth, this prompts climbers, zealots, and advocates leaving the organization and start new programs.



agents.<sup>30</sup> Moreover, Aim (1991) notes that deterrence tactics may take several forms including funding redactions, public embarrassment, or legal sanctions. Consequently, specific statutory references contained within the Single Audit Act itself and related implementation guidance supports the literature.

OMB A-128 regulations allow for sanctions to be imposed on state and local governments that are required to have a single audit but do not follow the provisions of the law. The sanctions include withholding a percentage of assistance payments until the audit is completed satisfactorily; withholding or disallowing overhead costs; and suspending the federal assistance agreement until the audit is made. (Brown & Burnaby (1988), p. 50)

Despite having the authority to exercise such action, Key (1972) notes that the federal agency may exhibit reluctance to withhold or delay payments of grants in order to avoid conflict or negative publicity (p. 161).

Moe (1984) discusses two different paradigms within the public administration field, behavioralism and contractualism. The behavioral paradigm has made three notable contributions: 1) the goals of an organization are believed to change over time, 2) the concept of organizational slack, and 3) the notion the theory can be formally modeled through computers (Moe, p. 748). Consequently, Moe argues that this theory has influenced studies in incrementalism. He argues the second paradigm, contractualism, remains largely untested and isolated in economics. In essence, agency theory is unique in its emphasis on markets versus hierarchies, transaction costs, and economic methods of analysis.

Moe asserts that “the new economics of organization, while shaped in important ways by Simon’s ideas, is largely founded upon this second paradigm” (p. 750). Moe frames the work of

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<sup>30</sup> The adverse psychological effects related to monitoring activities under specific conditions introduced by Frey (1993) and others are presumed to be negligible at the aggregate perspective of this study.

Alchian and Demsetz (1972)<sup>31</sup> and Niskanen<sup>32</sup> (1971) on individual shirking and Williamson's framework of adverse selection and moral hazard within this paradigm (p. 752-754). His analysis concentrated on the tools by which bureaucratic superiors control their subordinates, and how politicians can control bureaucrats by building incentive structures and efficient monitoring of the agent's behaviors. He argues that the principal-agent model prescribed under the contractual paradigm can be applied to public bureaucracies; however, he warns that the "contractual paradigm has been developed in reference to private organizations, particularly business firms, and that some of its most fundamental components must be modified if its application to public organization is to be meaningful and instructive" (p. 761).

Other scholars build on Moe's work to question the underlying assumptions of the agency model and its predictive value in the public realm. For instance, Dilulio (1994) examines the behaviors of employees within the Federal Bureau of Prisons in the context of the "principled-agent" model. As opposed to finding that employees engage in adverse activities, such as shirking, he finds the exact opposite. His evidence suggests that the agency model can be used to demonstrate positive behaviors whereby individuals do not shirk, subvert, or steal on the job (Dilulio, p. 282). He labels this observation the "principled agent" and believes insufficient research has been conducted under the institutionalist framework concerning this phenomenon. Using a case study approach, he cites specific instances in which guards went above and beyond the call of duty to perform thankless tasks, such as thwarting prison riots,

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<sup>31</sup> Alchian and Demsetz's discuss the theory of the firm. In theory, institutional arrangements that afford the most effective contractual relationships between principals and agents will naturally lend themselves to more desired social outcomes. They argue that monitoring represents a solution to the shirking problem. These authors posited that monitoring is most efficient when performed by a full time monitor.

<sup>32</sup> Niskanen (1971) argues bureaucrats behave similarly to officials in private organizations, except most bureaucracies have a monopoly of buyers for their service (usually politicians), most bureaucracies are monopoly suppliers of their service, the sponsor is not motivated to increase bureau efficiency since they cannot benefit from improved efficiency, and surpluses can indirectly benefit bureaus and/or sponsors.

despite receiving low pay and working within an environment of great uncertainty. He also finds significant “uniformity” in the application of administrative principles despite a complex disciplinary process (p. 306), which suggests a high level of professionalism being exhibited by employees.

Wood (1988) arrives at similar findings by examining the evolution of the Environmental Protection Agency (EPA) from its inception in the early 1970s, a period of time where democratic leadership allowed the agency to operate under a high degree of independence (p. 282) to the 1980s, a period when President Reagan sought to slash the agency’s budget and exercise more control through political appointments in an attempt to ease environmental regulation. Using a time-series model to evaluate several factors including monitoring activities, Wood finds that appointed officials sought to decrease monitoring activities to ease environmental resources; however, the bureaucrats found slack resources in an attempt “to restore and intensify their surveillance” activities (p. 224). He argues that his findings “demonstrate clearly that considerations of hierarchy, although important, have obvious limitations for explaining outcomes in some implementation policy processes” (p. 227). This finding supports his view that the principal-agent model must be effectively modified to account for bureaucratic interests in shaping policy outcomes. Like incrementalism, principal-agent theory has not been able to silence its critics; however, the analytical nature of the theory has shown promise in the public budgeting realm.

*How does incrementalism and principal-agent theory contribute to this study?*

A brief survey of the key contributions of incrementalism and principal-agent theory offers important insights into advancing the research questions of this study. At the beginning of this section, tentative research questions were presented based upon a review of the single audit literature. These questions focused on the type of information demanded by decision-makers and how such information is used. The two competing theories of public budgeting, incrementalism and principal-agent, offer two different courses of action.

Incrementalism suggests that individuals “muddle through” the budgeting process and only make small adjustments to the base. Since the single audit process is embedded in the bureaucratic regiment, bureaucrats will follow the necessary protocols. However, the single audit reports, in and of themselves, rarely lead to significant departures from historical precedent. Under this school of thought, single audit reports are not the most useful tools. Due to human cognitive limitations, such reports cannot be fully relied upon or interpreted. Further, they do not effectively accommodate for necessary political negotiations. One of the major drawbacks of this theory is the ability to test the model since the term itself has not been clearly defined.

An alternative theory presents a more concrete explanation of public budgeting behavior, one that is centered on self-interest. In contrast to incrementalism, agency theory generally lends itself well to empirical test work (including economic analysis). To ensure that the principal achieves his/her desired outcomes, the theory suggests that agents will be held to certain contractual obligations. Further, the principal will use various tools to ensure those contractual obligations are met including, but not limited to: monitoring devices, rewards, and punishment tactics. Agency theory advances our understanding of the administrative protocols embedded in

the single audit process. For instance, the audit process serves as a monitoring device; meanwhile the potential to either enhance or reduce funding can be explained as a system of rewards and punishment tactics. Like incrementalism, principal-agent theory possesses inherent limitations. This economic model is historically rooted in the experiences of the private sector. As such, it may not fully account for all variables unique to the public administration realm, such as the public service ethic or bureaucrats' desire to shape policy outcomes.

### **Chapter Summary**

Accountability serves as an underlying philosophy of the Single Audit Act. This value is deeply engrained in the American experience. With that said, the single audit is unique from other reforms in that it takes on a legalistic tradition by focusing predominantly on financial and compliance measures. As Light (2006) notes,

All government reform is not created equal. Some reforms seek greater efficiency through the application of scientific principles to organization and management, whereas others seek increased economy through attacks on fraud, waste, and abuse. Some seek improved performance through a focus on outcomes and employee engagement, whereas others seek increased fairness through transparency in government and access to information. (p. 6)

In this chapter, financial management reforms leading to the Single Audit Act were surveyed. The literature reveals that as the United States of America grew and political priorities changed, advances in governmental accounting and auditing practices stood at the forefront of reform. Shortly before and after World War II, notable financial reforms occurred that helped establish the administrative protocols relied upon by the single audit process. For example, the Budget and Accounting Act of 1921 established the Governmental Accounting Office (the single audit standard setting body), the Securities and Exchange Acts of 1933 and 1934 outlined a framework for evaluating financial statements, and the Hoover Commissions introduced new

financial controls for federal agencies, which forced them to demonstrate higher levels of accountability. However, it was not until the great expanse of federal grant programs under the Great Society program where the concept of the single audit process actually emerged. While several subsequent administrative attempts were made to implement the single audit concept in the 1970s, none of these measures carried the weight of the law. Ultimately, political motivations to reduce domestic federal aid would serve as a catalyst for the Act.

This chapter also explored the specific objectives of the Single Audit Act, as well as related empirical research into the subject. While some components of the law have been heavily investigated, the literature suggests there is a degree of uncertainty surrounding the extent of audit uniformity and reliance within the SAA reports. As a final step, two theories for predicting how single audit observations may impact audit uniformity and funding levels of state governments were examined, incrementalism and principal-agent theory. These two theories present two very different predictions for how users of SAA reports may react to the results contained within these reports.

## **Chapter 3: Research Methodology**

### **Introduction**

This chapter addresses the research methodology employed to conduct this study. In this chapter, the primary research questions and hypotheses are specified based on the applied underlying theory. Then, the research design is presented, including the study's unit of analysis and observation, instruments, sampling strategy, and key control variables. In this mixed method study, the single audit information contained in the Federal Audit Clearinghouse between the years 1997-2007, as well as interview data derived from single audit stakeholders, is relied upon.

### **Theoretical Foundation**

#### *Fiscal Federalism*

The grants management process is political in nature and requires a collaborative environment between federal, state, and local stakeholders to thrive. The federal government needs grant recipients in order to implement public policy just as state governments need federal revenues to fund local programs. This interdependence is a hallmark of federalism. V.O. Key (1972) notes that while all levels of government are accountable for use of public funds, the onus of ensuring adequate accountability over the use of federal funds ultimately resides with Congress, which holds the power of the purse.

In the absence of rules and regulations, principal-agent theory suggests that recipients of federal aid may have little incentive to use funds efficiently or for intended purposes. To overcome this challenge, many grantors impose conditions or “strings” to control policy implementation activities. Most grant agreements outline a series of terms and conditions that must be met, as well as laws that must be complied with, as a condition to receiving grant funds. However, in writing these requirements, the grantor rarely has a full appreciation of local

conditions or the recipient's capacity to meet such needs. Information asymmetry often arises throughout the complex federalist administrative apparatus. Monitoring mechanisms represent an important control used to mitigate the risk of information asymmetry. Consequently, the Single Audit Act represents one of the primary monitoring tools used by the federal government.

Under the traditional grant arrangement, money is collected and distributed at the federal level; but, most grant programs, such as Food Stamps, Highway Construction, and Medicaid, are actually managed and administered by state or local government employees. As a consequence, it is not uncommon for state and local agencies to inherit the structure and characteristics of federal bureaucracies. With only limited oversight of the legislature and the Governor, state agencies, in particular, tend "to gain autonomy and independent power in the management of grant funds" (Meier, 1979, p. 40).

Fiscal federalism also tends to create conditions known as the flypaper effect, whereby a dollar of grant spending at the local level tends to result in greater public spending than if community resources have been used. This phenomenon, which has been validated by "virtually all studies," can be explained in part by bureaucrats' desire to engage in "budget maximizing behavior" (Rosen & Gayer, 2008, p. 535). With over 89,000 units of government eligible to receive federal aid (US Census Bureau, 2011, Online), establishing suitable controls over the extent of federal grant awards represents a notable challenge for Congress.

V.O. Key (1972) outlined four ways in which Congress can exercise control over the bureaucracy. First, legislatures can pass legislation that sets limits on bureau actions and limiting responsibility. Second, Congress can control fiscal resources allocated to bureaucracies through the appropriations process (in some cases, choosing to eliminate all funding to an agency). Third, Congress can use the legislative veto to control administrative action. As a fourth



measure, the legislature can collect information on the bureaucracy through its oversight capacity. While some of these investigations are based upon constituents' requests, in most cases the legislature relies upon the audit process. The GAO serves as the primary channel for Congress in carrying out these audit activities at the federal level. Meanwhile, state auditors and private CPA firms almost exclusively conduct audits of federal aid to state and local governments, as well as non-profit entities, through the single audit process.

For several years, political scientists have warned that Congress has neglected its oversight duties as evidenced by the lack of detailed reviews being conducted over Federal expenditures. However, McCubbins and Schwartz (1984) note that two forms of oversight are exercised by Congress, police patrols and fire-alarms. The authors argue that Congress has not neglected its oversight role but has instead favored fire-alarm oversight, which can best be described as dealing with major problems on a case-by-case basis. Congress has undertaken this approach for two reasons: first, to lessen their work; second, to focus on incidents that will garner more positive press; this presents the idea is that putting out a "visible fire" warrants more support than "sniffing for smoke." The comprehensive nature of the Single Audit Act is consistent with McCubbins and Schwartz's theory because the Act was designed to detect major problems, while relegating more minor issues to the grant officer through the corrective action protocols.

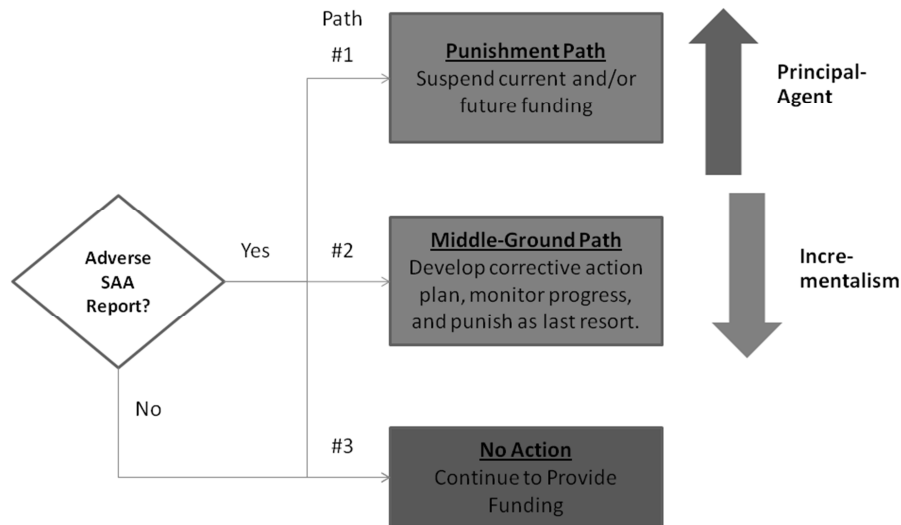
One of the primary objectives of this study is to understand how effectively the single audit process is working in relation to Congressional intent to control federal aid. In other words, what is the quality and uniformity of the information derived from its oversight functions? Are there instances where federal aid has been restricted? When it comes to the management of federal aid to the states, most of these responsibilities have been imparted to the

federal bureaucracy. As such, this study focuses on the relationship between federal and state administrators, as opposed to the Congressional-state relations. In assessing the aforementioned research objectives, two prevailing resource allocation theories are used to predict how federal officials may react to Single Audit observations: incrementalism and principal-agent.

*How Does Incrementalism and Principal-Agent Theory Relate to the Single Audit Process?*

“Theory helps us make sense of many interrelated phenomena and predict behavior or attitudes that are likely to occur when certain conditions are met” (Schutt, 2006, p. 69). In the case of this study, theory is especially helpful in the understanding of human cognitive limitations that may limit the extent of audit uniformity. Furthermore, theory provides a framework for predicting alternative courses of action. In this case, theory aids in the prediction of the degree to which sanctions may be imposed by Congress or the grant officer in the event of unfavorable audit findings. If we presume that unfavorable single audit observations can arise, then many consequences could prevail. However, at a basic level, the grant officer may elect to undertake one of three actions when receiving an undesirable report: 1) punish, 2) seek middle-ground, 3) take no action (see Figure 3).

Figure 3: Decision-Making Path Analysis



As reflected in Figure 3, if the report is favorable, the grantor would have little justification to change the current course of action. With that said, the scenario of “no action” is also plausible under unfavorable conditions. Perhaps the grantor is ambivalent, negligent, or incompetent in conducting the review and simply overlooks the unfavorable single audit observation. However, the literature tends to support the view that the grant officer will either impose a punishment or find a middle-ground solution. The path of suspending or terminating a federal funding path is best aligned with the principal-agent theory; alternatively, the middle-ground approach of developing a corrective action plan and monitoring progress against that plan may be better explained by incrementalism, which favors piece-meal adjustments.

As discussed in Chapter 2, incrementalism has been one of the most dominant budgeting theories within the public administration realm. According to this widely-held view, public administrators find short-cuts in the decision making process by relying extensively upon past actions and making only small adjustments to the base using historical precedent. For example, in the traditional budgeting context an appropriations committee may only examine the difference between the present and previous years’ budget. “Only in rare circumstances would

an agency find its entire budget re-examined” (Meier, 1979, p. 139). Incrementalism holds that decision-makers seek to accommodate or find the “middle-ground” between diverse interests. When applied to this study, the view would likely support the position that grantors would be inclined to find compromises when encountering unfavorable single audit reports or observe several years of adverse findings before acting. Developing corrective action plans and incrementally adjusting future funding would be predicted behaviors under this theory.

With that said, there is also an alternative model that could also be used to explain decision-makers’ behaviors, principal-agent theory. Although the principal-agent relationship has been traditionally used to examine the relationship between the general public and their elected representative, the link can also exist in a wide range of other contexts including Congress and the bureaucracy, as well as between senior and lower-level administrators (Alchian & Demsetz, 1972, p. 104). According to the principal-agent theory, the agent will have an incentive to shirk responsibility and undermine the principal’s desired policy outcomes. Agency theory suggests the principal will attempt to avoid this dilemma and control outcomes through enforcement measures. Aim (1991) notes that the principal, in this case Congress or the grant officer, would be expected to engage in several forms of punitive action against the agent including funding reductions. For the purpose of this study, principal-agent theory suggests that the single audit process would serve as a device used to limit and monitor the degree of discretion given to grant recipients, particularly as it relates to compliance with the terms and conditions of the grant award and subsequent decisions to fund programs.

### **Research Questions**

In recent years governments have operated under increasing resource constraints; thus, examining how accounting information, such as the Single Audit Act, is used to manage these

resource constraints is of interest to the academic community and accounting profession. As evidenced by the recent enactment of the American Reinvestment and Recovery Act (ARRA), the federal government is increasingly reliant on intergovernmental grants as a means to carry out fiscal policy. Consequently, the single audit process has been identified as the key mechanism for promoting accountability under the Recovery Act (Appendix IIV, OMB A-133). While the SAA plays an important role in this process, the extent of audit uniformity and the SAA's role in influencing resource allocation decisions remains unclear.

As discussed within the literature review, several studies have questioned the quality of single audit procedures. Past studies found that auditors have failed to comply with professional standards in the conduct of their work. The purpose for promulgating professional standards, such as accounting or auditing, is to help decision makers obtain "accurate, consistent, and relevant information" (Brown, 1985, p. 126). In the absence of the application of professional standards inconsistent audit results may arise. Meanwhile, auditors may exercise different levels of due care to save time or money, which may also lead to inconsistencies. Incrementalism suggests that public and private employees may have a tendency to "satisfice" or "muddle-through" the implementation of public policy. The single audit process is particularly susceptible to such risks.

Of the three branches of auditing<sup>33</sup>, governmental is the most comprehensive (Thai, 1992, p. 133). According to the GAO yellow book, three different types of governmental audit and attestation engagements can be performed: performance<sup>34</sup>, financial, and attestation. Two of the three audit types apply to the single audit process: financial and attestation. Financial audits

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<sup>33</sup> Schlosser notes three branches: 1) internal auditing, conducted by auditors within an organization, 2) governmental auditing, practiced within the public sector, 3) independent auditing by certified public accountants.

<sup>34</sup> Performance audits provide information to improve program operations and facilitate decision making by parties with a responsibility to improve public accountability. With that said, use of the performance audit is not specified within the Single Audit Act.

focus on the fiscal component of an entity by assessing whether financial statement information is presented in accordance with generally accepted accounting principles. In addition, “financial statement audits ensure that accounting transactions, accounting systems, financial statements, and financial reporting to Treasury, OMB, the public and the Congress are properly linked” (Bowsher, 1985, p. 18) through an independent third-party review. The single audit process is also used to attest to compliance measures. Compliance auditing assesses whether an agency has accomplished what it was instructed to do. According to Patton (1992), governmental Generally Accepted Accounting Principles (GAAP) focuses extensively on the compliance aspect of accountability (p. 170). Given the multiple layers of auditing activity associated with the single audit process, this activity requires special skill and expertise to carry out.

Adding to this complexity is the structure of grant funding programs. Mikesell (2007) discusses two families of grants: categorical<sup>35</sup>, which is used for “specific and narrowly defined programs”, (p. 555) and block grants which provide recipients with “considerable discretion in how to spend the money” and have a broader functional purpose (p. 558). Categorical grants, initiated during Johnson’s War on Poverty, typically have a narrow focus and target aid. Lee, Johnson, and Joyce (2004) note that many categorical grant programs are intended to channel funds directly to cities, thereby bypassing the state legislatures. More often than not, there are cost-reimbursement provisions associated with these grants and, in some cases, matching provisions as well. In addition to the project or block grants format, federal grants-in-aid can also be allocated on the basis of a formula or assume hybrid (project/formula) characteristics.

Under the categorical grant scenario, it is unclear how much discretion can actually be exercised by the administrator. Formula-based entitlement programs, as one example, “require

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<sup>35</sup> Categorical grants may be: 1) formula, whereby funds are dispersed based on some pre-defined formula; 2) project, whereby the administrator exercises discretion in the allocation process, or; 3) project/formula, a hybrid of the first two types of grants-in-aid (Mikesell, 2007, p. 555-556).

the government to make payments, usually payment to individuals, to anyone who meets the law's criteria" (Kettl, 1992, p. 46). Key (1972) reminds us that even if an administrator had the authority to exercise such action, the federal agency may exhibit reluctance to withhold or delay payments of grants in order to avoid conflict or negative publicity (p. 161). Unlike the discretionary grants that come with no certainty of obtainment, formula or entitlement grants are generally counted on by the community. Meanwhile, discretionary grants are generally awarded on the merits of a project proposal that has been submitted by the grant recipient. As the name implies, discretionary grants are believed to give the administrator a wider range of flexibility in awarding the grant since proposals are generally sought on a competitive basis.<sup>36</sup>

One of the key objectives of the Single Audit Act was to advance accountability through control of public funds. This sense of control is observed throughout the single audit process. In preparing single audit reports, management is expected to adhere to precise and clearly articulated standards as prescribed by generally accepted accounting principles. In conducting the single audit reviews, auditors are required to follow generally accepted governmental auditing standards. These rules and standards are designed to promote uniform and professional methods through strict adherence to rules and regulations. Ultimately, the reports issued pursuant to the Single Audit Act are subject to a second-level of review by government officials at the federal and state levels. These processes and reporting structures are consistent with the compliance accountability environment, which involves a clear bureaucratic hierarchy and regimented process. The first research question seeks to determine the extent of control or audit uniformity across state governments. Three interrelated secondary questions are linked to the primary research question in an effort to evaluate the potential source for variance, if any.

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<sup>36</sup> Regardless of the grant, legislators may ultimately dismiss any negative findings regarding favorite projects (Walton & Brown, p. 5).

*Q1. Does the promulgation of uniform audit requirements result in similar single audit results across states?*

*Q1.a Does the use of private auditors lead to different single audit results?*

*Q1.b Does the type of grant program make a difference in the likelihood of obtaining single audit findings?*

*Q1.c Are certain compliance standards more prone to being violated than others?*

A second major objective of this study is to assess whether the bureaucratic regimen prescribed to the single audit process leads to the maximum extent of reliance among federal officials, particularly as the concept relates to funding decisions. Brown and Burnaby (1988) call for additional studies to determine how effective the Single Audit Act has been in meeting its objectives and how granting agencies use the single audit as a starting point for additional reviews (p. 52). In evaluating the usefulness of the single audit process, this study considered whether particular components of the single audit reports were more valuable to federal officials than others. If so, this may suggest that certain steps in the process may be excessive and unnecessary.

According to incrementalism, the impact of single audit reports may be negligible to future budgeting outcomes. However, principal-agent theory suggests that grantors may undertake a series of remedies if unfavorable outcomes arise, including funding redaction, public embarrassment, suspensions in future periods or other costs (Aim, 1991; Baiman & Demski, 1980)<sup>37</sup>. In assessing whether grant officers and other federal officials rely upon single audit reports, one of the most important sections of that audit report would be the overall audit

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<sup>37</sup> “Ashbaugh-Skaife et al. (2009) find that internal control problems are associated with a higher cost of equity, while Ogneva et. al (2007), using a different specification, do not find an association” (Petrovits, et al, 2011, p. 332).



opinion, which describes whether the financial statements, presented as a whole, conform with generally accepted accounting principles. An entity can receive one of four opinions with regard to this criterion. For the purpose of this study, any opinion other than an unqualified statement is viewed as unfavorable. The four types of opinions are:

- **Unqualified-** financial statements are fairly presented in the auditors' opinion and are free of material misstatements and are presented in accordance with GAAP.
- **Qualified-** this type of opinion includes an additional "except for" clause and is intended to call attention to a certain issue that prevented the auditors from issuing a clean opinion.
- **Adverse-** in an adverse opinion, the auditors are clearly stating their opinion that the financial statements are not fairly presented in accordance with the accounting and reporting principles intended, or that there are material misstatements.
- **Disclaimer-** a disclaimer indicates that the auditors were engaged to perform an audit, but were unable to express an opinion. Usually, this is due to a lack of independence, an inability to obtain sufficient evidence, or going concern doubts. (Ruppel, 2005)

All grant awards have standard terms, conditions and laws that must be complied with under that award. In fact, the single audit process is somewhat unique in that auditors are specifically charged with evaluating compliance provisions. While there are literally hundreds of laws that federal officials could focus on, only fourteen compliance provisions of significant national interest are tested under the Single Audit Act. In most cases, state governments' sub-recipients or pass-through recipients inherit these same requirements. OMB A-133 and related supplementary guidelines specify which of the compliance requirements auditors must test, outline auditors' responsibilities to perform risk assessments, and obtains an understanding and method to test internal control for each of the following applicable categories:

**Table 1: SAA Compliance Provisions**

A: Activities allowed or unallowed	H: Period of availability of funds
B: Allowable costs/cost principles	I: Procurement
C: Cash management	J: Program income
D: Davis Bacon Act	K: Real property & relocation assistance
E: Eligibility	L: Reporting
F: Equipment and real property management	M: Sub-recipient monitoring
G: Matching, level of effort, earmarking	N: Special tests and provisions

A short description of the key compliance provisions is presented in Appendix D. In addition to providing deep meaning behind how effectively states have managed their grant awards, compliance factors can be also assessed on a unit basis. Unlike the audit opinion factor that is assessed at a state-wide level, the compliance assessment occurs on a grant-by-grant basis. Therefore, the potential to compare compliance criteria with the general nature, type, and size of the grant award readily exists. Consequently, the second research question focuses on the extent of reliance upon the Single Audit Act. Two interrelated secondary questions are linked to the primary research question in order to evaluate the impact of financial statement opinions versus compliance observations on grant officers' decisions.

*Q2: Do federal officials rely upon and use single audit reports, to the maximum extent possible?*

*Q 2.a Will unfavorable single audit financial statement opinions impact the total amount of federal aid received by state governments in future years?*

*Q 2.b Do unfavorable audit opinions on major program compliance impact future funding levels of state grant programs?*

## Hypothesis Development

Several hypotheses were developed to investigate audit uniformity and the degree to which single audit reports are relied upon. In developing these research hypotheses, a decision had to be made as to the most appropriate theory to leverage: incrementalism or principal-agent? Berry (1990) notes that incremental definitions are too simple and broad to guide “fruitful empirical research about the nature of public budgeting” (p. 178). Moreover, he argues that “longitudinal case studies of budgetary decision making, involving interviews or surveys of participants, appear to be the only realistic alternative” (p. 194) for testing incrementalism. Meanwhile, principal-agent theory offers a high degree of utility in explaining the demand for accounting information from a stewardship perspective (Gjesdal, 1981) and is increasingly being relied upon to explain budgeting behavior within the public sector (Smith & Bertozzi, 1998; Thompson & Jones, 1986). Since the ability to operationalize and test incrementalism has been brought into question, principal-agent theory was relied upon to develop the direction of the effect.

To date, only a few studies have evaluated whether the promulgation of uniform professional standards leads to similar audit results across states. Conducting a single audit is a complex task that must account for a wide range of standards and rules. Auditors must adhere to three sets of auditing standards: Generally accepted auditing standards (GAAS), Governmental Auditing Standards (GAGAS), and OMB Circular A-133. The audit spans not only the entity’s financial statements and system of internal control, but also compliance with applicable requirements of major programs. As such, the scope of the audit procedures necessary to conduct the single audit is both comprehensive and intensive.

While OMB A-133 advisory circulars have significantly streamlined the audit guidance, there is still significant progress to be made in making single audit procedures more understandable. Past studies have suggested that some auditors have been unable to comply with many of the professional standards (see PCIE, 2007; Cutler, 1995; Uehling, 1991). While one might expect some disparities between states of an analogous class (e.g., based on revenue, size, geography, etc.), one would not expect to find significant deviations between states of a similar structure if audit quality is held constant. The first research hypothesis of this study investigates whether audit uniformity results in a comparable number of audit observations across similar state governments:

*H1: Uniform audit requirements lead to similar single audit results across states.*

Following prior theoretical research, the frequency in which single audit observations occur by type of auditor engaged is explored (e.g., GAO, 1989; Engstrom and Reding, 1992; Jakubowski, 1995; Lopez and Peters, 2010). Earlier studies have suggested that state auditors are more likely to issue single audit findings. Jakubowski (1995) notes “state auditors reported significantly more material control weaknesses than both large and small CPA firms” (p. 69). He suggests this may be due, in part, to the fact that private entities are reluctant to issue highly critical audits in an effort to retain the client; whereas, state auditors will conduct the audit regardless of previous audit findings. Copley and Doucet (1993) conclude that audit quality suffers when the auditor has an incentive to limit the amount of audit testing in order to assure that the engagement remains profitable. Adhizer and Lampe (1997) find that cities that use the competitive bidding process for single audits are more likely to detect a higher percentage of questioned costs and identify more material compliance deficiencies. Furthermore, the longer an auditor is engaged, known as auditor tenure, the fewer compliance matters they are going to

detect, especially after five years (pp. 48-49). However, more recent research that has evaluated the single audit results within non-profit sector has suggested that private auditors may be more critical (see Lopez and Peters, 2010). As such, the first sub-hypothesis, expressed in the null format, is as follows:

*Ho1.a: Use of private auditors does not lead to decreased single audit observations.*

Federal grants come from unique federal agencies with different mission goals and objectives. Some grant programs are believed to be inherently more risky than others because of the nature of the services rendered. From this standpoint, grant funding structure can have a significant impact on the risk classification of a grant. Furthermore, categorical and block grants can be categorized as being either discretionary or non-discretionary or both. The literature suggests that federal officials may have greater flexibility to rely upon additional criterion in respect to discretionary grants, such as information contained within single audit reports. The second sub-hypothesis, stated in the null format, is as follows:

*Ho1.b: Grant funding source or type does not increase the probability of receiving unfavorable single audit observations.*

To date, research has not explored whether certain compliance standards are more prone to violations because they are more difficult to implement or infrequently tested; therefore, this study presumes that all fourteen compliance requirements may be influential to a decision-maker. While the single audit report as a whole may be relied upon, the literature suggests that financial reporting needs to constantly fluctuate around political priorities and circumstances. Therefore, the usefulness of particular compliance components of the single audit report may fluctuate with either the passage of time or propensity of states to comply with particular laws and regulations. For instance, under the ARRA, the Davis-Bacon Act compliance has been

elevated in importance (see Schmutte and Duncan, 2010). As such, the third sub-hypothesis, presented in the null format, is stated as follows:

*H01.c: Single Audit compliance requirement standards are not equally prone to violations.*

The fourth stated objective of the Act requires federal officials to rely upon the single audit reports to the maximum extent possible. Federal officials can use single audit reports in three primary ways: 1) to evaluate the integrity of the financial statement, 2) to assess the effectiveness of internal controls, or 3) to examine compliance on grant-by-grant basis. Assuming that proper controls are in place between Congress and the bureaucracy, agency theory suggests that federal officials would comply with the Congressional mandate to rely upon these reports to avoid punitive action. Likewise, if recipients violated one or more of the three areas examined through the single audit process, one would expect to find evidence that the federal government has engaged in remedial measures, including funding reductions or redactions. The second major research hypothesis explores the degree to which single audits reports are used by federal officials for decision-making purposes, including budgeting choices. A non-directional hypothesis is used in consideration of the lack of empirical evidence about the direction of the effect. The second major research hypothesis is stated as follows:

*H2: Federal officials rely upon and use single audit reports, to the maximum extent possible.*

The final two sub-hypotheses speculate that state governments with single audit observations receive fewer government contributions than organizations with internal control deficiencies. “Given that the federal government mandates internal control reporting as part of the required A-133 audit, all else equal, the federal government should use this internal control information to make funding decisions” (Petrovits, 2011, p. 334). The first sub- hypothesis,

which is presented in the null format, focuses on this relationship. Information is presented at an aggregate level because the audit opinion relates to financial management conditions of the entire entity.

*Ho2.a Unfavorable financial statement opinions do not decrease the total amount of federal aid distributed to states.*

When dealing with non-discretionary grants, such as formula-based or earmarked grants, the literature suggests that federal officials would have little control or influence over funding decisions (e.g., Mikesell, 2007; Lee et al., 2003; Fisher, 2001). As a consequence, single audit report observations could not be used to make funding awards. The final research hypothesis, expressed in the null format, is as follows:

*Ho2.b Unfavorable single audit opinions on major program compliance do not impact future funding levels of grant programs.*

### **Research Methodology**

To test the aforementioned hypotheses, a mixed-method research design was employed. Research observations were examined from multiple perspectives by conducting a quantitative analysis of data contained within the federal audit clearinghouse, evaluating documentary evidence, and conducting structured interviews. Under a purely experimental design, generalizability is limited. In general, the advantage of employing a mixed method research design is that more generalizable results accompany valid conclusions, which relate to causality. “The researcher can get a clearer picture of the social reality being studied by viewing the research question from several different perspectives” (Schutt, 2006, p. 18). From this standpoint, the qualitative data is used to observe and validate patterns as well as to contribute unique insights that are not already readily manifested in the quantitative data. While

quantitative methods were substantially used to accept or reject research hypotheses, the qualitative data offered supporting context. The discussion of the research methodology has been organized around these two methods.

### *Quantitative Data*

One of the most appropriate methods for estimating funding patterns and estimating economic relationships between variables is a longitudinal modeling approach. This study relied upon an unbalanced dataset across all state governments from the fiscal years 1997-2008 for the descriptive analysis. However, a balanced panel dataset comprising forty-two states was used to conduct a regression analysis. Schutt (2006) notes a time series design can be particularly useful for evaluating the impact of new laws and responses to administrative interventions. “Panel data analysis enables researchers to generate a relatively higher level of statistical validity in policy analysis and program evaluation by using a more sophisticated research design than other statistical techniques that apply cross-sectional data” (Eom, Lee, & Xu, p. 575). In essence, the panel data methodology, a form of time-series analysis, can be used to observe trends in a given dependent variable, such as funding levels, up to the date of an event and the trend in the dependent variable after the intervention. “Substantial changes between pre-and-post interventions can serve as strong evidence that the intervention had a significant impact” (Schutt, p. 213). Although significant value could have been drawn by evaluating the single audit process since the enactment of the measure in 1984, single audit results have not been collected in the FAC until after the Act was amended in 1996. As such, this time period was excluded from analysis.

Giannatasio (2008) discusses several potential threats to validity in research designs. Given the use of the time series approach, consideration had to be given to external threats



associated with testing interaction, reactive effects of arrangements, and multiple interference. To mitigate the effects of testing interaction, the entire population was evaluated to eliminate the effects associated with selection biases. The reactive effects of arrangements and multiple treatment interference, as best demonstrated in the Hawthorne study, is not applicable to the quantitative component of the study since the unit of analysis is not human subjects. Moreover, panel data resolves many of the research threats since it forces the researcher to “increase the number of observations,” inherent effectiveness in examining “cause-and-effect relationship using before and after observations,” and the ability of the technique “to reduce omitted variable bias” (Eom, Lee, & Xu, p. 579).

One of the reasons for tracking the data on an annual basis over a ten year lifespan is that there is some possibility that the impact of administrative intervention methods will fluctuate, as effects of corrective action events generally decay over time. To accommodate for such effects independent and control variables were lagged by one year in order to account for any future funding decreases. This delay enabled one to account for the length of time from an intervention until the principal invokes punitive measures upon the agent.

It is possible that many factors may influence federal aid to states. However, the literature suggests that three broad factors may serve as determinants of federal funding levels: 1) SAA audit opinions and report observations, which consisted of the fourteen specific compliance areas prescribed within the legislation<sup>38</sup>; 2) state need, which represents a composite index of community need based on indicators used to determine standard grant eligibility criteria through the use of census-based factors, such as population change, employment change, per capita

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<sup>38</sup> Compliance areas: a) activities allowed or unallowed, b) allowable costs/cost principles, c) cash management, d) Davis Bacon Act, e) eligibility, f) equipment and real property management, g) matching, level of effort, earmarking, h) period of availability of funds, i) procurement, j) program income, k) real property acquisition and relocation assistance, l) reporting, m) sub-recipient monitoring, and n) special tests and provisions.

income change, unemployment and poverty; 3) political influence, an index consisting of lobbying efforts, state influence in Congressional committees and subcommittees, and grant applications.

One of the limitations of the dataset was the inability to readily identify the type of grant distributed to the state government through a unique identifier. A second limitation, particularly with regard to formula or discretionary grants, relates to the fact that states may receive grants at non-regular intervals due to the fact that the grant is only periodically available or distributed to another competitive applicant. In order to come as close to a balanced dataset as possible, emphasis was placed on grants that had been received by every state in the sample over a ten-year period of time. As such, the states of Michigan, Hawaii, and New Mexico were eliminated from the panel, since their grants could not be readily matched to a single unique identifier. Late participants from the FAC were also excluded from analysis.

#### *Data Source*

Data submitted to the Federal Audit Clearinghouse (FAC), which collects single audit information through an internet-based interface, served as the primary data source for this study. The FAC, which serves as comprehensive database of single audit results, contains robust data on SAA observations for all types of grants awarded to state governments. The auditee data collection form (SF-SAC) serves as the primary source of information for populating the FAC.<sup>39</sup> All entities subject to the Single Audit Act are required to file their report within nine months of the fiscal year-end to the FAC. The FAC contains over 27,000 annual Single Audit reports. Users can apply a variety of query options to explore the database. For example, users have the option of either conducting a data query function or downloading the database. For the purpose

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<sup>39</sup> Periodically, updates are made to the data collection form to capture greater sources of detail, such as determining whether the award is direct or received by a sub-recipient through a pass-through arrangement.

of this study, the entire database was used to conduct the analysis (from the point data was first submitted to the FAC during the calendar year of 1997). The Employee Identification Number, the primary descriptive unit in the FAC that is unique to every organizational unit, served as the primary key for data analysis purposes.

Other data elements in the FAC included: amount of grant funding, type of compliance requirements, amount of questioned costs, audit opinion, and audit observations. The FAC incorporates robust information about each entity including contact information, the types of grants received by the organization, and the auditor of the organization. Also contained in the database is detailed information about the audit of the financial statement, including the audit opinion (e.g., unqualified, qualified, adverse, or disclaimer) and related compliance observations. A brief description of the audit findings for each program is denoted by reference numbers. After the audit findings, the details of expenditure of federal funds by the state government, by CFDA program, are presented. Other information includes: the federal agency prefix and extension (the components of a CFDA program code), whether the program is a designated R&D program, the full name of the program, the amount expended (per program), whether the funds were disbursed as a direct award, and whether the program is classified as a major program.

While a great deal of accuracy was achieved by evaluating the CFDA number, there were some limitations faced during the analysis. For example, a program funded through a formula grant may have a portion of the award that includes direct loans. Based on a discussion with clearinghouse staff, there are other inherent limitations of the system. For example, information is submitted at the local level during the entity's unique reporting period. As such, state fiscal years may vary from one state to another and do not always coincide with the federal fiscal year (October 1st - September 30th). Secondly, since information arises locally, there may be data

entry errors. In a recent study conducted by the GAO, the auditors identified several errors and discrepancies in which matching single audit report information with the data contained in Inspector General’s summary reports. This study found a 7-10% error rate in the database or approximately 1,800 reports (GAO, 2000, 14).<sup>40</sup>

### *Variables*

#### *Dependent Variable*

The dependent variable used for this study is total federal expenditures.<sup>41</sup> Population data was extracted from the U.S. Census Bureau and grants-in-aid data was extracted from the FAC by evaluating each program award by its CFDA number. To adjust for the effects of inflation financial data was converted into constant dollars using 1997 as the base year. In addition, a one year lead value ( $X_{it\ t+1}$ ) was used since audit report opinions of the current period are more likely to affect the allocation of federal grants to states in subsequent periods.

Table 2: Dependent Variables

Name	Label	Coding
Grant Expenditures	GTExpand	Dollar amount per capita
Federal Aid	FEDAid	Dollar amount per capita

*Note:* Data source for fiscal outputs include: Department of Commerce, Federal Audit Clearinghouse and U.S. Census Bureau’s report Federal Aid to States

#### *Independent Variables*

The primary independent variables supporting the model (reflected as dummy variables) are audit opinion alternatives for each of the fourteen compliance provisions, as these measures are hypothesized to outweigh all other predictors in the model. All instances of compliance

<sup>40</sup> Given the aforementioned challenges, disaggregating spending contained in the database was complex, and determining the portion of federal expenditure that was grant versus loan was difficult to discern.

<sup>41</sup> The unit of analysis for the quantitative portion of this study is total federal grant expenditures for state governments. In some cases, federal aid as reported by the U.S. Census Bureau’s report *Federal Aid to the States* was also leveraged for analysis purposes.

violations were aggregated into a variable known as Total Compliance Observations (TCO). To normalize the effect of large states receiving a higher number of TCOs, this figure was divided by the total number of grants received by a state. The resulting formula is hereinafter referred to as the TCO-Grant ratio.

Of the four audit opinions<sup>42</sup>, organizations hope to obtain unqualified opinions from their auditors. According to CPA professionals, adverse and disclaimer opinions are generally considered more severe than a qualified audit opinion. In accordance with the single audit, auditors issue opinions on financial statements and major programs compliance. A review of notable accounting and auditing publications suggests that the variables used for this study could be valid causal indicators of the dependent variable. For example, inadequate financial disclosure, as revealed through an adverse or qualified audit opinion, violates fundamental principles of public accountability and transparency. Moreover, an entity's failure to comply with laws and regulation, as exemplified by specific single audit report observations, diminishes the principal's confidence that funds are being adequately managed.<sup>43</sup> See Table 3 for a listing of independent variables.

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<sup>42</sup> Under the SAA, an auditor may elect to render four different opinions on the entity's financial statements: 1) unqualified- financial statements are fairly presented in the auditors' opinion and are free of material misstatements and are presented in accordance with GAAP; 2) qualified- this type of opinion is intended to call attention to a certain issue that prevented the auditors from issuing a clean opinion; 3) adverse- relates to opinions that the financial statements are not fairly presented in accordance with the accounting and reporting principles intended, or that there are material misstatements; 4) disclaimer- indicates that the auditors were engaged to perform an audit, but are unable to express an opinion due to a lack of independence, an inability to obtain sufficient evidence, or going concern doubts.

<sup>43</sup> For instance, any given federal grant may be found to be non-compliant with respect to specific laws, such as the Davis-Bacon Act or Cash Management Act.

Table 3: Independent Variables

Name	Label	Coding
Total Compliance Observations per Financial Statement Opinion-	TCO-Grant Ratio	Interval-Ratio measure
F/S_Qual		Dummy, Yes = 1 ; No = 0
Financial Statement Opinion- Adverse	F/S_Adv	Dummy, Yes = 1 ; No = 0
Financial Statement Opinion-	F/S_Dis	Dummy, Yes = 1 ; No = 0
Major Program Opinion- Qualified	M/P_Qual	Dummy, Yes = 1 ; No = 0
Major Program Opinion- Adverse	M/P_Adv	Dummy, Yes = 1 ; No = 0
Major Program Opinion- Disclaimer	M/P_Dis	Dummy, Yes = 1 ; No = 0

*Note:* Data source for independent variable include: Department of Commerce, Federal Audit Clearinghouse.

### *Control Variables*

Since the New Deal era, state and local governments have become increasingly reliant upon federal aid to finance operations. For example, “the number of federal grants-in-aid rose from twelve in 1932, with a value of \$193 million, to twenty-six in 1937, with a value of \$2.66 billion” (Bowman & Kearney, p. 38). In 2007, grants constituted approximately 23 percent of total state and local government revenue (Bowman & Kearney, p. 46). Growth in federal grants-in-aid can be explained by several factors, such as political trends towards delegating power and programs from the federal government to state and local governments and the overall economic trend of increased federal governmental spending while state and local governments struggle increasingly for own-source tax revenues (Lee, Johnson, & Joyce, p. 507-508).

Despite the significant amount of intergovernmental spending, fiscal federalism theory informs us that grants are not disbursed equally between the states. For example, in 2006, Wyoming received \$3,988 in grants per capita versus Virginia, which received only \$934 (Bowman & Kearney, 2000, p. 47). In order to understand this disparity, it is important to take note of the original intent behind grant funding. Rosen and Gayer (2007) note that “grants from

the central government to states and localities provide a way of correcting... the apparent ‘mismatch’ between where tax money is collected and where it is demanded” (p. 531). Grants-in-aid are designed not only to resolve tax capacity issues, but also other vertical and horizontal imbalances of social or political nature. For example, communities experience different needs with regard to housing, transportation, workforce development, and education, due to geography, economic conditions, demographics, or other factors. State and local governments may also serve as incubators for federal policy experiments. In some cases, state and local governments, with different political cultures, must be incentivized through federal stimulus to carry out certain policies, such as building a state highway network (Lee, Johnson, & Joyce, p. 507-508). All of these factors can lead to wide disparities in per capita grant spending in a given state and must be effectively controlled in the model.

The model used in this study includes a wide range of variables that attempt to control for possible influences on funding levels to the states. For example, economic and political indicators were used to ensure that state demographics or political capacity were not driving the results of the analysis. Depending on the nature of the grant, some grants were expected to have significant interactions with certain variables. For instance, some grants may geographically target benefits (Arnold, 1981, p. 644); whereas, research and development grants may be allocated on non-spatial and non-political grounds (Lowery, Brunn, & Webster, 1985, p. 7). Meanwhile, political factors can impact distributions. While federal grants-in-aid can be used as an instrument to influence policy, they also have a real impact on local economies through changes in income or the price of public goods, which make them coveted by Congressional lobbyists. “A grant may have either an income or substitution effect, both of which in turn affect local spending and revenue decisions” (Schneider & Moon Ji, 1990, p. 57).

Given the potential impact of grant policy, Pressman and Wildvasky (1984) note that bargaining and negotiation over grant programs becomes an important component of intergovernmental management. Federal intergovernmental aid programs must be passed by a Congressional coalition, and there are almost irresistible political pressures to create programs with benefits that are widely distributed: the more Congressional districts that benefit from a program results in the greater the probability of assembling a winning coalition. Arnold (1981) notes that few congressmen see merit in grant programs that do not benefit their districts (p. 265). “To be successful, donors need grant recipients, and grant recipients need donors; interdependence (thus collaboration) is the hallmark of many grant programs... moreover, the need to accommodate local, regional, and state needs is consistent with the ideal of federalism” (McGuire, p. 678). Stein (1989) shows that “the need to create coalitions to continue funding for grant programs often dilute initial restrictions on the number and types of eligible recipients” (Schneider and Moon Ji, p. 408). As such, lobbying variables that could influence funding decisions are used.

As suggested, a myriad of factors could affect the federal grant funding levels of state governments. To remedy this potential problem several existing studies were drawn upon in conducting the research. For example, Dye and Hurley’s (1978) measures of urban and resource needs are used, such as population, density, age, income levels, etc. and Copeland and Meier (1984) find that “state allocations of grants have become more closely related to population from 1952 to 1978” (Owens & Wade, 1984, p. 99). Similar to Petrovits (2011) “annual gross domestic product is used to control for economic conditions” (p. 335). Furthermore, Holcombe and Zardkoohi (2001), Knight (2002), and Hoover and Pecorino (2003) suggest several political variables that may alter the distribution of grants, including per capita senate and house



representation, party power, same party executives, and political leadership obtainment. The number of eligible recipients and the amount of federal land in the state can also potentially influence funding.

According to a GAO study (2009) that evaluated funding criteria for the ten largest formula grants, funding is predominately driven by census related and other factors. According to this study, one or more of the following factors are typically used in formulas that help the federal government disperse funds to states: poverty level by population segment, health insurance coverage ratios, community development need<sup>44</sup>, population, client characteristic (disability, etc.), taxes paid into a fund, and cost of rendering certain services. However, other criteria may apply since funding can be impacted by small-state minimums, hold harmless provisions or caps, and floors or ceilings (GAO, 2009, pp. 12-25). Based upon a review of the literature, Table 4 reflects the control variables or state indicator variables used as proxies for the demand for government funding. Other variables were tested, but several of these variables were eventually omitted due to high levels of autocorrelation, lack of explanatory power, or other diagnostic problems.

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<sup>44</sup> “Some studies that have compared federal aid and state aid to urban areas have concluded that, while both are responsive to need, state aid is more responsive” (Lee, Johnson, and Joyce, p. 525).

Table 4: Control Variables

Name	Label	Coding
Population	Population	Amount of population
% of population under 18	%_Under_18	Population under 18
% of population over 65	%_Over_65	Population over 65
Per capita income	PC_Income	Per Capita Income
% unemployment rate	%_Unemployment	State Unemployment Rate
Poverty rate	%_Poverty	% citizens in under poverty
Land Density	Density	Population density
State employees	SLG_Employees	# of state and local employees
Gross state product	GSP	Gross state product
Median household income	Median_Household	Average household income
% of house delegates in President's	%_HDelg_Majority	% house reps. in president
% of house delegates in majority	%_HDelg_Pres_Part	% house reps. in majority
Number of senators in President's party	#_Senators_Pres_Part	# of senators in president
Governor in the same party as president	GOVParty	Dummy, Yes = 0 ; No = 1
Sitting president won state in last	Pres_Won_Elec	Dummy, Yes = 0 ; No = 1
Absolute margin of victory in recent	Margin_Victory	Margin of victory in the state

*Note:* Data source for control variables include: International City/County Management Association, Washington, DC; ICMA; Council of State Governments; Book of the States; Office of Management and Budget, Standards for Defining Metropolitan and Metropolitan Statistical Areas, [www.house.gov](http://www.house.gov); [www.senate.gov](http://www.senate.gov); [www.cms.gov](http://www.cms.gov); and [www.nga.org](http://www.nga.org); U.S. Bureau of the Census, State Population Areas and Components, Washington, DC; U.S. Department of Commerce, U.S. Bureau of the Census, and Census of Governments' City Finance Surveys.

Once the dataset was constructed, the statistical component of this study was carried out using STATA MP 11 and SPSS 18. The purpose of this activity was to assess whether the principal (federal government) appeared to be altering grant awards in direct response to the agents' (state governments) success or failure in generating favorable SAA reports. These statistical packages were not only used to efficiently conduct traditional tests of association (parametric and non-parametric)<sup>45</sup>, but also to perform a panel data analysis. Panel data has the

<sup>45</sup> For example, the means and standard deviations of the independent variables, correlation coefficients, variance inflation factors, eigenvalues, confidence intervals, unstandardized and standardized betas, slope coefficients and other measure of association.  $R^2$  value was relied upon to explain how well the model described the data.

ability to identify and measure effects that are simply not detectable in pure cross-sectional or time-series data, and provides the facility to study the dynamics of adjustment (Baltagi, 2008). Hausman tests of the sample were used to identify the presence of unit (state) specific effects in the amount of the federal funds awarded to states. This test showed that time effects are jointly significant. For this reason, a fixed effects model of estimation was employed.<sup>46</sup> Wooldridge (2002) notes the fixed effects model removes panel-specific heterogeneity by subtracting the panel-level means from each variable; then performing Ordinary Least Squares (OLS) regression on the resulting data.

Before conducting the panel data analysis, descriptive statistics were calculated to determine the frequency and rank order of particular variables at the state level. This effort sought to buttress prior governmental audit studies based primarily on univariate descriptive statistics (e.g., Brown and Raghunandan, 1995; Keating et al, 2005). The results of this cross-tabulation analysis are presented in Chapter Four. In this section, a series of ratios applicable to the audit community were deployed, such as the total number of grant observations for each grant or unit of currency. Audit findings were further analyzed across multiple variables, including the use of private auditors, timeliness, materiality thresholds, federal programs, type of grant, and compliance elements. Single audit compliance observations were further itemized by year and aggregated for trend analysis. This diagnostic activity revealed patterns in the data that

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Differences between observations that are not explained by the model constituted the error term. P-values were used to determine how likely the coefficient for the independent variable emerged by chance and did not describe a real relationship. F-value was used to measure the likelihood that the model as a whole described a relationship that emerged at random, rather than a real relationship. As with the p-value, the lower the significance of the f-value, the greater the chance that the relationships in the model are real. Additionally, I tested for multicollinearity, omitted variables, endogeneity, and other unknown factors. Any potential problems specifically relating to the intercorrelation of independent variables, which tend to change contemporaneously over time, were closely monitored. The autoregressive response structure was employed to remedy autocorrelation among the disturbances in each equation and correct for the contaminating effects.

<sup>46</sup> Due to unit-specific effects in state and local finance, this statistical technique has been heavily utilized in state and local finance research. Comparing single cross-sectional data, pooled cross-sectional and time series data (panel) provide several advantages. Most importantly, these tests provide more variability and less collinearity among the variables.

could have been difficult to detect using regression analysis. These research findings were used to support the inferential statistics used for the test of hypotheses procedures discussed in Chapter Five.

### *Qualitative Analysis*

In an effort to link results from the quantitative analysis, a qualitative data analysis was performed. A series of qualitative techniques<sup>47</sup> was employed to provide more significant meaning and context to the surrounding events related to the single audit process. In conducting the qualitative analysis, generally accepted scientific inference methods, such as those advocated by King, Keohane, and Verba (1994), were employed to analyze interview and documentary evidence, and, similar to the spirit of the case study approach advocated by Yin (2003) “a full variety of evidence- documents, artifacts, interviews, and observations” (p. 9) was leveraged.

Given the fact that human subjects were interviewed, the qualitative component of the study was conducted in accordance with the Auburn University Institutional Research Board’s protocols (see Appendix A). As such, the primary source of qualitative data came through structured face-to-face interviews, or, in a limited number of cases, structured oral interviews that were conducted over the telephone. One of the major advantages of using the interview approach was the opportunity “to probe deeper into a question or predetermined set of answer choices” since “well-informed respondents can provide important insights into a situation” (Yin, 2003, p. 92).

The primary purpose of the qualitative portion of the study was to determine whether federal officials perceived the single audit process as influenced funding patterns to state governments. If not, what are the most common consequences imposed by the federal

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<sup>47</sup> The primary distinction of the qualitative data is that it “cannot readily be converted to numerical values” (Yin, 2003, p. 33).

government after adverse single audit report observations are published? From this accord, this portion of the study served as a means to reduce the existence of potential Type I or Type II errors with respect to the preliminary findings observed from the quantitative portion of the study. Given resource limitations, the sample was restricted to twenty interview participants.

Most of the participants of the study were current federal officials; however, some of the respondents were selected as a consequence of their prior federal service. A couple of the participants were from the academic community and had conducted prior research into the single audit process. The intent of targeting individuals who had retired or transferred from federal service was based on the idea that they may be more inclined to share detailed information during the interviews. While the sample was conveniently drawn, individuals were sought with both the requisite professional qualifications, as demonstrated through professional certifications<sup>48</sup> and work experience, necessary to effectively evaluate the single audit and budgeting process.

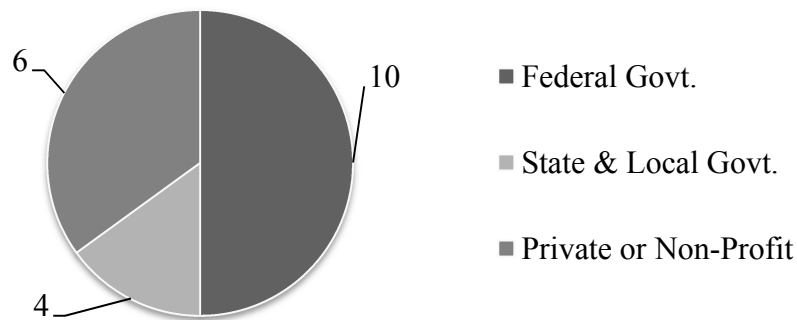
In general, those individuals that participated in the interview process could be broadly divided into two groups. Fifty percent of the respondents' job roles and responsibilities focused predominately on conducting or enhancing auditing activities. The remaining respondents did not conduct audits, but rather relied upon audit reports to determine financial reporting or program compliance in their capacity as a financial manager. In other words, the respondent pool was equally divided between individuals with substantial accounting and reporting responsibilities as well as those who focused almost exclusively on conducting single audits or other types of governmental audits.

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<sup>48</sup> Examples include Certified Public Accountant, Certified Internal Auditor, or Certified Governmental Financial Manager.

The majority of respondents, ten, were currently or most recently employed by the federal government. Six were currently employed by private or non-profit organizations, such as CPA firms or professional associations, and the remaining participants were employed by state and local government. While fifty percent of respondents were currently or most recently employed by the federal government, several of the individuals currently working in state or local government, private industry, or non-profit organizations also had prior federal service experience. Figure 4 reflects each of the sectors represented in this study.

Figure 4: Industry Affiliation of Respondents



A semi-structured interview protocol was developed in order to address the potential problems associated with interview bias. The questionnaire listed potential alternative courses of action once adverse SAA observations have been reported (see Appendix C). Interview questions focused on the officers' opinions regarding the standard administrative consequences resulting from adverse SAA report findings and overall usefulness of the reports. Whenever possible, the interviews were conducted in-person using open-ended and closed-ended questions. The advantage of conducting in-person interviews is that the response rate is generally much higher.

Part I of the questionnaire pertained to the participant's perceptions of the budget allocation process. For example, each respondent was asked whether federal officials exercise

discretion and, if so, what type of criteria is typically utilized. Participants were then asked to comment on the importance of internal control and related compliance assessments, as prescribed under the Single Audit Act. Respondents were given (or read) a list of the specific compliance requirements tested under the Act and were asked to rank the most important items. As a final measure, participants were asked to identify other useful reports or tools used in making future funding decisions. As opposed to focusing on the information leveraged, the latter half of the questionnaire focused on the specific actions undertaken by governments when unfavorable information is identified with regard to the state recipient, in either the SAA or other materials. In an effort to obtain relevant information, one question addressed the use of Recovery Act funds. Participants were also asked whether they believed the Single Audit Act had achieved its goal of assuring that information and audit work is relied upon pursuant to the Act to maximum extent possible.

Before the instrument was deployed, the questionnaire was reviewed by an audit manager. The individual had several years of experience in the subject area of the study and possessed familiarity with survey methodologies. The purpose of the preliminary review was to eliminate ambiguous or biased items and to improve formatting, both for ease of understanding and functionality in analyzing results. All suggestions for improvement were carefully documented and minor changes were made to the research instrument. Once the instrument was deployed in the field, participants were asked if they had any comments or suggestions for improving the instrument at the conclusion of each interview. While only a handful of minor suggestions were made and any opportunity to make the content more straightforward was noted and the process or instrument was revised accordingly.

Participants were selectively invited to participate in the study either through a letter, email notification, or orally informed of the purpose of the research and the methodology (see Appendix B). In accordance with the Institutional Review Board of Auburn University standards, interview participants were asked to sign the approved informed consent letter. Confidentiality was maintained by taking hand-written notes and transcribing the results using a numerical coding scheme.

The sample population was identified through one of several methods. First, a contact list posted on the Federal Audit Clearinghouse website was used. This contact list identified the appropriate contact information for each cognizant federal agency and related Office of Inspector General unit with single audit oversight responsibilities. Each of these offices was contacted to solicit participation. Second, a major accounting firm in the United States, Grant Thornton LLP, identified interested participants with prior federal experience. A final strategy for identifying participants involved contacting major professional associations, such as the Association of Government Accountants and Government Finance Officers Association, and interviewing participants at professional conferences sponsored by these entities. On-site interviews were conducted in Atlanta, Georgia, and Kansas City, Missouri.

In addition to interviews, a record analysis was performed on governmental studies and reports that offered insights into the research question or offered justification for the responses of some federal officials. In essence, this record analysis was conducted to enhance field data and to serve as a supplementary reference for the conclusions derived from this study. The primary advantage of using documentary sources is that they tend to be created using structured methodologies; thereby providing potentially more objective evidence of events (Yin, 2003, pp. 85-87). Several sources of information were used to develop the content in this area.



As a foremost measure, substantial reliance was placed upon resources available through electronic databases, especially indices maintained by the Auburn University library system. As opposed to content found on the World Wide Web, these electronic databases, such as JSTOR, Lexis/Nexis, AcademicOne, and Business Premier, led to exposure of refereed journals and other official government documents. While journals have a tendency to be more current, the books used in this study typically offered a more holistic perspective on the subject-matter at hand. Thanks to a research grant from the LBJ Library & Museum, an opportunity was made available to integrate archives from this location. These materials provided valuable insights into the events occurring before the enactment of the Single Audit Act, particularly during the decade of 1960s. Information published by widely-recognized professional associations and government institutions, such as the GAO and Presidential Workgroups, was also utilized.

### **Chapter Summary**

Principal-agent theory suggests that the federal government may exercise the right to change future funding levels to state governments through the use of accounting information. Thus far, no study has evaluated whether adverse observations, as detected through the single audit process, have a significant effect on funding levels of state governments. This study hypothesizes that unfavorable audit opinions or compliance observations will impact funding allocations. Seven hypotheses were developed to determine the extent of audit uniformity and whether single audit reports are relied upon by federal officials to the maximum extent possible. A mixed-methodology approach consisting of a panel dataset and structured interviews was employed to test the aforementioned research hypotheses. Independent and control variables believed to effectively represent varying forms of eligibility criteria or to be causally related to the dependent variable were used for the panel data analysis component.

## **Chapter 4: Descriptive Analysis**

### **Introduction**

This chapter focuses on the data collected and analyzed from the Federal Audit Clearinghouse (FAC) and is applied in order to answer the research hypotheses. The data presented in this chapter is the quantitative component of the study. Using descriptive statistics, this chapter analyzes FAC data and is structured into three major components. Section II consists of a general survey of data contained in the FAC between the periods 1997-2007. Sections III and IV present information relating to the two major research topics, audit consistency across states and the single audit observations' relationships to grant funding levels.

### **Survey of the FAC**

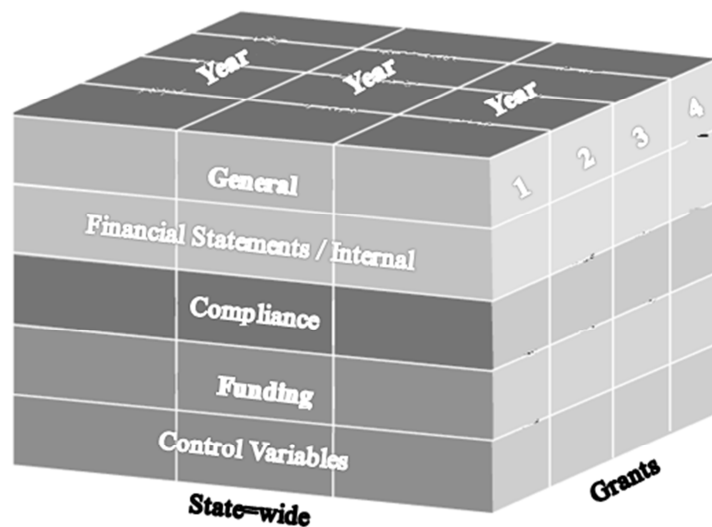
Data submitted to the Federal Audit Clearinghouse (FAC) by state government officials and their auditors serve as the primary data source for this study. To understand the extent of the single audit observations and the general accuracy of the database, a survey of data was performed. The FAC contains robust data on SAA observations for all grants awarded to state governments. Data variables used in the FAC include: the amounts of grant funding, types of compliance requirement, amounts of questioned costs, audit opinions, and audit observations. Also contained in the database is detailed information about the audit of the financial statement, including the audit opinion (e.g., unqualified, qualified, adverse, or disclaimer) and compliance observations associated with major programs. A brief description of the audit findings for each program is denoted by reference numbers. The details of expenditure of federal funds by the state government and Catalog of Federal Domestic Aid (CFDA) number are also presented.

Based on their audit period, state governments are required to file the SF-SAC either on an annual or biennial basis. This study uses general information, financial statement opinion, audit methodology, and grant compliance evidence gathered from this form. For instance, the

first section of the form contains basic profile information about the grantee and his or her auditor. The financial statement section outlines the types of opinions issued by the auditor. Contained in the FAC are the dollar thresholds used to determine major programs. As a final measure, detailed information concerning each federal grant awarded to the entity is available. For major programs, a separate audit opinion on compliance is contained in the FAC. In addition to information derived from the FAC, this study also relied upon the actual single audit reports of entities, as well as supplementary tables of economic data.

A survey of all data was conducted for the relevant period in question, 1997-2007. The complete FAC dataset for each year was downloaded and information was extracted based on each state's unique Employee Identification Number (EIN). Other data was merged to primary key fields contained within the FAC. One of the goals of creating a master data table was to construct a "data cube" that can be used to evaluate information from multiple dimensions. Figure 5 represents the conceptual framework of the FAC data cube.

Figure 5: FAC Conceptual Data Cube



With only a few exceptions<sup>49</sup>, information can be analyzed at a statewide level and at the individual grant level throughout the ten year research frame. After the Single Audit Act was amended in 1996, all non-federal recipients who expended more than \$500,000 in federal aid were required to file their Single Audit report to the FAC within nine months of the fiscal year-end. However, several states were late adopters in meeting this requirement. For example, New York, Illinois, and Arkansas did not fully report their grant data until 1998, 2000, and 2002, respectively. North Dakota and Montana have constitutional provisions that allow them to conduct bi-annual audits as opposed to annual audits. Another major complication in collecting a balanced dataset for all states from the FAC was the reality that a unique EIN was not available for grants issued to the states of Hawaii, Michigan, and New Mexico. As a consequence, these states have been excluded from the analysis.

First, a frequency distribution table was created for the number of unique grant programs and total expenditures reported by each state within the FAC (see Table 5). Then, the number of grants and total expenditures in each state were compared. While a few states receiving a large amount of federal aid possessed a higher volume of grants (e.g., Texas), there does not appear to be a direct correlation. For example, Colorado had 36,164 grants during the ten year period, but the state ranked 28<sup>th</sup> in total expenditures. Meanwhile, Illinois which ranked last on the grant frequency list ranked 7<sup>th</sup> in total expenditures. This appears to be a function of when the state began submitting uniquely identifiable data to the FAC (denoted by \*) and a difference in reporting standards (denoted by \*\*).

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<sup>49</sup> Compliance opinions were not reported in the FAC until the year 2004 and the auditor for a given state and materiality levels could not be readily determined until the year 2002.

Table 5: State Rank- Expenditures and Grants Reported to FAC (1997-07)

State	Total Expenditures	↓	%	Ind. Grants	↓	%
California	\$698,519,895,895	1	16.97%	3,918	29	1.00%
New York*	\$354,055,401,026	2	8.60%	3,117	42	0.80%
Texas	\$278,715,864,995	3	6.77%	31,093	2	7.70%
Florida	\$194,260,582,594	4	4.72%	11,808	12	2.90%
Pennsylvania	\$169,934,515,000	5	4.13%	3,149	40	0.80%
Ohio	\$145,543,433,887	6	3.54%	3,670	34	0.90%
Illinois*	\$141,122,700,877	7	3.43%	2,684	47	0.70%
Georgia	\$126,480,746,057	8	3.07%	8,039	15	2.00%
North Carolina	\$119,476,669,385	9	2.90%	21,872	5	5.40%
Tennessee	\$119,201,396,916	10	2.90%	14,796	8	3.70%
New Jersey	\$112,504,501,737	11	2.73%	3,723	32	0.90%
Louisiana	\$102,240,915,698	12	2.48%	13,259	10	3.30%
Massachusetts	\$95,815,102,540	13	2.33%	3,896	30	1.00%
Washington	\$91,174,051,033	14	2.21%	22,038	4	5.50%
Wisconsin	\$84,598,459,081	15	2.05%	16,472	7	4.10%
Missouri	\$75,247,690,773	16	1.83%	3,448	37	0.90%
Arizona	\$74,715,976,648	17	1.81%	13,177	11	3.30%
Oklahoma	\$72,374,146,263	18	1.76%	26,716	3	6.60%
Virginia	\$70,374,830,794	19	1.71%	14,032	9	3.50%
Indiana	\$67,621,052,817	20	1.64%	3,246	39	0.80%
Maryland	\$66,995,458,999	21	1.63%	6,996	19	1.70%
Kentucky	\$65,727,429,976	22	1.60%	3,839	31	1.00%
Minnesota	\$65,196,590,637	23	1.58%	4,234	25	1.00%
Alabama	\$58,768,315,819	24	1.43%	3,702	33	0.90%
Oregon	\$55,995,350,874	25	1.36%	9,499	14	2.40%
Connecticut	\$51,774,931,121	26	1.26%	5,455	23	1.40%
Mississippi	\$50,556,010,237	27	1.23%	3,123	41	0.80%
Colorado	\$48,612,810,908	28	1.18%	36,164	1	9.00%
South Carolina	\$47,872,866,766	29	1.16%	5,957	22	1.50%
Utah	\$47,539,858,960	30	1.15%	17,109	6	4.20%
Iowa	\$45,647,546,798	31	1.11%	7,871	16	1.90%
West Virginia	\$36,553,497,724	32	0.89%	3,965	28	1.00%
Kansas	\$34,123,707,819	33	0.83%	7,065	18	1.70%
Rhode Island	\$30,808,240,397	34	0.75%	4,487	24	1.10%
Arkansas*	\$29,473,990,559	35	0.72%	3,965	27	1.00%
Maine	\$22,743,202,313	36	0.55%	3,304	38	0.80%
Alaska	\$22,302,121,233	37	0.54%	7,542	17	1.90%
Nebraska	\$22,063,629,942	38	0.54%	9,519	13	2.40%
Montana**	\$17,634,982,544	39	0.43%	6,692	20	1.70%
Nevada	\$17,444,073,467	40	0.42%	2,876	45	0.70%
Idaho	\$16,139,659,373	41	0.39%	4,010	26	1.00%
South Dakota	\$14,586,758,338	42	0.35%	6,513	21	1.60%
North Dakota**	\$13,364,562,495	43	0.32%	3,498	35	0.90%
New Hampshire	\$13,294,840,056	44	0.32%	3,016	44	0.70%
Vermont	\$11,195,258,479	45	0.27%	3,034	43	0.80%
Delaware	\$10,544,753,254	46	0.26%	3,477	36	0.90%
Wyoming	\$6,011,515,988	47	0.15%	2,705	46	0.70%
<b>Total</b>	<b>\$4,116,949,899,092</b>		<b>100.00%</b>	<b>403,770</b>		<b>100.00%</b>

Source: FAC ; Columns- ranking of states ↓ - (ascending order) ↑ - (descending order)

The FAC also contains information concerning the characteristic of the grant awards. For instance, the number of major programs, direct awards, and research and development grants received by the state is reflected.<sup>50</sup> The auditor's determination of the number of major programs relevant to each state has important implications on compliance audit test work. In accordance with OMB Circular A-133, a major program is determined using both a quantitative and risk-based approach.<sup>51</sup> As reflected in Table 6, the number of major programs as a percentage of total grants varies significantly from state to state. Only five percent of Washington State's grants were identified as major programs compared to Colorado, which had reported that nearly sixty-five percent of its grants were major. This can be explained, in part, on the application of different audit thresholds.

Table 6 also highlights differences in direct awards, which are monies that the state government received directly from a federal awarding agency and expended to carry out a federal program. Illinois reported the most direct awards as a percentage of total grants and North Carolina the least. The final measure evaluated was the total instances of Research and Development (R&D) grants. R&D relates to all research activities, both basic and applied, and all development activities that are performed by a state government. According to OMB A-133, research activities involve training individuals in research techniques outside of the instruction function. Development is the systematic use of knowledge and understanding gained from research that is directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes.

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<sup>50</sup> In some cases, states have elected to not disclose this level of information on their SF-FAC. For instance, Idaho, Illinois, Indiana, Missouri, Pennsylvania, Vermont, and Wyoming have all received R&D grants, but elected not to disclose this information.

<sup>51</sup> The quantitative approach involves evaluating the total number of federal expenditures of the entity and determining the appropriate tiered threshold to apply. The risk approach involves evaluating entities that fall below the threshold (Type B) that historically had a significant internal control deficiency, material noncompliance with a compliance requirement, or received a qualified opinion and reclassifying them as major (Type A). Likewise, if a Type B program carries an inherent risk or has not been audited recently, then it can be moved up into Type A class.

Table 6: State Rank- Grants by Defining Characteristic (1997-07)

State	Ind. Grants (G)	Major Program	% of G	Direct	% of G	R&D	% of G
Alabama	3,702	441	12%	2,448	66%	22	1%
Alaska	7,542	1,668	22%	4,412	58%	1,194	16%
Arizona	13,177	5,749	44%	5,686	43%	3,757	29%
Arkansas*	3,965	1,387	35%	3,340	84%	1,085	27%
California	3,918	553	14%	2,494	64%	103	3%
Colorado	36,164	23,501	65%	19,067	53%	20,824	58%
Connecticut	5,455	1,484	27%	3,242	59%	750	14%
Delaware	3,477	471	14%	2,202	63%	23	1%
Florida	11,808	4,892	41%	5,792	49%	3,127	26%
Georgia	8,039	3,682	46%	4,233	53%	2,450	30%
Idaho	4,010	434	11%	2,267	57%	0	0%
Illinois*	2,684	392	15%	2,371	88%	0	0%
Indiana	3,246	316	10%	2,161	67%	0	0%
Iowa	7,871	4,771	61%	4,505	57%	2,674	34%
Kansas	7,065	1,341	19%	4,313	61%	1,348	19%
Kentucky	3,839	544	14%	2,523	66%	59	2%
Louisiana	13,259	7,090	53%	6,267	47%	3,732	28%
Maine	3,304	397	12%	2,180	66%	0	0%
Maryland	6,996	1,380	20%	4,189	60%	1,008	14%
Massachusetts	3,896	485	12%	2,389	61%	16	0%
Minnesota	4,234	755	18%	2,713	64%	1	0%
Mississippi	3,123	352	11%	2,042	65%	1	0%
Missouri	3,448	354	10%	2,223	64%	0	0%
Montana**	6,692	2,613	39%	4,505	67%	2,101	31%
Nebraska	9,519	1,453	15%	4,381	46%	1,912	20%
Nevada	2,876	355	12%	1,842	64%	31	1%
New Hampshire	3,016	253	8%	2,025	67%	0	0%
New Jersey	3,723	377	10%	2,370	64%	2	0%
New York*	3,117	523	17%	2,251	72%	24	1%
North Carolina	21,872	9,442	43%	5,381	25%	9,320	43%
North Dakota**	3,498	1,232	35%	1,792	51%	765	22%
Ohio	3,670	455	12%	2,462	67%	122	3%
Oklahoma	26,716	10,920	41%	12,841	48%	9,400	35%
Oregon	9,499	1,877	20%	5,113	54%	2,620	28%
Pennsylvania	3,149	465	15%	2,079	66%	0	0%
Rhode Island	4,487	1,608	36%	3,086	69%	762	17%
South Carolina	5,957	1,075	18%	2,781	47%	675	11%
South Dakota	6,513	1,347	21%	3,619	56%	1,546	24%
Tennessee	14,796	9,152	62%	8,897	60%	7,397	50%
Texas	31,093	21,459	69%	8,877	29%	14,019	45%
Utah	17,109	7,323	43%	8,706	51%	3,924	23%
Vermont	3,034	301	10%	2,010	66%	0	0%
Virginia	14,032	5,286	38%	6,275	45%	6,207	44%
Washington	22,038	1,190	5%	11,595	53%	5,230	24%
West Virginia	3,965	542	14%	2,620	66%	69	2%
Wisconsin	16,472	8,892	54%	5,961	36%	5,683	35%
Wyoming	2,705	378	14%	1,742	64%	0	0%

Source: FAC

Table 7: Total Single Audit Observations (1997-07)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
<b>Grants (000's)</b>	26.1	26.6	28.8	29.7	37.7	39.0	42.0	41.5	43.5	44.4	44.3	403,770
<b>% Total</b>	.065	.066	.071	.073	.093	.097	.104	.103	.108	.11	.11	1.00
<b>Expend. (billions)</b>	\$220	\$264	\$283	\$312	\$325	\$387	\$432	\$455	\$468	\$477	\$493	\$4,117
<b>% Total</b>	.054	.064	.069	.076	.079	.094	.105	.111	.114	.116	.120	1.00
<b>TCO</b>	3,584	4,456	4,478	2,940	6,578	8,671	7,686	20,451	29,299	19,351	25,990	133,484
<b>GCO</b>	2,181	3,089	2,572	1,722	3,291	4,276	3,877	4,984	6,890	5,326	9,792	48,000
<b>% Total</b>	.045	.064	.054	.036	.069	.089	.081	.104	.144	.111	.204	1.00
<b>Qualified</b>	*	*	*	*	*	*	*	414[1]	374	565	412	1,765
<b>Adverse</b>	*	*	*	*	*	*	*	8	16	12	12	48
<b>Disclaim</b>	*	*	*	*	*	*	*	23	15	5	6	49
<b>% GCO</b>	.084	.116	.089	.058	.087	.110	.092	.120	.158	.120	.221	.119

Source: FAC

\* Measure not reported within FAC until 2004

[1]- In FY2006, Texas had over 1,981 qualified grant opinions. Given this outlier, an average of 57 was used.

As demonstrated in Table 7, the total number of grants and federal expenditures being reported to the FAC since 1997 has increased nearly sixty and one hundred percent, respectively. Part of this growth can be attributed to a general trend by the federal government to distribute more federal aid to the states; however, this growth trend can also be attributed to an increasing number of states adopting the FAC reporting mandate. The number of audit observations, particularly compliance related<sup>52</sup>, has been increasing in recent years, which appears to suggest that auditors have been increasing the number of compliance findings in their single audit reports. In 1997, there were 3,584 total compliance observations (TCO)<sup>53</sup> contained in the FAC., By 2005 that number had grown to 29,299. Overall, this sampling frame includes over 403,770 grants, representing \$4.1 trillion dollars.

The FAC was also analyzed by determining when grants experienced one or more compliance observations (GCO). In essence, this provides a better sense of the number of major grant programs that experienced compliance problems. In 1997, approximately 2,100 (8.4% of

<sup>52</sup> A particular grant can be found to be out of compliance with regard to one or more of the 14 general or specific compliance standards per the single audit.

<sup>53</sup> As discussed in Chapter 3 (and more fully in the latter half of this chapter), a state may receive as few as one compliance observation or as many as fourteen compliance observations for each grant program depending on how well the state complied with grant terms and conditions.



the total sample) grants met this criterion. By 2007, the number of grants with one or more compliance observations had increased substantially to nearly 9,792 (22.1% of the sample). Meanwhile, unfavorable financial opinions have not increased substantially. The highest number of qualified opinions, 565, occurred in 2006 and 95% of these unfavorable audit opinions constituted qualified opinions (the less severe audit opinion type). We can conclude that unfavorable single audit opinions are relatively rare occurrences at the state level.

### **Uniformity of Audit Results**

In this section of the chapter, the extent of uniform audit requirements, as prescribed by the Single Audit Act, is surveyed across states. To explore the first research question, the following factors are used as proxies for audit uniformity: 1) use of different types of auditors, public versus private, 2) audit methodology, such as materiality thresholds for major programs<sup>54</sup>, 3) audit submission timeliness, 4) sources of federal funding by agency, 5) contractual types of grants, and the 6) frequency of findings by compliance element.

As reflected in Table 8, wide disparities exist between states concerning the number of audit observations and total amount of federal aid received by each state. To illustrate this disparity states were ranked based upon the average grant monies expended in a given year (see “↓” column). States were then benchmarked relative to the number of audit observations.

Coding is as follows:

TCO = # of Total Compliance Observations;  
GCO = # of Grants with Compliance Observations;  
QUAL = # of Qualified Audit Reports;  
ADV = # of Adverse Audit Reports;  
DIS = # of Disclaimer Audit Reports.

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<sup>54</sup> Uniquely identifiable information for each state was only readily available from the period 2002-2007 for these factors.

Table 8: State Rank- Average Expenditures and SAA Observations

State	(A) Grant \$	↓	(A) TCO	↓	(A) GCO	↓	(A) QUAL	↓	(A) ADV	↓	(A) DIS	↓
California	63,501,808,718	1	81	26	39	24	14.0	13	0.3	6	0.5	8
New York*	39,339,489,003	2	89	24	42	21	16.8	10	0.0	9	0.0	11
Texas	25,337,805,909	3	6,036	1	1,028	1	57.3	1	0.3	6	0.8	5
Florida	17,660,052,963	4	735	4	211	4	6.3	18	0.0	9	0.0	11
Illinois*	16,733,816,625	5	123	14	41	22	23.8	6	0.8	4	0.8	5
Pennsylvania	15,448,592,273	6	85	25	42	20	44.8	2	0.0	9	0.0	11
Ohio	13,231,221,262	7	160	10	44	18	4.5	23	0.0	9	0.0	11
Georgia	11,498,249,642	8	106	19	67	17	24.3	4	0.0	9	0.8	5
North Carolina	10,861,515,399	9	110	17	84	11	9.0	15	0.0	9	0.0	11
Tennessee	10,836,490,629	10	43	35	30	31	1.5	34	0.0	9	0.0	11
New Jersey	10,227,681,976	11	60	28	27	33	21.8	8	0.0	9	2.8	1
Louisiana	9,294,628,700	12	215	7	175	5	2.8	26	0.0	9	0.3	9
Massachusetts	8,710,463,867	13	65	27	38	27	2.8	26	0.0	9	0.0	11
Washington	8,288,550,094	14	39	36	23	36	2.5	29	0.0	9	0.3	9
Wisconsin	7,690,769,007	15	117	15	76	14	0.0	42	0.0	9	0.0	11
Missouri	6,840,699,161	16	33	39	19	39	3.8	25	0.0	9	0.0	11
Arizona	6,792,361,513	17	115	16	83	12	24.0	5	0.0	9	0.0	11
Oklahoma	6,579,467,842	18	137	12	104	8	4.8	20	0.0	9	0.0	11
Virginia	6,397,711,890	19	108	18	78	13	1.8	32	0.0	9	0.0	11
Indiana	6,147,368,438	20	50	30	21	38	4.5	23	0.0	9	0.0	11
Maryland	6,090,496,273	21	92	21	44	19	2.3	30	0.0	9	0.0	11
Kentucky	5,975,220,907	22	46	33	30	30	1.0	37	0.0	9	0.0	11
Minnesota	5,926,962,785	23	52	29	33	28	1.3	35	0.0	9	0.0	11
Alabama	5,342,574,165	24	49	31	28	32	4.8	20	0.0	9	0.0	11
Oregon	5,090,486,443	25	46	34	38	26	5.0	19	0.0	9	0.0	11
Arkansas*	4,912,005,449	26	209	8	67	16	23.0	7	0.0	9	0.0	11
Connecticut	4,706,811,920	27	159	11	99	10	1.8	32	0.0	9	0.0	11
Mississippi	4,596,000,931	28	30	41	15	43	2.3	30	0.0	9	0.0	11
Colorado	4,419,346,446	29	962	3	676	3	14.3	12	0.0	9	0.0	11
South Carolina	4,352,078,797	30	192	9	102	9	1.3	35	0.0	9	0.0	11
Utah	4,321,805,360	31	295	5	145	6	4.8	20	0.0	9	0.0	11
Iowa	4,149,776,982	32	48	32	25	34	0.0	42	0.3	6	0.0	11
Montana**	3,526,996,509	33	1,551	2	830	2	1.0	37	0.0	9	0.0	11
West Virginia	3,323,045,248	34	94	20	39	25	11.8	14	3.5	2	0.0	11
Kansas	3,102,155,256	35	25	43	18	41	0.3	40	0.0	9	0.0	11
Rhode Island	2,800,749,127	36	126	13	69	15	40.5	3	0.0	9	0.0	11
N. Dakota**	2,672,912,499	37	32	40	24	35	0.8	39	0.0	9	0.0	11
Maine	2,067,563,847	38	92	21	32	29	8.0	17	0.0	9	0.0	11
Alaska	2,027,465,567	39	37	37	22	37	0.0	42	0.0	9	0.0	11
Nebraska	2,005,784,540	40	229	6	136	7	8.8	16	4.8	1	2.0	3
Nevada	1,585,824,861	41	19	45	13	44	0.0	42	0.0	9	0.0	11
Idaho	1,467,241,761	42	12	47	8	47	0.3	40	0.0	9	0.0	11
South Dakota	1,326,068,940	43	35	38	18	40	0.0	42	0.0	9	0.0	11
N. Hampshire	1,208,621,823	44	26	42	17	42	2.8	26	0.0	9	2.3	2
Vermont	1,017,750,771	45	23	44	11	46	15.3	11	0.8	4	0.0	11
Delaware	958,613,932	46	92	23	41	22	19.8	9	1.5	3	2.0	3
Wyoming	546,501,453	47	18	46	12	45	0.0	42	0.0	9	0.0	11

As reflected in the Table 8, expending a high proportion of federal aid does not necessarily lead to a higher average number of audit observations. California, New York, and Texas expended the most federal aid while Vermont, Delaware, and Wyoming expended the least during the ten year period. The top two recipients, California and New York, ranked 26<sup>th</sup> and 24<sup>th</sup>, respectively, in average compliance observations (A-TCO). Meanwhile, Texas the 3<sup>rd</sup> largest state ranked 1<sup>st</sup> in total compliance observations, grants with compliance observations, and qualified audit opinions. Likewise, Nebraska, which ranked 40<sup>th</sup> in grant dollars, observed a high rate of audit observations in all categories. A higher number of compliance observations could be either a sign of deficient internal controls within the entity or an indicator of audit quality or scrutiny. However, the literature tends to suggest the latter (e.g., DeAngelo, 1981; Copley and Doucet, 1993; Deis and Giroux, 1992)<sup>55</sup>.

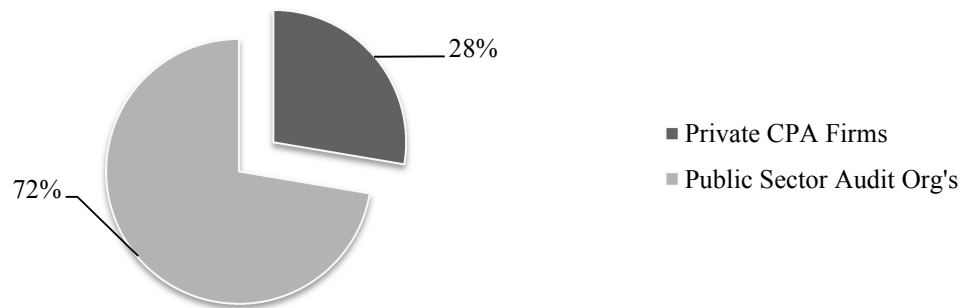
*Does Use of the Private versus Public Auditor Play a Role in Single Audit Disparities?*

States were coded by the type of auditor performing the single audit between 2002-2007. During the most recent five year period, the majority of states relied on independent organizations formed under the legislative branch. In other words, audits were performed by state employees who were exclusively charged to conduct financial, performance, and compliance audits of state funding. However, some states have elected to outsource the single audit process to private CPA firms. Of all the private audits conducted, the largest CPA firms in the United States (commonly referred to as the “Big Four”) conducted the majority of single audits for the states. For example, the accounting firm KPMG, LLP conducted over 50% of all private audits during the period in question. Figure 6 reflects the breakdown of the number of states relying on public sector audit organizations versus the private audit firms to conduct their single audits.

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<sup>55</sup> Texas, as one example, has received national acclaim from the audit community for the innovative work at the state audit department level. In 2008, the State of Texas received the GAO’s National Award for Excellence in Governmental Auditing. The fact that more audit observations are being identified within this state could be a sign that more, better trained staff are being assigned to the single audit process than other states.

Figure 6: % of States Relying on Public vs. Private Auditors (2002-2007)



In order to determine whether the type of auditor impacts the number of compliance observations a ratio of compliance observations was created in relation to total expenditures and grant instances (for both TCO and GCO). The best proxy indicator of relative compliance observations was determined to be GCO held in relation to total expenditures. Using this methodology, Montana ranked number one in its compliance scrutiny. In essence, for every \$4.2 million in federal aid expended, the state's single auditors have found one or more compliance observations. Some of the largest states have the fewest compliance observations per grant dollar. New York and California, as two examples, ranked 46<sup>th</sup> and 47<sup>th</sup> respectively. However, there are exceptions to this observation. The 3<sup>rd</sup> largest state in total expenditures, Texas, ranks 5<sup>th</sup> in compliance observations relative to grant expenditures. As reflected in Table 9, there does not appear to be a relationship between either total expenditures or disparate grants when compared to the financial amount per GCO ratio; therefore, there could be other factors influencing compliance findings.

Table 9: State Rank- Audit Observations per Grant Ratio

State	\$ per TCO	↓	Grant / GCO	↓	\$ per GCO	↓	Auditor
Montana**	\$ 2,274,308	1	2 : 1	1	\$ 4,250,418	1	Public
Colorado	\$ 4,593,481	3	5 : 1	3	\$ 6,533,102	2	Public
Nebraska	\$ 8,776,305	4	6 : 1	7	\$ 14,797,874	3	Private
Delaware	\$ 10,419,717	5	8 : 1	14	\$ 23,432,785	4	Public
Texas	\$ 4,197,781	2	3 : 1	2	\$ 24,654,212	5	Public
Utah	\$ 14,650,188	6	11 : 1	20	\$ 29,880,490	6	Public
Rhode Island	\$ 22,196,139	7	6 : 1	8	\$ 40,644,117	7	Public
South Carolina	\$ 22,624,228	9	5 : 1	5	\$ 42,820,095	8	Public
Wyoming	\$ 29,613,379	13	20 : 1	35	\$ 45,199,368	9	Private
Connecticut	\$ 29,602,591	12	5 : 1	6	\$ 47,718,831	10	Public
Louisiana	\$ 43,230,831	16	7 : 1	10	\$ 53,195,065	11	Public
Oklahoma	\$ 47,898,178	19	23 : 1	36	\$ 63,043,681	12	Public
Maine	\$ 22,363,031	8	9 : 1	18	\$ 64,065,359	13	Public
New Hampshire	\$ 46,648,562	18	16 : 1	30	\$ 69,606,492	14	Private
South Dakota	\$ 37,789,529	15	32 : 1	43	\$ 72,570,937	15	Public
Arkansas*	\$ 23,503,980	10	10 : 1	19	\$ 73,501,223	16	Public
Arizona	\$ 58,877,838	21	14 : 1	26	\$ 82,195,794	17	Public
Virginia	\$ 59,388,043	22	16 : 1	29	\$ 82,213,587	18	Public
Florida	\$ 24,024,311	11	5 : 1	4	\$ 83,769,117	19	Public
West Virginia	\$ 35,181,422	14	9 : 1	16	\$ 84,614,578	20	Private
Vermont	\$ 43,561,317	17	24 : 1	39	\$ 90,284,343	21	Private
Alaska	\$ 54,662,062	20	31 : 1	42	\$ 91,029,066	22	Public
Wisconsin	\$ 65,835,377	23	20 : 1	33	\$ 100,832,490	23	Public
North Dakota**	\$ 84,585,839	27	29 : 1	41	\$ 111,371,354	24	Public
Nevada	\$ 83,464,466	26	20 : 1	34	\$ 121,139,399	25	Private
North Carolina	\$ 98,986,470	29	24 : 1	38	\$ 129,024,481	26	Public
Oregon	\$ 110,227,069	33	23 : 1	37	\$ 133,640,456	27	Public
Maryland	\$ 65,875,574	24	15 : 1	28	\$ 139,573,873	28	Private
Iowa	\$ 86,127,447	28	29 : 1	40	\$ 167,207,131	29	Public
Kansas	\$ 123,636,623	37	36 : 1	44	\$ 171,475,919	30	Private
Georgia	\$ 108,567,164	31	11 : 1	21	\$ 172,552,177	31	Public
Minnesota	\$ 114,581,003	34	12 : 1	22	\$ 177,647,386	32	Public
Idaho	\$ 119,553,032	35	46 : 1	46	\$ 183,405,220	33	Public
Alabama	\$ 109,234,788	32	12 : 1	24	\$ 187,758,198	34	Public
Kentucky	\$ 129,130,511	38	12 : 1	23	\$ 199,174,030	35	Public
Massachusetts	\$ 133,076,531	39	9 : 1	17	\$ 230,324,766	36	Private
Indiana	\$ 122,059,662	36	14 : 1	27	\$ 287,749,161	37	Public
Ohio	\$ 82,789,212	25	8 : 1	13	\$ 300,709,574	38	Public
Mississippi	\$ 155,079,786	40	19 : 1	32	\$ 300,928,632	39	Public
Illinois*	\$ 103,996,095	30	6 : 1	9	\$ 313,606,002	40	Private
Washington	\$ 212,526,925	44	87 : 1	47	\$ 360,371,743	41	Public
Pennsylvania	\$ 181,748,144	42	7 : 1	11	\$ 366,238,179	42	Public
Tennessee	\$ 252,545,332	45	46 : 1	45	\$ 366,773,529	43	Public
Missouri	\$ 204,477,421	43	17 : 1	31	\$ 368,861,229	44	Public
New Jersey	\$ 170,720,033	41	13 : 1	25	\$ 382,668,373	45	Private
New York*	\$ 396,923,095	46	7 : 1	12	\$ 845,000,957	46	Private
California	\$ 788,397,174	47	9 : 1	15	\$ 1,613,209,921	47	Public

Source: FAC

The last column of Table 9 reflects whether the state relied upon a private<sup>56</sup> or public auditor to conduct the single audit. The majority of states that have a lower “\$ per GCO” (or find more compliance observations per unit of grant expenditure) relied upon public auditors. Only three of the top 15 ranked states relied upon a private CPA firm. Consequently, the two states relying upon small to regional CPA firms Nebraska and Wyoming, were among the states that ranked highest in this category. Several large states, such as Massachusetts, Illinois, New Jersey, and New York that contracted with a Big Four audit firms (e.g., KPMG, Deloitte, or Ernst & Young) were among the lowest ranked states in disclosing compliance observations per unit of federal expenditure. Likewise, Texas observed a significant increase in compliance findings, which were disclosed after the state switched from a private auditor, KPMG, back to state auditors.

*Does Audit Timeliness Lead to Differences in Single Audit Observations?*

In addition to comparing compliance observations, the timeliness in submitting the single audit reports to the FAC was evaluated (as a proxy measure for single audit timeliness). Table 10 reflects the average number of days that elapsed between the state’s fiscal year end and the date the single audit was submitted to the FAC. The average number of days for single audit submission across all states was 214 (or approximately seven months). While three of the top fifteen least timely states engaged private auditors, a greater number of timely audits were conducted by private firms. Since 2002, there have been 47 instances where states were unable to meet the nine month submission deadline. Appendix F highlights the longest and shortest single audit submissions. Only 32% of these late submissions were controlled by private firms. However, these firms were responsible for approximately 30% of the more timely submissions.

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<sup>56</sup> Among those states that relied upon private auditors, many of the states have elected to change CPA firms after the firm had performed 3-5 years of service. All states except Texas relied almost exclusively on either public or private auditors.

Table 10: State Rank- Audit Timeliness (2002-07)

State	↓	Days	Month	Grant Dollars	↓	(A)GCO	↓	Auditor
Illinois*	1	274	9.1	16,733,816,625	5	41	22	Private
Alaska	2	271	9.0	2,027,465,567	39	22	37	Public
Maine	3	269	9.0	2,067,563,847	38	32	29	Public
Pennsylvania	4	265	8.8	15,448,592,273	6	42	20	Public
New Jersey	5	262	8.7	10,227,681,976	11	27	33	Private
Rhode Island	6	254	8.5	2,800,749,127	36	69	15	Public
Vermont	7	242	8.1	1,017,750,771	45	11	46	Private
Ohio	8	237	7.9	13,231,221,262	7	44	18	Public
Georgia	9	237	7.9	11,498,249,642	8	67	17	Public
South Dakota	10	237	7.9	1,326,068,940	43	18	40	Public
Connecticut	11	235	7.8	4,706,811,920	27	99	10	Public
Arizona	12	233	7.8	6,792,361,513	17	83	12	Public
Louisiana	13	229	7.6	9,294,628,700	12	175	5	Public
California	14	225	7.5	63,501,808,718	1	39	24	Public
Alabama	15	224	7.5	5,342,574,165	24	28	32	Public
Indiana	16	220	7.3	6,147,368,438	20	21	38	Public
Tennessee	17	219	7.3	10,836,490,629	10	30	31	Public
Idaho	18	218	7.3	1,467,241,761	42	8	47	Public
Washington	19	216	7.2	8,288,550,094	14	23	36	Public
Mississippi	20	215	7.2	4,596,000,931	28	15	43	Public
South Carolina	21	214	7.1	4,352,078,797	30	102	9	Public
Maryland	22	210	7.0	6,090,496,273	21	44	19	Private
New Hampshire	23	210	7.0	1,208,621,823	44	17	42	Private
Arkansas*	24	209	7.0	4,912,005,449	26	67	16	Public
Missouri	25	206	6.9	6,840,699,161	16	19	39	Public
Kansas	26	205	6.8	3,102,155,256	35	18	41	Private
North Dakota**	27	202	6.7	2,672,912,499	37	24	35	Public
Nebraska	28	202	6.7	2,005,784,540	40	136	7	Private
Oklahoma	29	200	6.7	6,579,467,842	18	104	8	Public
Delaware	30	199	6.6	958,613,932	46	41	22	Public
Colorado	31	197	6.6	4,419,346,446	29	676	3	Public
West Virginia	32	197	6.6	3,323,045,248	34	39	25	Private
Iowa	33	196	6.5	4,149,776,982	32	25	34	Public
North Carolina	34	196	6.5	10,861,515,399	9	84	11	Public
New York*	35	196	6.5	39,339,489,003	2	42	21	Private
Wisconsin	36	196	6.5	7,690,769,007	15	76	14	Public
Oregon	37	196	6.5	5,090,486,443	25	38	26	Public
Wyoming	38	195	6.5	546,501,453	47	12	45	Private
Kentucky	39	194	6.5	5,975,220,907	22	30	30	Public
Minnesota	40	192	6.4	5,926,962,785	23	33	28	Public
Florida	41	191	6.4	17,660,052,963	4	211	4	Public
Nevada	42	191	6.4	1,585,824,861	41	13	44	Private
Virginia	43	190	6.3	6,397,711,890	19	78	13	Public
Utah	44	187	6.2	4,321,805,360	31	145	6	Public
Massachusetts	45	178	5.9	8,710,463,867	13	38	27	Private
Texas	46	168	5.6	25,337,805,909	3	1,028	1	Public
Montana**	47	168	5.6	3,526,996,509	33	830	2	Public

Source: FAC

### *What Impact do Materiality Levels Play?*

Further analysis was conducted into the materiality levels established within the states. While the Act does outline standards for determining materiality thresholds, the specific materiality threshold can vary relative to the size of an entity depending on quantitative and risk-based factors. The risk-based approach requires auditors to account for current and prior audit experience, oversight by federal agencies and pass-through entities, and inherent risk. The quantitative approach involves a tiered approach towards determining the materiality threshold. Type A programs<sup>57</sup> are determined based on the larger of:

- \$300,000 or three percent (.03) if total Federal awards expended equal or exceed \$300,000 but are less than or equal to \$100 million.
- \$3 million or three-tenths of one percent (.003) if total Federal awards expended exceed \$100 million but are less than or equal to \$10 billion.
- \$30 million or 15 hundredths of one percent (.0015) if total Federal awards expended exceed \$10 billion (OMB Circular A-133).

Table 11 reveals lower materiality thresholds and does not assure a higher number of compliance observations. Meanwhile, the probability of increased compliance observations is enhanced. Seven states relied upon a baseline threshold of \$30 million, which is a larger number than would have been established using a .0015 of total Federal awards, increasing the threshold leads to a lower ratio. A second calculation was performed that compared the compliance observations relative to the number of major programs. Several states that had ranked lower in total compliance observations had a higher percentage of compliance observations associated with their major programs when compared to other states (e.g., Illinois, New York, New Jersey). Consequently, many of these states have engaged private auditors. This suggests private auditors tend to identify fewer major programs but find more audit observations for these programs.

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<sup>57</sup> During the period examined, all of the states expended more than \$100,000,000 in a given year; therefore, Tier ii and iii rules were applied.



Table 11: State Rank- GCO by Materiality Threshold Ratio

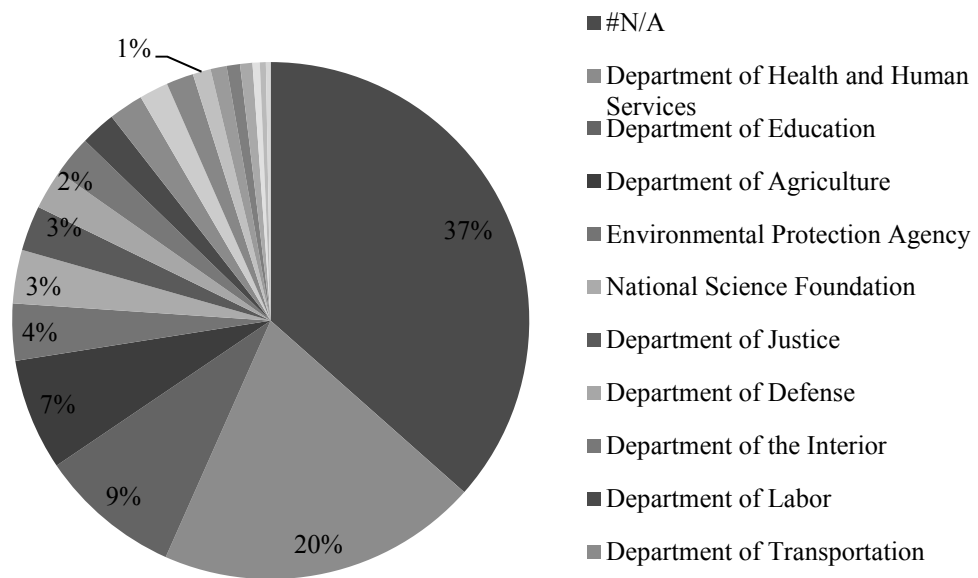
State	GCO	M. Threshold	Ratio	↓	Major Programs	% w/ GCO	Auditor
Montana**	830	11,312,011	0.73	1	2613	31.76%	Public
Illinois*	41	30,000,000	0.01	38	392	10.46%	Private
Ohio	44	30,000,000	0.02	36	455	9.67%	Public
South Carolina	102	14,596,005	0.07	9	1075	9.49%	Public
Nebraska	136	6,558,645	0.21	4	1453	9.36%	Private
Pennsylvania	42	30,000,000	0.01	37	465	9.03%	Public
Delaware	41	3,499,634	0.12	6	471	8.70%	Public
Maine	32	7,401,552	0.04	15	397	8.06%	Public
New York*	42	60,280,667	0.01	46	523	8.03%	Private
Massachusetts	38	30,000,000	0.01	39	485	7.84%	Private
West Virginia	39	11,263,501	0.04	21	542	7.20%	Private
New Jersey	27	30,000,000	0.01	43	377	7.16%	Private
California	39	70,358,070	0.01	47	553	7.05%	Public
New Hampshire	17	4,049,876	0.04	16	253	6.72%	Private
Connecticut	99	16,224,856	0.06	12	1484	6.67%	Public
Indiana	21	22,250,250	0.01	42	316	6.65%	Public
Alabama	28	18,824,160	0.02	35	441	6.35%	Public
Kentucky	30	18,714,286	0.02	33	544	5.51%	Public
Missouri	19	24,726,384	0.01	45	354	5.37%	Public
Arkansas*	67	14,214,549	0.05	14	1387	4.83%	Public
Texas	1,028	44,853,463	0.23	3	21459	4.79%	Public
Minnesota	33	20,316,667	0.02	32	755	4.37%	Public
Florida	211	33,295,352	0.06	11	4892	4.31%	Public
Rhode Island	69	7,170,188	0.10	7	1608	4.29%	Public
Mississippi	15	17,385,013	0.01	41	352	4.26%	Public
Nevada	13	5,973,915	0.02	28	355	3.66%	Private
Vermont	11	3,629,890	0.03	24	301	3.65%	Private
Maryland	44	22,208,371	0.02	30	1380	3.19%	Private
Wyoming	12	3,000,000	0.04	18	378	3.17%	Private
Colorado	676	13,316,667	0.51	2	23501	2.88%	Public
Louisiana	175	25,391,810	0.07	10	7090	2.47%	Public
Oregon	38	17,852,182	0.02	29	1877	2.02%	Public
Utah	145	8,783,333	0.17	5	7323	1.98%	Public
North Dakota**	24	5,916,759	0.04	17	1232	1.95%	Public
Washington	23	29,243,156	0.01	44	1190	1.93%	Public
Idaho	8	5,405,896	0.02	34	434	1.84%	Public
Georgia	67	30,000,000	0.02	27	3682	1.82%	Public
Virginia	78	22,027,933	0.04	20	5286	1.48%	Public
Arizona	83	23,865,882	0.04	19	5749	1.44%	Public
Kansas	18	10,982,031	0.02	31	1341	1.34%	Private
South Dakota	18	3,375,000	0.05	13	1347	1.34%	Public
Alaska	22	7,392,667	0.03	23	1668	1.32%	Public
Oklahoma	104	13,709,195	0.08	8	10920	0.95%	Public
North Carolina	84	30,000,000	0.03	25	9442	0.89%	Public
Wisconsin	76	24,568,189	0.03	22	8892	0.85%	Public
Iowa	25	11,083,333	0.02	26	4771	0.52%	Public
Tennessee	30	28,595,337	0.01	40	9152	0.33%	Public

Source: FAC

*Do Compliance Observations Vary by Funding Source?*

Compliance observations were also evaluated by federal awarding agency and grant type. According to the FAC, the major distributor of federal aid is the Department of Health and Human Services. Other large grant funders include the Department of Education, the Department of Transportation, and Department of Agriculture. However, the largest distributor of federal aid does not mean that a greater number of grants will be issued. The Department of Justice and the National Science Foundation, as two examples, tend to issue a large volume of grants, but these grants are not as large as a standard grants issued by other federal departments, such as the Department of Health and Human Services.<sup>58</sup>

Figure 7: Number of Grants Distributed by Federal Agencies (1997-07)



Source: FAC

Table 12 compares the number of grants issued by federal agencies with the number of grants with one or more compliance observations. On average, approximately 12% of all grants issued are found to be non-compliant in one or more areas. However, the risk of non-compliance

<sup>58</sup> Due to CFDA data limitations, approximately 37% of all grants cannot be directly attributed to a specific department or grant category.

is much greater for grants from certain federal agencies than others. On average, compliance issues are found with over 22% of all grants issued by the NSF, which deals with research and development and other higher risk program activities. Meanwhile, only 2.5% of Corporation for National and Community Service grants were found to be non-compliant during the program period. Scientific and medically oriented programs tend to observe a greater percentage of compliance matters in relation to the total number of grants these programs issue.

Table 12: SAA Observations by Federal Agency (1997-07)

<b>Federal Agency</b>	<b>Grants</b>	<b>GCO</b>	<b>GCO / IG Ratio</b>
National Science Foundation	13,303	2,948	22.16%
Department of Defense	9,956	2,080	20.89%
Department of Energy	6,728	1,266	18.82%
Department of Health and Human Services	80,163	12,717	15.86%
Department of Labor	8,810	1,348	15.30%
National Aeronautics and Space Administration	4,039	600	14.86%
Department of Agriculture	27,807	3,750	13.49%
Department of Education	35,402	4,402	12.43%
Department of Homeland Security	3,057	367	12.01%
Department of Commerce	7,276	734	10.09%
Department of Transportation	8,626	818	9.48%
UNKNOWN (could not be classified)	145,681	13,764	9.45%
Department of the Interior	9,946	935	9.40%
Other	5,079	415	8.17%
Department of Housing and Urban Development	4,524	331	7.32%
National Endowment for the Humanities	1,541	101	6.55%
Institute of Museum and Library Services	1,142	62	5.43%
Environmental Protection Agency	14,214	742	5.22%
Department of Justice	11,362	468	4.12%
Department of Veterans Affairs	1,820	68	3.74%
Corporation for National and Community Service	3,294	84	2.55%
<b>TOTAL</b>	<b>403,770</b>	<b>48,000</b>	<b>11.89%</b>

Source: FAC

Further, compliance observations and qualified audit opinions were most likely to occur with regard to project grants (see Figure 8); however, project grants are also the most common type of grant (see Table 13). Consequently, it is far more likely that a compliance observation or

unfavorable audit opinion will occur with regard to a formula-based grant than a project grant. Fifteen percent of formula grants had one or more compliance observations and 1.5% of formula grants had a qualified, adverse, or disclaimer of audit opinion. In fact, if an entity were to receive an adverse opinion there was a 46% probability that it was a formula-based grant. Likewise, if an entity were to receive a disclaimer of opinion, there was a 71% probability the grant was formula-based. While project and formula grants constitute the largest kind of grant distributed by federal agencies, some other forms of federal aid, especially loan programs, had an even greater propensity to be faced with audit compliance issues. For example, 30.43% of guaranteed loan programs and 21.87% of direct loans had one or more compliance issues.

Figure 8: SAA Observations by Grant Type (excludes unknown)

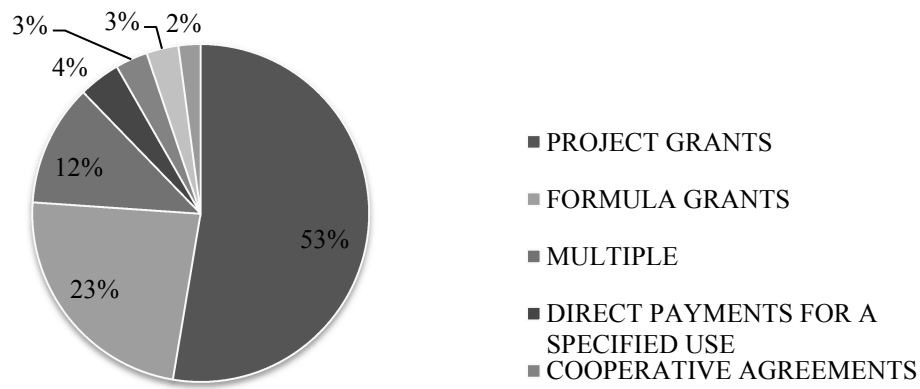


Table 14 illustrates how the number of project versus formula grants issued state by state varies markedly. Nearly 38% of Nevada’s grants were found to be formula based, while several states had far fewer project grants. Meanwhile, Southern states, such as Florida, Arkansas, and Tennessee appeared to have a higher number of project grants. With that said, Table 14 should be evaluated with a degree of caution since many of the grants were insufficiently coded to determine the type of grant. As such, the actual number of formula versus project based grants could vary significantly if every grant could be classified.

Table 13: SAA Observations by Grant Type (1997-07)

Type of Grant	Frequency	%	Compliance Observation	%	% of Total Grants	Qualified (MP)	%	% of Total Grants	Adverse (MP)	Disclaimer (MP)
Unknown	145,680	36.1%	13,776	28.70%	9.46%	645	17.90%	0.44%	4	0
Project Grants	133,802	33.1%	15,912	33.20%	11.89%	1,394	38.70%	1.04%	12	1
Formula Grants	62,550	15.5%	9,452	19.70%	15.11%	937	26.00%	1.50%	22	35
Multiple	30,431	7.5%	3,635	7.60%	11.95%	276	7.70%	0.91%	5	7
Cooperative Agreements	11,844	2.9%	945	2.00%	7.98%	124	3.40%	1.05%	4	0
Direct Payments For A Specified Use	7,619	1.9%	1,627	3.40%	21.35%	108	3.00%	1.42%	0	5
Dissemination Of Technical Information	4,963	1.2%	696	1.50%	14.02%	55	1.50%	1.11%	0	0
Provision Of Specialized Services	1,907	0.5%	127	0.30%	6.66%	9	0.30%	0.47%	0	0
Advisory Services And Counseling	1,153	0.3%	121	0.30%	10.49%	6	0.20%	0.52%	0	0
Guaranteed/Insured Loans	1,091	0.3%	332	0.70%	30.43%	22	0.60%	2.02%	1	1
Direct Loans	997	0.2%	218	0.50%	21.87%	17	0.50%	1.71%	0	0
Training	650	0.2%	44	0.10%	6.77%	3	0.10%	0.46%	0	0
Direct Payments With Unrestricted Use	601	0.1%	23	0.00%	3.83%	55	1.50%	9.15%	0	0
Insurance	221	0.1%	34	0.10%	15.38%	2	0.10%	0.90%	0	0
Investigation Of Complaints	100	0	6	0.00%	6.00%	1	0.00%	1.00%	0	0
Sale Exchange Or Donation Of Property Or Goods	95	0	4	0.00%	4.21%	1	0.00%	1.05%	0	0
Use Of Property Facilities Or Equipment	44	0	0	0.00%	0.00%	0	0.00%	0.00%	0	0
Federal Employment	22	0	5	0.00%	22.73%	0	0.00%	0.00%	0	0
<b>Total</b>	<b>403,770</b>	<b>100%</b>	<b>48,000</b>	<b>100%</b>	<b>100%</b>	<b>3,600</b>	<b>100%</b>	<b>100%</b>	<b>48</b>	<b>49</b>

Source: FAC

Table 14: State Distribution- Project vs. Formula Grants (1997-2007)

State	Ind. Grants	Formula	%	Project	%	Other/Unknown	%
Alabama	3,702	1,104	30%	916	25%	1,682	45%
Alaska	7,542	1,135	15%	2,165	29%	4,242	56%
Arizona	13,177	1,461	11%	2,406	18%	9,310	71%
Arkansas	3,965	748	19%	1,678	42%	1,539	39%
California	3,918	1,121	29%	977	25%	1,820	46%
Colorado	36,164	2,134	6%	12,675	35%	21,355	59%
Connecticut	5,455	1,167	21%	1,422	26%	2,866	53%
Delaware	3,477	1,041	30%	1,004	29%	1,432	41%
Florida	11,808	1,841	16%	4,920	42%	5,047	43%
Georgia	8,039	1,346	17%	3,254	40%	3,439	43%
Idaho	4,010	1,240	31%	967	24%	1,803	45%
Illinois	2,684	899	33%	766	29%	1,019	38%
Indiana	3,246	1,091	34%	810	25%	1,345	41%
Iowa	7,871	1,309	17%	2,717	35%	3,845	49%
Kansas	7,065	1,258	18%	2,087	30%	3,720	53%
Kentucky	3,839	1,168	30%	1,016	26%	1,655	43%
Louisiana	13,259	1,242	9%	3,040	23%	8,977	68%
Maine	3,304	1,039	31%	882	27%	1,383	42%
Maryland	6,996	1,184	17%	2,068	30%	3,744	54%
Massachusetts	3,896	1,147	29%	1,068	27%	1,681	43%
Minnesota	4,234	1,116	26%	1,280	30%	1,838	43%
Mississippi	3,123	1,077	34%	812	26%	1,234	40%
Missouri	3,448	1,066	31%	861	25%	1,521	44%
Montana	6,692	887	13%	1,906	28%	3,899	58%
Nebraska	9,519	1,486	16%	2,913	31%	5,120	54%
Nevada	2,876	1,092	38%	699	24%	1,085	38%
New Hampshire	3,016	1,014	34%	778	26%	1,224	41%
New Jersey	3,723	1,088	29%	1,026	28%	1,609	43%
New York	3,117	1,021	33%	765	25%	1,331	43%
North Carolina	21,872	1,760	8%	7,327	33%	12,785	58%
North Dakota	3,498	551	16%	990	28%	1,957	56%
Ohio	3,670	1,161	32%	970	26%	1,539	42%
Oklahoma	26,716	4,193	16%	10,586	40%	11,937	45%
Oregon	9,499	1,512	16%	3,582	38%	4,405	46%
Pennsylvania	3,149	1,067	34%	822	26%	1,260	40%
Rhode Island	4,487	1,084	24%	1,590	35%	1,813	40%
South Carolina	5,957	1,289	22%	2,136	36%	2,532	43%
South Dakota	6,513	1,222	19%	2,382	37%	2,909	45%
Tennessee	14,796	1,324	9%	6,344	43%	7,128	48%
Texas	31,093	1,994	6%	12,531	40%	16,568	53%
Utah	17,109	2,373	14%	3,911	23%	10,825	63%
Vermont	3,034	1,024	34%	797	26%	1,213	40%
Virginia	14,032	1,531	11%	5,650	40%	6,851	49%
Washington	22,038	1,473	7%	5,407	25%	15,158	69%
West Virginia	3,965	1,105	28%	1,026	26%	1,834	46%
Wisconsin	16,472	1,426	9%	4,823	29%	10,223	62%
Wyoming	2,705	878	32%	495	18%	1,332	49%
<b>TOTAL</b>	<b>403,770</b>	<b>61,489</b>	<b>15%</b>	<b>129,247</b>	<b>32%</b>	<b>213,034</b>	<b>53%</b>

Source: FAC

*Do Single Audit Observations Vary by Compliance Requirement?*

Of the fourteen compliance provisions, the most common violation is allowable cost, which occurred over 27,725 times during the ten year period. In fact 20% of all compliance observations related to allowable costs (see Table 15). Over 50% of the compliance observations related to a combination of sub-recipient monitoring, reporting, procurement, cash management, and matching, level of effort, and earmarking (each of which represented about 10% of the total cases). Equipment and real property, special tests, period of availability of funds, program income, activities allowed and unallowed, eligibility, and Davis-Bacon Act compliance observations are less common. However, this may be explained in part by the fact that these provisions only apply to a select number of programs. For example, the Davis-Bacon Act would only apply to construction related projects and special tests that are only applicable when clearly specified. Over the ten years, there were only thirty three cases of real property acquisition and relocation violations, which represented the least likely scenario. Table 16 highlights the frequency of non-compliance for each requirement in every state government.

Table 15: SAA Observations by Compliance Provision

<b>Compliance Element</b>	<b>Frequency</b>	<b>Percentage</b>
B: Allowable Costs	27,725	20.80%
M: Sub-recipient monitoring	16,006	12.00%
L: Reporting	14,271	10.70%
I: Procurement	13,892	10.40%
C: Cash Management	13,575	10.20%
G: Matching, level of effort, earmarking	12,291	9.20%
F: Equipment and real property management	8,695	6.50%
N: Special Tests	8,001	6.00%
H: Period of availability of funds	6,517	4.90%
J: Program Income	4,964	3.70%
A: Activities allowed and unallowed	4,109	3.10%
E: Eligibility	3,127	2.30%
D: Davis Bacon Act	278	0.20%
K: Real property acquisition & relocation	33	0.00%
<b>Total</b>	<b>133,484</b>	<b>100.00%</b>

Table 16: State by State Comparison- Total Compliance Observations by Requirement

State	A	B	C	D	E	F	G	H	I	J	K	L	M	N	TOTAL	TOTAL
AL	11	35	57	3	41	0	17	10	12	0	0	157	72	74	538	0.4%
AZ	16	132	25	0	12	11	17	1	16	0	0	26	84	37	408	0.3%
AZ	71	634	106	0	28	1	43	4	18	0	1	78	243	42	1269	1.0%
AR	33	119	44	0	127	5	12	142	183	1	0	267	191	130	1254	0.9%
CA	35	101	169	1	29	0	61	41	90	2	0	109	177	71	886	0.7%
CO	214	386	3030	15	264	14	70	37	616	23	0	1465	3460	989	10583	7.9%
CT	25	717	80	9	95	164	53	20	65	4	1	103	264	149	1749	1.3%
DE	92	166	217	11	111	24	23	17	80	2	1	139	57	72	1012	0.8%
FL	539	1863	1203	1	186	26	896	16	683	22	0	587	1101	963	8086	6.1%
GA	32	311	66	3	124	85	23	19	20	11	1	285	88	97	1165	0.9%
ID	7	38	14	0	17	1	2	4	2	6	0	10	8	26	135	0.1%
IL	293	317	122	1	71	5	39	20	20	1	2	173	242	51	1357	1.0%
IN	73	116	69	1	47	14	9	22	24	0	1	76	54	48	554	0.4%
IA	107	81	69	6	44	3	9	3	6	4	0	49	121	28	530	0.4%
KS	19	29	22	0	31	0	18	1	4	0	0	74	56	22	276	0.2%
KY	26	64	40	2	18	3	7	8	136	8	2	60	102	33	509	0.4%
LA	93	1695	49	1	99	12	27	26	6	3	0	79	203	72	2365	1.8%
ME	53	181	218	7	48	1	52	23	54	7	0	197	121	55	1017	0.8%
MD	9	213	278	3	30	12	16	3	16	2	0	96	269	70	1017	0.8%
MA	13	245	86	7	38	4	33	6	9	0	2	85	106	86	720	0.5%
MN	26	87	75	3	122	7	8	21	25	5	7	86	42	55	569	0.4%
MS	14	82	24	2	4	0	27	14	10	3	4	53	59	30	326	0.2%
MO	40	88	19	1	43	8	6	2	29	5	0	50	62	15	368	0.3%
MT	307	3653	187	7	30	295	280	1137	295	9	0	412	655	487	7754	5.8%
NE	67	659	61	1	174	2	32	18	536	0	0	109	605	250	2514	1.9%
NV	11	54	6	3	5	0	25	2	9	0	0	44	32	18	209	0.2%
NH	8	71	67	5	25	0	7	2	16	0	0	13	22	49	285	0.2%
NJ	143	94	23	0	51	26	20	23	47	1	0	93	112	26	659	0.5%
NY	27	141	45	0	53	20	25	34	75	2	0	61	291	118	892	0.7%
NC	2	743	51	0	65	21	22	14	54	0	0	43	141	51	1207	0.9%
ND	11	33	6	1	6	4	11	4	1	13	0	41	17	10	158	0.1%
OH	281	322	80	3	249	34	16	72	97	2	0	252	214	136	1758	1.3%
OK	90	628	70	14	78	189	27	23	84	3	5	120	67	113	1511	1.1%
OR	13	28	32	0	22	1	15	3	14	0	2	332	19	27	508	0.4%
PA	1	167	318	1	65	13	30	8	23	6	0	65	210	28	935	0.7%
RI	43	198	348	7	73	84	20	6	165	2	1	120	186	135	1388	1.0%
SC	391	450	67	1	22	56	68	13	76	7	0	613	289	63	2116	1.6%
SD	30	48	8	52	11	1	5	3	73	3	0	110	37	5	386	0.3%
TN	29	117	11	4	71	14	1	4	11	5	0	79	57	69	472	0.4%
TX	60	10073	5772	1	127	7423	9914	4280	9605	4769	0	6547	5178	2647	66396	49.7%
UT	540	974	89	84	130	6	27	368	355	16	3	432	71	150	3245	2.4%
VT	44	18	2	3	23	0	12	1	32	0	0	25	64	33	257	0.2%
VA	8	613	11	3	29	11	18	4	0	0	0	135	239	114	1185	0.9%
WA	52	159	9	1	38	1	9	1	49	3	0	31	43	33	429	0.3%
WV	103	186	163	6	90	17	24	22	14	6	0	138	192	78	1039	0.8%
WI	4	567	41	2	51	76	187	8	100	8	0	101	22	118	1285	1.0%
WY	3	10	17	1	6	1	24	7	34	0	0	40	44	16	203	0.2%
<b>TOTAL</b>	<b>4109</b>	<b>27725</b>	<b>13575</b>	<b>278</b>	<b>3127</b>	<b>8695</b>	<b>12291</b>	<b>6517</b>	<b>13892</b>	<b>4964</b>	<b>33</b>	<b>14271</b>	<b>16006</b>	<b>8001</b>	<b>133,484</b>	<b>100.0%</b>
<b>%</b>	<b>3.1%</b>	<b>20.8%</b>	<b>10.2%</b>	<b>0.2%</b>	<b>2.3%</b>	<b>6.5%</b>	<b>9.2%</b>	<b>4.9%</b>	<b>10.4%</b>	<b>3.7%</b>	<b>0.0%</b>	<b>10.7%</b>	<b>12.0%</b>	<b>6.0%</b>	<b>100.0%</b>	



### *Concluding Observations Relating to Audit Uniformity*

When examining single audit observations, their occurrence varies across multiple dimensions. Not only do the compliance observations vary from state to state, but it appears that other factors may be influencing these occurrences. For instance, the type of auditor, materiality threshold applied, funding source, or type of funding structure all appear to influence the probability of occurrence. Furthermore, single audit observations are not uniform across compliance standards; therefore, this suggests that some compliance requirements are tested more frequently and are more prone to violation.

### **Single Audit Findings' Impact on Federal Aid**

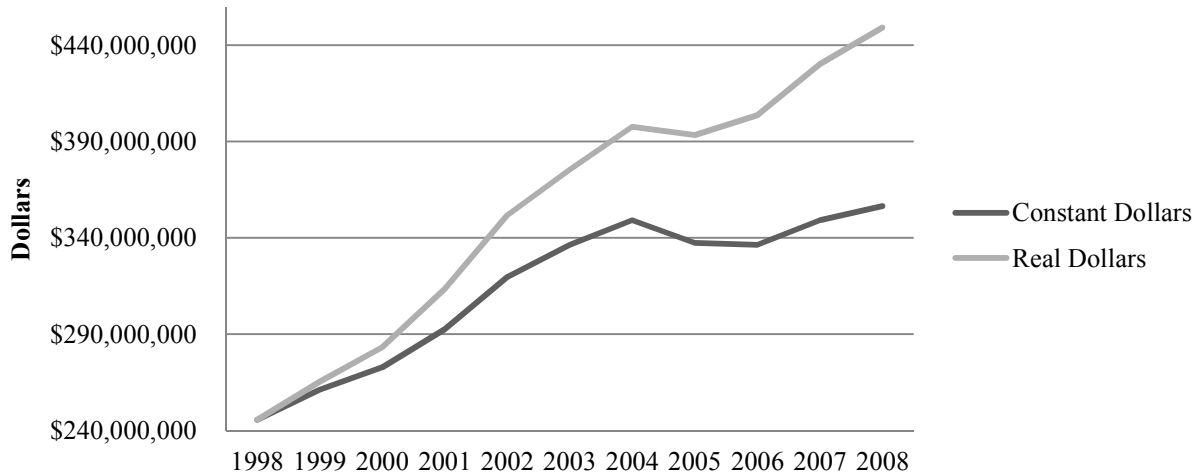
As a final step in the data analysis, federal aid receipts and expenditures were evaluated in relation to single audit observations. The purpose of this activity was to determine the relationship that exists between state funding levels and the information contained within the single audit reports. Before administering this exercise, a survey was conducted of federal aid to states in order to determine whether funding levels indeed fluctuated between states during the period in question. The second objective was to evaluate the extent to which funding either increased or decreased.

During the ten year period evaluated in this study, federal aid to the states had grown substantially. At the height of the 1990s economic boom, the federal government had provided over \$274 billion dollars in aid to state governments in fiscal year 1999. By fiscal year 2007, federal aid to states had grown by over \$165 billion to nearly \$440 billion dollars. Even when adjusting for the effects of inflation, the states, at an aggregate level, have experienced a growth in federal aid in virtually every year with exception of the period 2004-2006. Bowman and Kearney (2010) find “the national government contributes about one quarter of all state and local

revenues; however, more than 60 percent of this federal money is passed through to individual recipients such as those receiving Medicaid (p. 339). The top five distributors of federal aid to the states include these federal agencies: Health and Human Services, Transportation, Housing and Urban Development, Education, and Agriculture. In Fiscal Year (FY) 2007, the largest grantor was the Department of Health and Human Services, which distributed over 57.3% of all federal aid awards. Beyond these five federal departments, other federal agencies total distributions represented only 7.1% of the total share of federal aid to the states. For the purpose of this study, this observation is important since the vast majority of grant funding is being distributed by 5 of the 24 largest federal agencies.

Appendix E highlights the total amount and changes in federal aid to states between 1997-2007. Information contained within this section illustrates how the growth in costs in the medical assistance programs are beginning to crowd out federal aid made to all other domestic programs. For instance, in FY1999, housing and other programs represented 37.3% of total federal aid to states. By 2007, other programs (including housing) constituted only 35.9% of total federal aid. During this same period, Health and Human Services grants went from 54.1% of the budget to 57.3%. Conversely, Department of Agriculture grants represented 6.8% of total federal aid to the states in FY1999, but this amount had declined to only 5.8% by FY2007. Meanwhile, the Office of Elementary and Secondary Education, Food and Nutrition Services, and Housing Programs, which constituted 4%, 5.9%, 11.1% respectively of the FY1999 budget, were no longer discretely presented programs in FY2007. Thus, changes in funding levels are not only occurring at the state level, but also at the federal program level. Figure 9 models the linear growth trend in federal aid to states over a ten year period.

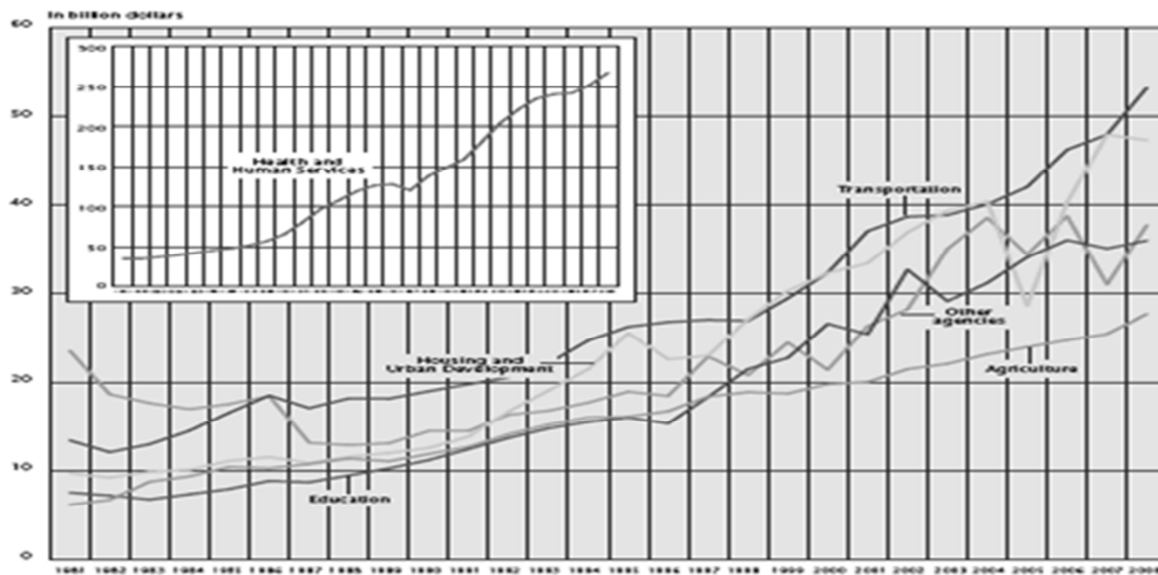
Figure 9: Growth in Federal Aid to States (1998-08)



Source: US Census Bureau, Federal Aid to the States

In part, changes in programmatic spending to the states can be attributed to escalating health care costs. The Health and Human Services overall aid represents nearly 60% of all state spending. The Medicaid program alone represents nearly 45% of federal aid transfers. A slight escalation in health care costs can have a substantial effect on the total federal aid given to states. This reality is accentuated when costs grow at an exponential rate (see Figure 10).

Figure 10: Federal Outlays by Functional Area



Source: US Census Bureau, Federal Aid to the States

Table 17: State by State Comparison- % Change in Federal Aid in Constant Dollars (1999-08)

State	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Alabama	7.5%	7.4%	7.7%	6.5%	4.6%	0.7%	1.7%	1.2%	1.9%	-0.4%
Alaska	10.2%	39.8%	4.3%	-9.9%	5.4%	-1.0%	7.2%	-11.8%	-2.4%	4.8%
Arizona	10.5%	2.7%	11.4%	18.8%	9.7%	8.9%	-0.4%	-0.1%	3.1%	12.1%
Arkansas	2.1%	3.9%	14.2%	10.7%	6.6%	4.9%	-1.0%	0.8%	0.5%	3.4%
California	8.0%	-0.8%	8.7%	9.0%	9.4%	0.3%	-4.9%	-2.8%	5.7%	5.3%
Colorado	10.3%	8.6%	4.4%	9.1%	5.6%	6.6%	-3.8%	1.7%	0.5%	6.2%
Connecticut	10.0%	-0.3%	4.1%	8.0%	-1.6%	9.6%	-11.6%	7.4%	-3.6%	4.0%
Delaware	10.6%	4.8%	6.1%	4.2%	5.4%	6.5%	0.2%	1.6%	-0.1%	8.8%
Florida	9.1%	5.7%	10.3%	10.2%	13.1%	3.2%	2.4%	-2.5%	2.1%	0.8%
Georgia	11.1%	9.4%	9.0%	12.0%	-5.1%	4.4%	-8.7%	1.1%	9.9%	-0.3%
Idaho	16.8%	8.5%	9.0%	9.9%	4.3%	12.8%	-6.8%	-2.0%	8.2%	29.4%
Illinois	6.2%	3.9%	2.7%	8.4%	3.8%	4.6%	-4.5%	-2.3%	7.0%	-1.5%
Indiana	10.2%	11.0%	9.0%	1.0%	3.3%	8.6%	-9.1%	4.8%	1.1%	11.4%
Iowa	9.0%	6.9%	0.7%	20.5%	-1.7%	4.6%	-2.8%	-1.3%	-1.6%	6.4%
Kansas	15.0%	4.2%	5.0%	12.1%	-5.9%	4.1%	-4.3%	9.7%	2.6%	0.6%
Kentucky	5.8%	7.1%	4.4%	9.5%	2.9%	3.5%	-10.5%	-2.0%	6.5%	5.4%
Louisiana	4.1%	1.3%	3.1%	18.9%	-6.2%	6.3%	-0.8%	22.5%	43.5%	-8.3%
Maine	1.1%	11.4%	-1.0%	5.6%	15.7%	7.6%	-3.0%	-9.0%	1.0%	3.5%
Maryland	6.5%	24.4%	-1.1%	-2.5%	10.2%	2.9%	0.0%	0.1%	2.5%	-0.9%
Massachusetts	1.6%	-1.4%	4.1%	11.2%	5.4%	6.0%	-8.4%	1.5%	4.7%	-0.7%
Minnesota	3.2%	5.1%	7.5%	10.2%	-2.5%	8.6%	-9.3%	6.5%	5.9%	5.2%
Mississippi	5.7%	4.2%	12.0%	13.4%	5.5%	5.3%	-4.7%	35.0%	11.7%	-11.2%
Missouri	9.4%	6.2%	11.0%	7.0%	-1.4%	5.9%	-6.2%	-3.3%	5.1%	1.7%
Montana	4.6%	20.0%	4.3%	4.0%	-14.5%	28.6%	4.8%	-15.7%	1.9%	12.4%
Nebraska	12.1%	3.6%	4.6%	8.8%	1.0%	9.4%	-5.1%	-3.5%	1.2%	2.4%
Nevada	14.3%	2.2%	10.0%	13.5%	14.4%	7.3%	3.3%	22.6%	-19.1%	3.2%
New Hampshire	11.6%	5.1%	0.5%	11.6%	5.9%	3.7%	-4.0%	3.5%	0.3%	1.7%
New Jersey	2.7%	9.5%	4.0%	13.1%	-2.1%	4.6%	-5.7%	3.1%	4.5%	-5.1%
New Mexico	10.6%	10.9%	13.6%	2.3%	8.6%	10.6%	-5.8%	-3.5%	4.0%	21.0%
New York	-1.3%	3.7%	8.2%	12.2%	10.9%	-4.0%	-0.3%	-6.4%	0.7%	0.4%
North Carolina	7.0%	9.3%	7.3%	5.7%	4.3%	10.5%	-0.5%	-3.8%	5.8%	1.4%
North Dakota	5.6%	6.4%	-6.1%	3.4%	-0.2%	7.2%	3.5%	-11.2%	-2.1%	7.1%
Ohio	0.7%	6.5%	7.5%	10.2%	-1.7%	7.4%	-7.5%	1.1%	7.3%	-5.3%
Oklahoma	12.2%	10.0%	13.5%	4.5%	3.3%	2.3%	-2.3%	0.2%	5.5%	5.0%
Oregon	8.7%	-0.9%	8.3%	8.0%	4.3%	3.2%	-5.5%	-2.6%	1.1%	7.5%
Pennsylvania	9.6%	1.1%	7.0%	7.8%	5.2%	6.1%	-1.9%	-3.6%	2.9%	-3.0%
Rhode Island	11.5%	4.5%	2.9%	7.8%	1.9%	4.6%	-4.5%	0.7%	2.2%	-5.4%
South Carolina	5.9%	8.9%	5.6%	8.6%	-0.8%	10.5%	-6.2%	6.8%	-2.4%	0.6%
South Dakota	6.9%	2.1%	5.9%	6.3%	0.5%	0.2%	-7.3%	3.4%	-12.3%	12.6%
Tennessee	5.4%	5.0%	8.4%	4.2%	9.0%	9.7%	-2.8%	-12.6%	7.7%	-0.4%
Texas	8.1%	2.0%	6.0%	12.6%	9.3%	3.3%	-2.5%	11.2%	-6.7%	6.4%
Utah	11.7%	6.2%	4.2%	4.6%	4.4%	10.6%	-2.5%	2.4%	-0.1%	8.6%
Vermont	23.8%	-6.4%	9.0%	4.6%	7.4%	5.4%	-7.0%	3.6%	16.4%	-8.9%
Virginia	16.9%	2.6%	11.1%	14.7%	-2.0%	4.3%	-6.3%	7.4%	-0.1%	5.3%
Washington	2.5%	7.2%	4.6%	12.2%	3.7%	3.0%	-4.5%	-6.7%	6.3%	5.3%
West Virginia	4.3%	7.5%	10.9%	1.6%	7.2%	0.4%	0.5%	-6.4%	3.7%	-2.6%
Wisconsin	3.5%	-0.7%	18.8%	8.9%	8.1%	-0.4%	-6.9%	-7.6%	4.9%	1.9%
Wyoming	13.5%	11.0%	11.0%	-0.1%	17.5%	9.2%	38.4%	-13.4%	-7.5%	20.3%
<b>United States</b>	<b>6.7%</b>	<b>4.1%</b>	<b>7.4%</b>	<b>9.0%</b>	<b>4.9%</b>	<b>3.7%</b>	<b>-3.4%</b>	<b>3.1%</b>	<b>0.1%</b>	<b>4.4%</b>

As reflected in Table 17, only North Dakota and Vermont experienced funding declines greater than five percent prior to 2002. While several states received effective cuts in federal aid in 2005, funding reductions in other years were less likely. Funding declines greater than 5% of the base are highlighted in light gray and reductions greater than 10% are highlighted in dark gray. If single audit observations impact federal aid to states, we would expect to find a high number of audit observations or severe audit findings a year or two before the funding decline. As discussed later in this section, this relationship did not appear to exist.

While the average amount of federal aid made to the states equated to \$8.6 billion in the FY 2007, the actual award made to each state varies significantly. For example, the top three states receiving federal aid since 1998, California, New York, and Texas, received \$50 billion, \$43 billion, and \$28 billion in fiscal year 2007. Meanwhile, the lowest ranked three states, Delaware, North Dakota, and Vermont, each received approximately \$1.4 billion. Table 17 reflects the change of funding levels (after adjusting for the effects of inflation) year after year between the states. With that said, funding levels can fluctuate. Table 18 highlights states that moved five or more places in total grants per capita (across the U.S.):

Table 18: Significant Changes in Federal Aid per Capita Ranking (1999-07)

<b>Moved UP</b>	<b>Moved DOWN</b>
Mississippi	North Dakota
Louisiana	South Dakota
Arkansas	Connecticut
Alabama	Oregon
Oklahoma	Delaware
North Carolina	California
Arizona	Missouri
Idaho	Nebraska
Ohio	Michigan
Maine	South Carolina
	Washington
	Utah

Source: US Census Bureau, *Federal Aid to the States*

The analysis of federal aid reveals that grant funding levels have been generally growing. However, occasional instances are presented in which federal aid has decreased substantially in one period. According to the literature, an assortment of factors can potentially impact the amount of funding a state receives. Scholars argue that political factors, economic conditions, capacity, and demographic trends may influence funding levels. Likewise, a preliminary review of funding trends for this study appeared to suggest that all these factors influenced grant allocations.<sup>59</sup> While this preliminary review is helpful, a higher order of analysis is needed to understand what exactly is causing these changes in funding levels. This study is focused on whether audit observations play a role in funding changes.

*Does the Financial Audit Opinion Impact Funding Levels?*

In a private sector environment, investors use an entity's financial statements to determine how much money, if any, should be invested. While financiers' motives may differ between the private and public sectors organizations, both entities prepare financial statements. Further, the structure of these statements is essentially identical. An auditor may issue a qualified, adverse, or disclaimer opinion on the entity's financial statements. To assess whether federal government behaves similarly to a private investor, changes in grant funding levels were examined the immediate year following the unfavorable audit opinion (see Table 19 and 20). In general, the audit opinion of a state has not adversely impacted the amount of federal aid an entity has received.

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<sup>59</sup> Some states' overall rank in total federal aid has fluctuated between years and Presidential administrations. Wyoming, as one example, home of former Vice President Dick Cheney saw its share of federal aid increase under the Bush administration when compared to the Clinton years. Likewise, after Hurricane Katrina, Louisiana's grants per capita increased substantially, which suggests socio-economic and emergency events also influence grant spending levels.

Table 19: Percentage Increase in Grant Funding

State	% Inc.
Maine	11.40%
Georgia	9.90%
Vermont	9.00%
Arizona	8.90%
Colorado	8.60%
Arkansas	4.90%
Kansas	4.20%
Rhode Island	2.20%
Florida	2.10%
Missouri	1.70%
New Hampshire	1.70%
Ohio	1.10%

Table 20: Percentage Decrease in Grant Funding

State	% Dec.
California	-4.90%
Louisiana	-8.30%
Alaska	-9.90%

Source: FAC

*Note: % change is reflected one year preceding the most recent unfavorable audit opinion.*

Most states receive notable funding increases the year after an unfavorable financial statement audit opinion. Alaska, California, and Louisiana were the only states to experience a funding decrease; however, this may be for other reasons beyond the financial statement opinion.<sup>60</sup> Appendix F provides examples of the justification used by the independent auditor in expressing an unfavorable audit opinion on the entity's financial statements. Appendix F also highlights how an unfavorable audit opinion at the state government level is a relatively rare occurrence. Between 2001 and 2007, there have only been thirty-nine instances of this occurring (two of which have been a disclaimer (TD) and one an adverse opinion (TA) with the remaining qualified). In 2001, nine qualified opinions were issued, but on average only 10% of states received an unfavorable audit opinion. Some states received the same audit opinion every year.

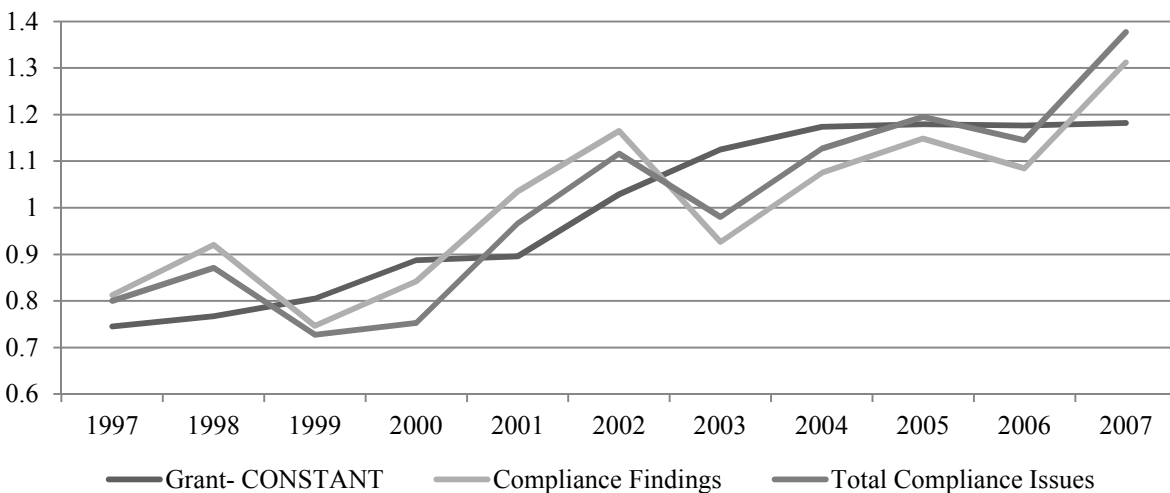
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<sup>60</sup> California, as one example, experienced its funding decline in the year 2005 when federal aid to all states decreased -3.4% (adjusted for inflation). Louisiana's decline occurred as Hurricane Katrina relief funds phased out.

### *Do Compliance Observations Impact Funding Levels?*

To graphically assess the relationship between state funding levels and compliance observations the FAC data was compiled across all states and normalized.<sup>61</sup> Figure 11 illustrates growth patterns of total compliance observations (TCO) and grants with one or more compliance observations (GCO) that are virtually identical. In general, growth in compliance observations follows a pattern similar to total constant grant dollars.

Figure 11: Normalized Growth in Grant Dollars and SAA Compliance Observations



Source: FAC

A review of normalized FAC data at the national level suggests that more compliance observations do not result in lower levels of federal aid to the states. During the period in question, funding levels and compliance observations both increased. If anything, the trend simply suggests that with more grant funding there will inevitably be more audit findings associated with each grant (at least at an aggregate level). To determine whether this trend was

<sup>61</sup> Normalization is a process which enables one to add and compare measures on a “like by like” basis by creating a common denominator for each measure. The normalization process requires that each score be compared to the average score around the data set. The average in each measure is the sum of all data available, divided by the sample size. Other methods of normalization include standard normal Z scoring and setting the maximum value to 1. While these methods each have their own individual merits, extensive testing has determined that normalizing about the average values is the most appropriate method for this analysis.



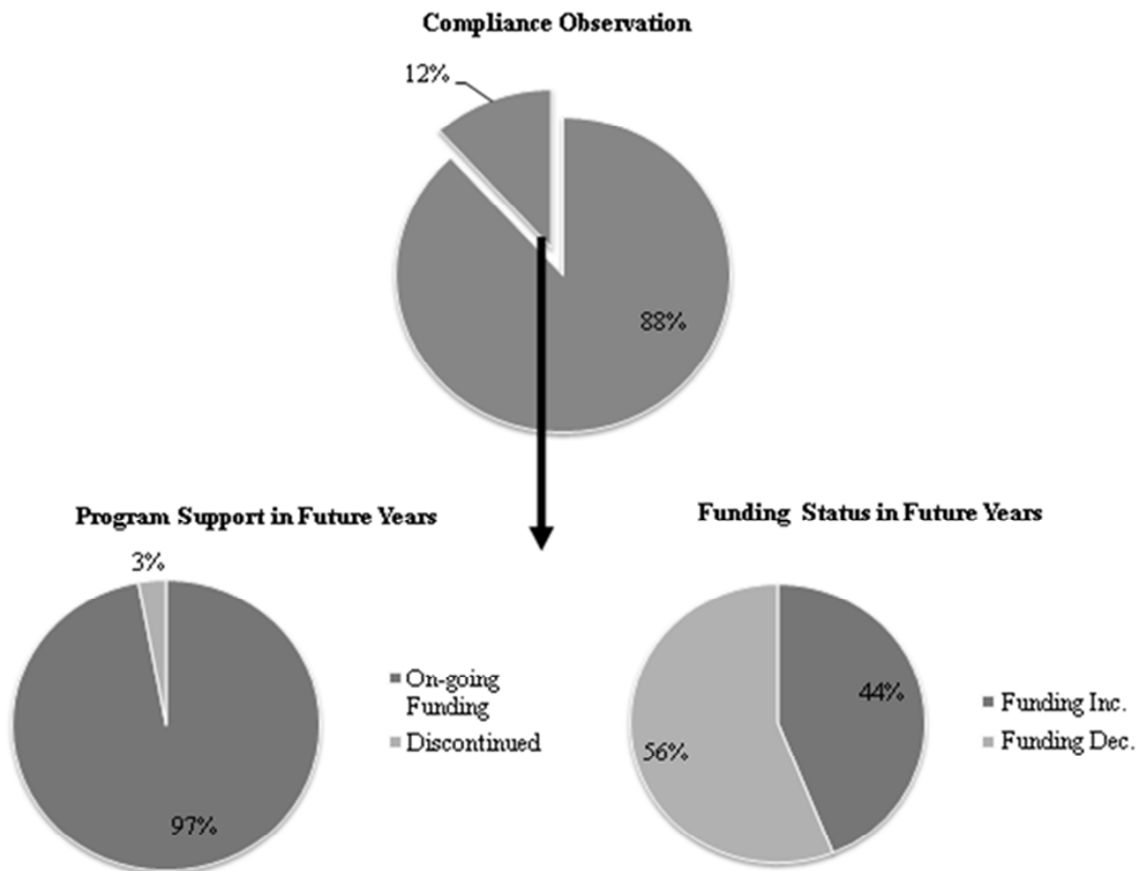
observed across all types of states the sampling pool was stratified into small, medium, and large pools based on grant dollars (see Appendix F, Figures 34-36).

The small strata consisted of states with less than \$5 billion dollars in federal aid. The greatest number of states resided within this strata; therefore, it should not come as a great surprise that the trend was nearly identical to the national trend. When evaluating the medium strata pool, the trend changed notably. After reaching a peak in 2001, the medium strata states reported fewer compliance observations than in years past. Meanwhile, grant dollars that have been adjusted for inflation have remained virtually constant. In the case of the largest strata, which included states that received more than \$10 billion over the ten year cycle, the trend was nearly opposite to the medium tier states. Since 2001, the number of compliance observations being reported by the states has been increasing markedly. However, increasing compliance observations do not appear to be impacting federal aid levels since these are increasing as well, even after being adjusted for inflation. Based upon this analysis, there is little evidence to suggest that a greater number of compliance observations results in less federal aid.

When focusing on compliance violations in the aggregate and their relationship to federal aid to states, we find that they only occur in twelve percent of instances. Moreover, some states are much more likely to disclose compliance deficiencies than others; therefore, this figure may be higher or lower depending on a given state. When examining a given grant program that has experienced one or more compliance violations, there is no clear pattern indicating that negative consequences will necessarily ensue. Figure 12 illustrates both the probability of a compliance observation occurring within a grant pool and the chance that the grant with compliance problems will be funded in future periods. In the case of the timeframe evaluated, only 3% of grants to states were discontinued after a compliance observation had been made in prior years.

Not only is there a low risk of the grant being suspended, there exists a 44% probability that funding will increase in subsequent years despite the compliance observation. Arguably, 56% of cases funding declined, but other exogenous factors may play a role over the results contained in the single audit report.

Figure 12: Funding Status after Compliance Observation



Source: FAC

*Do Compliance Opinions of Major Programs Impact Funding Levels?*

Similar to the observations made with regard to compliance observations, only a small number of federally funded state programs, approximately 4%, were discontinued after a grant recipient received a qualified audit report on a major program. In 99% of the cases, a qualified report had compliance observations, but receiving a qualified report only marginally increased the probability that the program will be discontinued (from 3% to 4%). Moreover, there does not appear to be a strong likelihood that the program will experience a funding decrease. In fact, 46% of grants experienced a funding increase after a qualified report had been issued.

Figure 13: Status of Program after Qualified Opinion

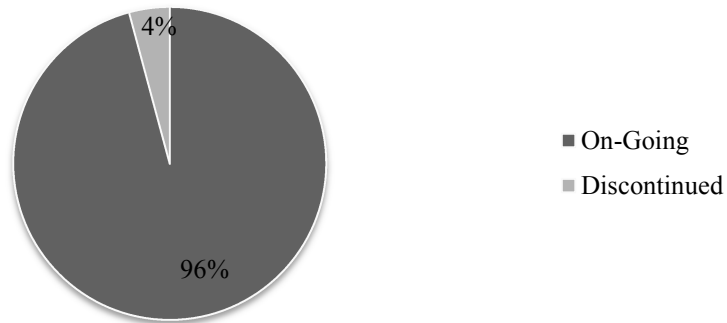
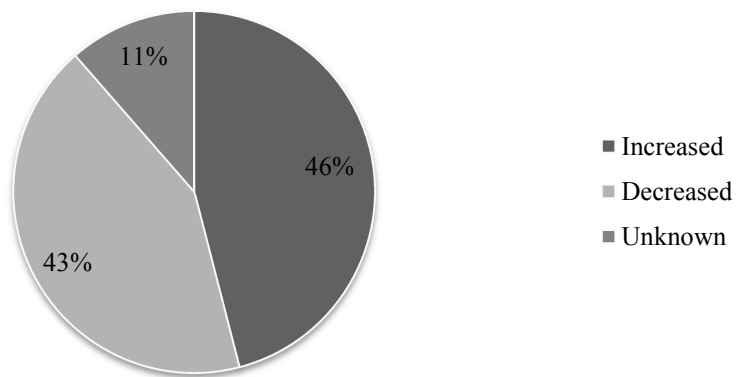


Figure 14: Funding Outcome after Qualified Opinion



Source: FAC

Table 21: State by State Comparison - Qualified Compliance Opinions (2004-07)

STATE	2004	2005	2006	2007	TOTAL			
Alabama	7	4	-43%	4	0%	4	0%	19
Alaska	0	0	0%	0	0%	0	0%	0
Arizona	25	20	-20%	25	25%	26	4%	96
Arkansas	85	2	-98%	4	100%	1	-75%	92
California	0	1	100%	22	2100%	33	50%	56
Colorado	0	0	0%	29	0%	28	-3%	57
Connecticut	2	2	0%	1	-50%	2	100%	7
Delaware	19	16	-16%	22	38%	22	0%	79
Florida	5	3	-40%	11	267%	6	-45%	25
Georgia	27	39	44%	24	-38%	7	-71%	97
Idaho	1	0	-100%	0	0%	0	0%	1
Illinois	21	25	19%	25	0%	24	-4%	95
Indiana	2	1	-50%	7	600%	8	14%	18
Iowa	0	0	0%	0	0%	0	0%	0
Kansas	0	0	0%	1	100%	0	-100%	1
Kentucky	2	0	-100%	0	0%	2	200%	4
Louisiana	0	1	100%	7	600%	3	-57%	11
Maine	4	4	0%	6	50%	18	200%	32
Maryland	9	0	-100%	0	0%	0	0%	9
Massachusetts	1	0	-100%	0	0%	10	1000%	11
Minnesota	2	3	50%	0	-100%	0	0%	5
Mississippi	0	1	100%	4	300%	4	0%	9
Missouri	2	5	150%	1	-80%	7	600%	15
Montana	0	0	0%	0	0%	4	400%	4
Nebraska	5	16	220%	5	-69%	9	80%	35
Nevada	0	0	0%	0	0%	0	0%	0
New Hampshire	8	0	-100%	1	100%	2	100%	11
New Jersey	13	27	108%	25	-7%	22	-12%	87
New York	20	17	-15%	12	-29%	18	50%	67
North Carolina	5	9	80%	10	11%	12	20%	36
North Dakota	2	0	-100%	1	100%	0	-100%	3
Ohio	7	4	-43%	3	-25%	4	33%	18
Oklahoma	4	6	50%	9	50%	0	-100%	19
Oregon	1	6	500%	4	-33%	9	125%	20
Pennsylvania	33	48	45%	48	0%	50	4%	179
Rhode Island	11	9	-18%	136	1411%	6	-96%	162
South Carolina	2	0	-100%	0	0%	3	300%	5
South Dakota	0	0	0%	0	0%	0	0%	0
Tennessee	3	3	0%	0	-100%	0	0%	6
Texas	1891**	64	-97%	68	6%	42	-38%	2065
Utah	8	5	-38%	0	-100%	6	600%	19
Vermont	9	13	44%	29	123%	10	-66%	61
Virginia	0	0	0%	7	700%	0	-100%	7
Washington	0	5	500%	5	0%	0	-100%	10
West Virginia	12	15	25%	11	-27%	9	-18%	47
Wisconsin	0	0	0%	0	0%	0	0%	0
Wyoming	0	0	0%	0	0%	0	0%	0
<b>TOTAL</b>	<b>2248</b>	<b>374</b>		<b>567</b>		<b>411</b>		<b>3600</b>

To determine whether funding levels for programs that had previously received a qualified opinion varied by grant type, comparative analyses were conducted between formula and project grants. As reflected within Figure 15 and Figure 16, the probability of a funding increase in the immediate period was nearly identical (around 48-49%) under both circumstances. The greatest disparity between the two types of grants was the number of unknown cases. A much higher number of unknown cases were reported for formula-based grants because this type of funding is recurring; therefore, more qualified reports in FY2007 led to more unknown cases.

Figure 15: Funding Outcome after Qualified Opinion- Formula Grants

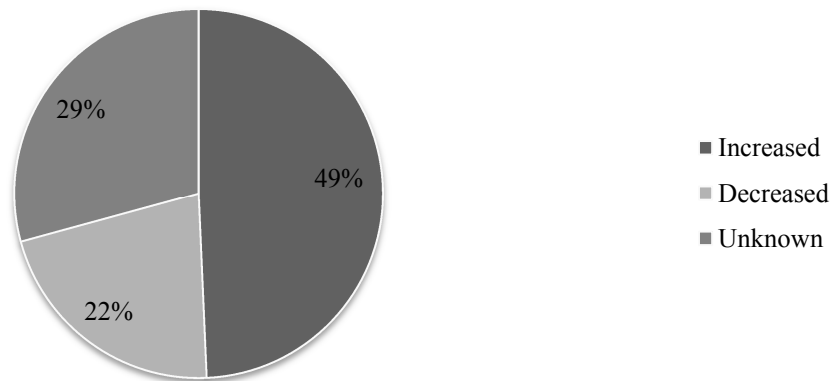
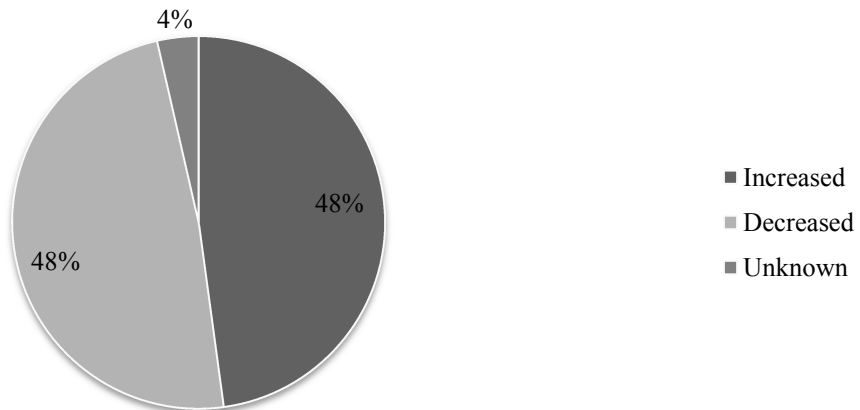


Figure 16: Funding Outcome after Qualified Opinion- Project Grants



Tables 34 and 35 (located in Appendix F) itemize all occurrences of adverse and disclaimer audit opinions observed during the sample period. While there were forty-eight instances of adverse audit opinions, in several cases these were recurring findings. In fact, there were eleven instances (30% of cases) where the same state program received an adverse audit opinion one or more times; therefore, the total number of adverse audit opinions issued to unique programs was only 37. Likewise, there were 49 instances of disclaimer audit opinions that were revealed to be recurring findings in some cases. In fact, there were 7 instances (16%) where the same state program received a disclaimer audit opinion one or more times.

Not only was it relatively common for programs to receive adverse or disclaimer audit opinions across multiple periods, but in many instances these compliance opinions were preceded or followed by a qualified audit opinion. This observation occurred twelve times, which represents 32% of cases. With regard to adverse opinions, this occurred 28 times (67%) for disclaimer opinions. This suggests that auditors had noted on-going problems with regard to particular grant programs. Despite these observations, the state continued to receive the grant. There were only five instances, or 13%, where a program was suspended in the immediate year following the adverse opinion. Meanwhile, there were no instances where a program was suspended in the immediate year following the disclaimer opinion. In other words, the program was guaranteed to receive future funding regardless of the disclaimer of opinion.

This analysis found that adverse or disclaimer opinions typically result in on-going funding. Further, there is a good chance that funding for the program will actually increase in future periods. Funding actually increased in subsequent years in seven, or 19% of instances, where adverse opinions were received by grant programs. In only twelve instances (32%) where

grant programs received qualified opinions, did funding decrease in subsequent years.<sup>62</sup> In only eighteen instances, 43%, in which grant programs received disclaimer opinions did funding decrease in subsequent periods. On three occasions, funding increased one year and then decreased the second year. Consequently, the Department of Health and Human Services was linked to most major programs receiving adverse and disclaimer of audit opinions.

#### *Concluding Remarks on Single Audit Observations and Federal Aid*

When analyzing trends between single audit observations and federal aid or spending levels, both are increasing. Intuitively, this suggests that single audit observations do not decrease funding levels. When looking closer at different types of unfavorable single audit observations, there is limited evidence that compliance violations or unfavorable compliance opinions impact funding levels.

### **Chapter Summary**

This study relies upon detailed data associated with over 400,000 unique grant awards managed by forty-seven states. While reporting inconsistencies exist with the FAC, sufficient data exists to identify emerging patterns. Upon constructing and analyzing the “data cube” across multiple dimensions, the descriptive statistics point to large variances in audit consistency across state governments. Moreover, the linkage between unfavorable audit opinions or compliance findings and future funding levels appears weak. Chapter Five will link these research observations with the results of the structured interviews. Additionally, inferential statistics are leveraged for hypotheses testing.

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<sup>62</sup> On two occasions, funding increased one year and then decreased the second year. This suggests a potential lag for federal officials to engage in punitive action.

## Chapter 5: Test of Hypothesis

### Introduction

This chapter focuses on the data collected, analyzed, and relied upon to answer the research hypotheses of this study. To address the research hypotheses, quantitative and qualitative data were relied upon. Chapter Four highlighted descriptive statistics associated with the Federal Audit Clearinghouse (FAC) data. To conduct the testing of the hypotheses, this chapter places greater emphasis on inferential statistics, as well as feedback received from interview participants. During the interview process, certain patterns emerged concerning the perceptions of federal officials that provided deeper meaning into the quantitative component of the analysis. The purpose of integrating the interview data was to link research findings in an effort to validate final research conclusions.

### Test of Hypotheses

The results in this chapter are arranged in the order in which the hypotheses were presented in Chapter Three. As discussed in Chapter Three, the hypotheses are structured around two primary research questions. The first research question relates to the extent of uniformity in single audit results in light of standard practices applied within the field. Meanwhile, the second research question focuses on whether unfavorable single audit observations impact funding levels of state governments in future periods. Both of these major research questions have more targeted sub-questions. These research questions were presented in the null hypothesis format as follows:

*H1: Uniform audit requirements lead to similar single audit results across states.*

*Ho1.a: Use of private auditors does not lead to decreased single audit observations.*



*Ho1.b: Grant funding structure does not increase the probability of receiving unfavorable single audit observations.*

*Ho1.c: Single audit compliance standards are not equally prone to violations.*

*H2: Federal officials rely upon and use single audit reports, to the maximum extent possible.*

*Ho2.1: Unfavorable financial statement opinions do not decrease the total amount of federal aid distributed to states.*

*Ho2.2: Unfavorable single audit opinions on major program compliance do not impact future funding levels of these same grant programs.*

### **Audit Uniformity**

*H1: Uniform audit requirements lead to similar single audit results across states.*

Despite widespread promulgation of uniform or generally accepted auditing standards across the states, standardization in audit practices is not visible based on information submitted to the Federal Audit Clearinghouse. The volume and types of Single Audit Act findings vary significantly from state to state, even among states of similar size, region, or political culture. Likewise, variation occurs across federal grant programs. The type of grant (e.g., formula vs. project) also has implications on the probability that a state government will receive an unfavorable audit or compliance related finding. While one might expect audit results to vary in limited circumstances due to the differences in states' financial management or internal control systems, the examination of forty-seven states across a ten-year period revealed non-uniformity is more common than uniformity. In order to determine whether there was a statistical correlation a two-tailed Pearson correlation was performed. Grant expenditures were correlated

with the average number of compliance observations (TCO, GCO), opinions (QUAL, ADV, DIS), and unfavorable financials (UNF. F/S).

As reflected in Table 22, no single audit report factors were correlated with grant expenditures, except for qualified compliance opinions whose relationship was significant at the .05 level. This suggests that, as a general rule, single audit observations are not correlated with the amount of money expended by state governments. If state internal control systems are held constant, it can be expected to find a relationship between grant expenditures and single audit observations. This analysis also revealed that TCO and GCO are strongly correlated. Furthermore, there appears to be a statistically significant relationship between entities that receive an adverse and disclaimer opinion with regard to compliance over major programs.

Table 22: Pearson Correlation of SAA Observations to Expenditures

	<b>GrantExpend</b>	<b>TCO</b>	<b>GCO</b>	<b>QUAL</b>	<b>ADV</b>	<b>DIS</b>	<b>UNF. F/S</b>
<b>GrantExpend</b>	1.000						
<b>TCO</b>	.222 (.134)	1.000					
<b>GCO</b>	.122 (.415)	.857** (.000)	1.000				
<b>QUAL</b>	.328* (.024)	.536** (.000)	.374** (.010)	1.000			
<b>ADV</b>	-.086 (.566)	.003 (.985)	-.006 (.966)	.097 (.516)	1.000		
<b>DIS</b>	.038 (.800)	.091 (.543)	.025 (.870)	.256 (.082)	.385** (.008)	1.000	
<b>UNF. F/S</b>	.009 (.977)	.388 (.190)	.313 (.298)	.361 (.225)	.148 (.628)	-.051 (.869)	1.000

n = 47

\* Correlation is significant at the .05 level (2-tailed)

\*\* Correlation is significant at the .01 level (2-tailed)

During the exploratory phase of this research project, certain factors emerged that may increase the probability of a state receiving unfavorable compliance observations outside of the sheer amount of expenditures that flow through the entity. For instance, the type of auditor, public versus private, appears to have a limited impact on audit uniformity across states, including the volume of compliance observations and timeliness. Likewise, the materiality

threshold established within a given state also appears to increase or decrease the chances that a state will receive more or fewer audit observations. The source of funding, from a federal agency, also increases the likelihood of certain findings. Meanwhile, the specific compliance requirements also tested by the auditor impacts the chances of audit observations. In light of all of the aforementioned considerations and supported by further analysis, the hypothesis H1 is rejected.

*Ho1.a: Use of private auditors does not lead to decreased single audit observations.*

The first sub-hypothesis used to explore the extent of uniformity across states involved examining the engagement of specific types of auditors who perform the single audit, namely public auditors charged by legislature versus private CPA firms. To test this assertion a ratio consisting of total expenditures (\$) was held relative to the number of grants with one or more compliance observations (GCO). States with higher ratios indicated a greater degree of leniency on behalf of the auditor. Upon rating and ranking each state government using this ratio, the analysis revealed that a greater number of states that had contracted with a private auditor had a higher “\$ to GCO” ratio. While only 28% of states had relied upon private auditors, 85% of the states that relied upon private auditors were ranked lower than twenty in compliance scrutiny (see Table 9). This suggests that states who engaged a private auditor were far more likely to have encountered compliance findings for each dollar of federal expenditure. As an illustration, consider Texas, which detects compliance matters for every \$25 million dollars, compared with New York, which identifies compliance matters for every \$845 million dollars. While Texas relies upon public auditors, New York relies upon private auditors.

To obtain further evidence based on that descriptive data to support the aforementioned observations these variables were correlated together to determine statistical significance. Table 23 reflects the results of this analysis:

Table 23: Pearson Correlation of Audit Findings to Auditor Type

	GCO	MT	Ratio	MP	% w/ GCO	Auditor
GCO	1.000					
M. Threshold (MT)	.134 (.369)	1.000				
MT/GCO (Ratio)	.821** (.000)	-.166** (.265)	1.000			
Major Programs (MP)	.704** (.000)	.155** (.299)	.461** (.001)	1.000		
% MP w/ GCO	.408** (.004)	.054 (.719)	.606** (.000)	-.246 (.096)	1.000	
Auditor Type (Auditor)	-.195 (.190)	-.062 (.677)	-.140 (.348)	-.302* (.039)	.107 (.472)	1.000

n = 47

\* Correlation is significant at the .05 level (2-tailed)

\*\* Correlation is significant at the .01 level (2-tailed)

Given the fact that the Single Audit Act is designed to be performed on a risk-basis, the majority of audit work will be performed within major programs. Consequently, Table 23 reveals a statistically significant relationship between the number of grants with one or more compliance concerns and the number of major programs identified within a given state. In addition, Table 23 reveals that a negative statistical relationship between auditor type and the number of major programs identified within a state. This phenomenon could be explained by two factors. First, as a rule, private auditors are attracted to larger states that use higher materiality thresholds because higher materiality thresholds result in fewer major programs being tested. Second, private auditors exercise professional discretion and are less inclined to classify additional programs as being major on a risk-basis. While the determination of major programs requires the auditor to follow a structured procedure, there is a degree of subjectivity exercised during this process, particularly in selecting programs based on risk. Likewise, the determination

of the appropriate sample size to use for audit test work is largely a function of the auditor's professional judgment.

Using this parametric technique, there was no relationship between private auditors and the GCO. However, other non-parametric correlation techniques demonstrated a significant negative relationship between the number of compliance observations and use of private auditors. For instance, at the 90% confidence level, Kendall's tau\_b and Spearman's Rho both reflected a statistically valid correlation coefficient of -.244 and -.295, respectively. While the Pearson correlation reflected a statistically valid relationship between compliance observations and major programs, as well as major programs and auditor type, the parametric model likely mitigated the effects of audit test work within non-major programs. Given the results of non-parametric models and the descriptive analysis, a statistically significant, albeit weaker, relationship exists between fewer compliance observations and state's decision to engage a private auditor.

As discussed previously, this study revealed that higher the materiality threshold used by auditors resulted in fewer compliance findings. Private audit firms appear to gravitate towards states with higher materiality thresholds. Eighty-five percent of the states that relied upon private auditors were ranked in the lower 65% strata when using the "GCO to Materiality Threshold" factor. As a general rule, the higher a materiality threshold results in fewer major programs tested. In California, an average materiality threshold of \$70 million was used to select 553 major programs. There are thousands of programs that fell under the \$70 million dollar threshold within California that would not be subject to compliance test work, unless the program was selected on a risk basis. Meanwhile, in Iowa the threshold stands around \$11 million, 4,771 major programs were subject to compliance test work (nearly ten times that of

California) resulting in far more audit coverage over all programs within the State of Iowa. While some might argue that it would not be cost effective to scrutinize California’s programs to the same extent as Iowa’s, the fact remains that different dollar thresholds result in more or less audit work. More or less audit work impacts the number of audit findings a state will receive.

In addition to examining the “\$ to GCO” and “MP to GCO” ratios, audit timeliness by auditor type was also evaluated. In order to conduct this analysis, the number of days elapsing between the states’ fiscal years’ end and the date of submission to the FAC was determined to serve as a proxy for audit timeliness. The average over a seven year period was calculated and states were ranked according to those audits that took the longest to complete versus the quickest. Similar to the previous findings, 85% of the states that relied upon private auditors were not in the top twenty in terms of audit submission tardiness, except for Illinois which ranked first in tardiness. These descriptive statistics suggests that states that engage private auditors have a greater likelihood of submitting a timelier audit.

Could there be a potential relationship between audit timeliness and the number of compliance observations detected? In other words, if an auditor dedicates more time to the audit process will he or she will find more problems? The answer to such a question appears to be “yes.” Table 24 correlates the average number of days (elapsing from final day of the fiscal year end to single audit submission) with grants with one or more compliance observations.

Table 24: Pearson Correlation of Audit Findings to Audit Days

	Audit Days	GrantExpend	GCO
Audit Days	1.000		
GrantExpend	.012 (.935)	1.000	
GCO	-.401** (.005)	.122 (.415)	1.000

N = 47

\* Correlation is significant at the .05 level (2-tailed)

\*\* Correlation is significant at the .01 level (2-tailed)

Table 24 reflects a relatively strong adverse relationship between the number of days dedicated to the audit process and number of grants with compliance issues. In other words, the more time the auditor dedicates to the audit process, the higher the probability is that he or she will find compliance issues with particular grants. Despite existence of such a relationship, the amount of time the auditor will ultimately spend on a given engagement is often determined during the planning stage. Moreover, the timeliness of an audit is largely a function of the number of major programs that the auditor is required to test and the number of transactions that the auditor elects to test within each program in order to obtain sufficient evidence to support audit conclusions.

During the interview process, several participants expressed concerns over both the funding structure of the single audit process and the use of private firms. Several respondents suggested that private firms tend to solicit businesses from larger states in an attempt to collect higher audit fees. Meanwhile, participants from private firms suggested that higher fees are needed to break even in the conduct of a single audit, which is far more complex than the traditional financial statement audit. While participants felt that both public and private auditors were equally qualified to conduct the work, they noted distinctions in the incentive structure between the two groups. Public employees questioned whether private firms would not have an incentive to provide a clean opinion or conduct a single audit with fewer compliance observations for the sake of retaining a client. In light of the collective body of findings, the null hypothesis is rejected.

*Ho1.b: Grant funding structure does not increase the probability of receiving unfavorable single audit observations.*

In terms of the total amount of federal aid and grants issued, the three largest federal agencies are the Department of Health and Human Services, Department of Education, and Department of Agriculture. Regardless, being a large distributor of federal aid does not necessarily assure that the agency will distribute more grants. The National Science Foundation, as one example, disburses a relatively small amount of aid in relation to the total federal budget, but tends to issue many grants in smaller amounts. Since the single audit procedures are designed to push auditors toward programs with greater expenditures, there exists the potential that agencies that issue many grants, in smaller amounts, could potentially elude the single audit process. However, this rarely appears to be the case.

As a general rule, single audit compliance observations tend to arise from federal programs with similar missions, goals, or objectives. Meanwhile, the amount of federal aid disbursed by each agency does not appear as important. For example, federal agencies that target monies to state governments for scientific endeavors tend to observe more single audit compliance observations. The National Science Foundation, Department of Defense, and Department of Energy all ranked among the highest in terms of the number of compliance issues detected for each grant issued. Approximately 20% of all grants issued by these organizations were found to have one or more compliance related issues. This figure is almost double the twelve percent average across all federal agencies (see Table 12). Meanwhile, if the state relies upon community development grants, the probability of receiving compliance observations appears to be much less.



Compliance observations, as well as qualified audit opinions, can also vary depending upon the type of grant. Project grants, the most common type of grant, have the greatest number of compliance observations. However, the probability is actually much higher that on a grant-by-grant basis a formula grant will have a compliance observation or unfavorable audit opinion than a project grant. While only 15% of the total identifiable grants were formula-based, 20% of the total compliance observations came from formula-based grants. Every fifteen in one-hundred formula-based grants had a compliance issue compared with every twelve in one-hundred project-based grants. In addition, 1.5% of formula grants had a qualified, adverse, or disclaimer of audit opinion (refer to Table 13).

From an intuitive standpoint, the project grant may appear to be more susceptible to single audit findings because these grants tend to be more experimental and offer a wider range of discretion to the grantee. In some cases, the criteria used to evaluate the grant may not be readily apparent to the auditor. This dynamic also makes the grants potentially more difficult to audit. Meanwhile, formula-based grants tend to be far more rule based; for example, entities are found to be eligible if they meet strict criterion and adhere to the rules of the program. Given the higher volume of rules, formula-based provisions may be more onerous and difficult for grantees to comply. However, this structure also makes it easier for auditors to conduct their review and detect findings.

Supporting this view is the reality that if an entity were to receive an adverse opinion there would be a 46% probability the grant was formula-based. Likewise, if an entity were to receive a disclaimer of opinion, there would be a 71% probability the grant was formula-based between the years 2004 and 2007. While project and formula grants constitute the largest kind of grant distributed by federal agencies, some other forms of federal aid, especially loan

programs, had an even greater propensity to face audit compliance issues. For example, 30.43% of guaranteed loan programs and 21.87% of direct loans had one or more compliance issues. In conclusion, the type of grant has a significant impact on the probability that a given entity will experience compliance observations. Since the types of grants received by particular states range widely from state to state, this appears to be one of many factors influencing different levels of compliance observations found within states.

Nearly all of the interview participants agreed that the type of grant funding structure does impact the number compliance observations that a particular state receives. Several participants highlighted that programs were more susceptible to fraud and other compliance matters from a single audit or improper payment standpoint. Fraud, as one example, was described by several individuals as being a big problem within the Head Start program, whereas other educational programs had much smaller incidences of fraud. Furthermore, the quantitative results support the position of one interviewee who cited a high error rate and eligibility problems in the student loan program. Another complicating factor for determining compliance within programs can be the extent of rules and regulations associated with the program. For example, determining compliance with real property standards is complicated by the fact that states have their own procurement rules that must be accounted for during any single audit review. Given the wide variation in audit findings between programs and based on testimonial data, the null hypothesis is rejected.

*Ho1.c: Single Audit compliance standards are not equally prone to violations.*

Compliance violations vary significantly due to requirements. For instance, while there were 27,725 compliance violations relating to allowable cost over the ten year period, a modest 33 violations occurred with regard to real property and relocation. In fact 20% of all compliance

observations related to allowable costs (see Table 25). Over 50% of the compliance observations related to sub-recipient monitoring, reporting, procurement, cash management, matching, level of effort, and earmarking, each representing about ten percent of the total cases. Equipment and real property, special tests, period of availability of funds, program income, activities allowed and unallowed, eligibility, and Davis-Bacon Act issues are less common. However, this may be explained in part by the fact that these provisions only apply to a select number of programs. For example, the Davis-Bacon Act would only apply to construction-related projects and special tests are only applicable when clearly specified.<sup>63</sup>

**Table 25: Findings by Compliance Requirement**

<b>Compliance Element</b>	<b>Frequency</b>	<b>Percentage</b>
B: Allowable Costs	27,725	20.80%
M: Sub-recipient monitoring	16,006	12.00%
L: Reporting	14,271	10.70%
I: Procurement	13,892	10.40%
C: Cash Management	13,575	10.20%
G: Matching, level of effort, earmarking	12,291	9.20%
F: Equipment and real property management	8,695	6.50%
N: Special Tests	8,001	6.00%
H: Period of availability of funds	6,517	4.90%
J: Program Income	4,964	3.70%
A: Activities allowed and unallowed	4,109	3.10%
E: Eligibility	3,127	2.30%
D: Davis Bacon Act	278	0.20%
K: Real property acquisition & relocation	33	0.00%
<b>Total</b>	<b>133,484</b>	<b>100.00%</b>

With regard to responding to non-compliance matters in any one of these areas, interview respondents tended to suggest that the magnitude of the response will typically vary on a case-by-case basis. Further, political values or priorities of a given period may influence the extent of focus in a particular area. For instance, one individual suggested that “people don’t worry unless

<sup>63</sup> In accordance to OMB A-133, only applicable program provisions should apply. However, many standards are tested across all programs; therefore, some provisions are more inclined to be violated than others.

unions get involved” with regard to the Davis-Bacon Act compliance objective. Meanwhile, some measures may be very important to certain programs, but not as important to others. For example, the eligibility criterion is very important in determining how many children should be enrolled in particular educational program. However, for other programs, eligibility may be less of a concern because the government is actively pursuing additional participants. Given the wide disparity across programs, the null hypothesis is not rejected.

### **Single Audit Observations and Federal Aid**

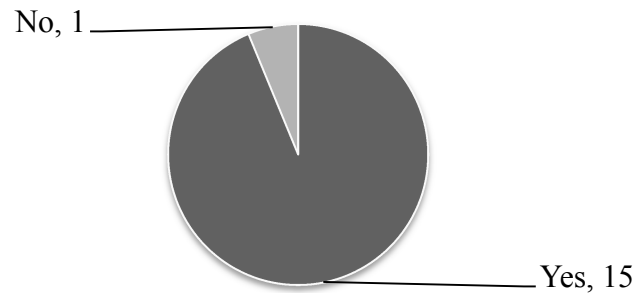
*H2: Federal officials rely upon and use single audit reports, to maximum extent possible.*

According to the Single Audit Act, federal officials are empowered to carry out a series of actions depending upon the results contained within the single audit report. For instance, federal officials may elect to increase monitoring activities or implement a corrective action plan. The fourth stated objective of the Single Audit Act, however, calls on federal officials to rely upon the results to the “maximum extent” possible. As Key (1972) notes, the most effective means of control is the “power of the purse” or the ability to control grants allocations. As such, the quantitative component of this study focused on the relationship between single audit results and grant funding levels as a proxy for determining the extent of reliance on these reports.

Before such a proposition could be tested, confirmation was sought to determine whether such authority is even within the control of a federal official. When asked whether federal officials have the ability to exercise control over spending, four individuals did not respond. However, fifteen of the interview respondents believed that federal employees can exercise discretion in determining the most qualified applicant of federal funds, particularly during the grant application process. Only one respondent, who happened to work in a program that

exclusively dealt with formula-grants, indicated that no discretion was exercised during the grant distribution process (see Figure 17).

Figure 17: Can Federal agencies exercise funding discretion?



If federal officials can impact funding allocations to states and they have access to the single audit reports, then it is reasonable to assume that the single audit reports could be used as one tool for allocating grant monies. Despite this potential authority, compelling evidence simply does not exist that the single audit reports are used for this purpose. Contained within the FAC are three primary data elements directly relating to the auditor's assessment of the financial management practices of a given entity: financial statements, internal controls over major programs, and compliance with laws and regulations for grants selected for test work. In other words, entities may receive unfavorable audit findings relating to any of these areas.

For the purpose of this study, funding levels were examined at both the statewide and individual program level. When evaluating funding levels in the years preceding an unfavorable single audit opinion for a given entity, it was uncommon for funding to decline. At both the state and program levels, there was a greater probability that funding would increase despite unfavorable audit opinions discovered in past years. Only on very rare occasions was funding to a particular entity suspended. In order to achieve greater clarity with regard to the research hypothesis and to facilitate a causal explanation, a panel data set was constructed.

The panel data set compared information contained within the single audit reports, such as financial statement opinions and compliance observations, using multiple sampling frames between 1997 to 2007 at an aggregate level. As noted previously, several states had to be omitted from the analysis since they lacked uniquely identifiable information, conducted audits on a biennial basis, or were late adopters in submitting information to FAC.<sup>64</sup> In order to maintain a balanced data set, forty-two states were used, which provided up to 430 observations.

Funding levels were examined in two ways: total grant expenditures using the FAC and total federal aid using the U.S. Census Bureau data. Independent variables were drawn from the FAC and control variables were collected from multiple information sources. Control variables included in the model were based on previous empirical work, as well as basic theoretical considerations. Measures that could potentially impact federal aid distributions were selected such as: political influence, demographics, economic factors, and other determinants of federal aid.<sup>65</sup> The panel dataset model<sup>66</sup> can be expressed in as simplified format as follows:

$$\ln\text{GOV AID}_i = \alpha + \gamma_{i,t-1} + \beta_1 \ln E'_{i,t-1} + \beta_2 P'_{i,t-1} + \beta_3 T'_{i,t-1} + \epsilon_{it}$$

Before conducting the regression analysis, several tests were carried out to detect potential multicollinearity, serial autocorrelation, heteroskedasticity, heterogeneity of intercepts and slopes, endogeneity of regressors, and contemporaneous correlation of the errors. According to these results, a fixed effects model for final estimation and specification was used.<sup>67</sup> Although

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<sup>64</sup> States omitted from the analysis included: Arkansas, Illinois, North Dakota, Montana, Michigan, New Mexico, Hawaii, and New York.

<sup>65</sup> In several instances, accurate annual data was not available, and so I use the natural log for certain variables. For example, the natural log for population size is used to indirectly capture the effects of population growth on the dependent variables.

<sup>66</sup> Whereas, state  $i$  in year  $t$ ,  $\gamma_{i,t-1}$  represents prior-year aid to capture other organizational specific factors,  $E_{it}$  is a matrix of economic variables,  $P_{it}$  is a matrix of political measures, and  $T_{it}$  is a matrix that accounts for the different types of demographic indicators. Finally,  $\epsilon_{it}$  is the normally distributed residual term.

<sup>67</sup> A preliminary auxiliary regression with the grant funding as the dependent variable using fixed effects. From this regression, predicted values were calculated for the grant funding and then used in lieu of the actual grant funding in the expenditure regressions allowing for the exogeneity tests.

the individual random effects model may have more effectively accommodated time invariant characteristics, such as short-term population growth, the Hausman test proposed by Wooldridge (2002) rejected the hypothesis of uncorrelation between regressors and individual effects (p value < 0.001), making the fixed effects model the best option for this particular analysis. Furthermore, the fixed effects (FE) model proved helpful in dealing with potential omitted variable bias and more effectively controlled for certain unobserved characteristics that were constant over time but differed between cases.

In building the model, special attention was dedicated to the structure of the data. Since the audit opinion is traditionally rendered months after the close of the fiscal year-end, a lag in decision-making had to be accommodated. Compliance observations were believed to have a more immediate impact once time has passed, but not after the window of opportunity had closed. However, the lagged-response model is only practical if the observations are equally spaced in time, which was generally the case with regard to this dataset. As such, the correlation structure was conducted using the autoregressive-response structure, otherwise known as AR(1).

Once the model was constructed, tests were performed to detect the extent of multicollinearity, a condition that would otherwise limit the reliability of the model. Some scholars argue that not all autocorrelation is harmful within an econometric model (Gujarati, 1995 and Greene, 2000). If it is detected, it can be resolved by omitting select variables from the model. Near-extreme multicollinearity, one of two forms of the condition, was of greater concern for this dataset. As Allison (1999) notes, extreme multicollinearity is “unusual in the social sciences” (p. 139). Furthermore, the statistical software used to conduct this analysis automatically omitted highly correlated variables. However, near-extreme multicollinearity can

be more difficult to detect and, as such, a series of steps were undertaken to expose its potential existence.

As discussed in Chapter 3, the control variables used in this model were selected as determinants of federal aid to the states based on existing public budgeting literature. While one may assume that replicating such studies may be sufficient, the addition of new variables can lead to unforeseen conditions. Therefore, a series of steps were undertaken to detect the presence of collinearity. An examination was conducted to determine if the hypothesized signs were incorrect, which proved not to be the case. In addition, the model did not exhibit other signs of multicollinearity, such as the standard error being artificially high.

Variance inflation factors (VIF) were calculated for each model. There were no high VIF indicators, such as 2.00 or greater. Since not all scholars contend VIF is sufficient, additional measures were undertaken. The eigenvalues were examined within the correlation matrix to screen for the presence of particularly small measures. As a final measure, select variables were removed from the model to determine if the regression results were particularly sensitive to changes. As recommended by Allison, each variable was regressed on all other variables (p. 141). When performing this operation, none of the variables used in the model exceeded an  $R^2$  above .60. However, a couple of variables, such as land area and rural density, did appear to be moderately correlated. If any two variables exhibited a moderate degree of multicollinearity, the variable with the least explanatory power was removed from the model.



Table 26: Summary Statistics

<b>Variables</b>	<b>Observations</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Minimum</b>	<b>Maximum</b>
TCO – Grant Ratio	462	.21	.49	0	6.27
F/S_Qual	294	.12	.33	0	1
F/S_Adv	294	.00	.05	0	1
F/S_Dis	294	.00	.08	0	1
M/P_Qual	210	11.35	110.72	0	1891
M/P_Adv	210	.14	.80	0	9
M/P_Dis	210	.16	.80	0	8
Ln_Population	462	15.10	.97	13.08	17.41
#_Senators_in_Pres_Party	462	1.03	.84	0	2
%_HDelegates_in_Majority	462	.59	.30	0	1
%_HDelegates_in_Pres_Party	462	.51	.31	0	1
Pres_Won_Last_State_Elec	462	.62	.49	0	1
Margin_Victory	462	9.44	11.49	0	45.54
Gov=Pres_Party	462	.47	.50	0	1
%_Poverty	462	11.45	2.99	4.8	20.6
Density	462	192.85	264.08	1.06	1171.02
Ln_GSP	462	18.3	1.46	13.04	21.27
Ln_Median_Household	462	10.67	.17	10.19	11.13
Ln_SLG_Employees	462	11.93	.94	9.87	14.42
%_Under_18	462	25.08	2.31	9.7	33.43
%_Over_65	462	12.48	1.92	5.3	18.5
%_Unemployment	462	4.67	1.13	2.2	8.2
Ln_PC_Income	462	10.19	.147	9.83	10.62
Ln_Federal Aid	462	15.2	.85	13.43	17.54
Ln_Federal Expenditures	462	22.17	.96	19.71	24.82

Source: FAC

Table 27: Regression Results

Variables	(FE-1)	(FA-2)	(FE-3)	(FA-4)	(FE-5)	(FA-6)
TCO – Grant Ratio	-.01 (.012)	-.002 (.010)	-.01 (.01)	-.009 (.012)	-.034 (.029)	-.042 (.037)
F/S_Qual	N/A	N/A	.018 (.020)	.017 (.023)	-.003 (.033)	-.03 (.044)
F/S_Adv	N/A	N/A	-.017 (.072)	.007 (.083)	Omit	Omit
F/S_Dis	N/A	N/A	-.016 (.049)	-.053 (.057)	.008 (.054)	-.003 (.076)
M/P_Qual	N/A	N/A	N/A	N/A	-.0001 (.0001)	-.00008 (.0002)
M/P_Adv	N/A	N/A	N/A	N/A	.008 (.007)	.001 (.01)
M/P_Dis	N/A	N/A	N/A	N/A	-.00008 (.009)	.010 (.013)
Ln_Population	1.66*** (.311)	.51** (.313)	-.29* (.473)	-.850* (.560)	-.22 (1.21)	-2.20 (1.18)
#_Senators_in_Pres_Party	.011* (.008)	-.005 (.007)	.007 (.015)	-.007 (.018)	.011 (.028)	-.012 (.037)
%_HDelegates_in_Majority	.056*** (.022)	.05*** (.02)	.02* (.019)	.014 (.023)	.016 (.024)	.016 (.03)
%_HDelegates_in_Pres_Part	-.02 (.024)	-.01 (.02)	-.044 (.035)	-.014 (.04)	-.061 (.052)	-.103* (.067)
Pres_Won_Last_State_Elec	.003 (.025)	-.006 (.02)	.047 (.043)	.023 (.051)	.05 (.151)	.237 (.323)
Margin_Victory	-.0004 (.001)	.001 (.001)	.0004 (.0024)	-.002 (.003)	.012* (.008)	-.008 (.016)
Gov=Pres_Party	-.005 (.01)	-.007 (.001)	-.017 (.014)	-.012 (.017)	-.044 (.038)	-.03 (.016)
%_Poverty	.006** (.003)	.007*** (.003)	.003 (.003)	.005 (.004)	.010** (.006)	.007 (.009)
Density	.0008 (.001)	.001 (.001)	.0002 (.003)	.001 (.003)	-.002 (.008)	.006 (.007)
Ln_GSP	.013*** (.005)	.001 (.004)	-.0006 (.004)	-.008* (.005)	-.008 (.012)	-.003 (.015)
Ln_Median_Household	.207*** (.09)	.141*** (.086)	-.089 (.102)	-.088 (.120)	-.143 (.180)	.027 (.237)
Ln_SLG_Employees	-.009 (.024)	.007 (.022)	-.042* (.023)	-.010 (.003)	-.102* (.07)	-.038 (.090)
%_Under_18	-.004* (.003)	-.002 (.002)	-.001 (.002)	-.0003 (.002)	-.002 (.003)	-.002 (.004)
%_Over_65	.026* (.022)	.031* (.021)	.027 (.023)	.036 (.027)	-.053 (.119)	-.037 (.137)
%_Unemployment	.036*** (.006)	.014*** (.006)	-.010* (.008)	-.014* (.009)	-.047*** (.017)	-.03* (.023)
Ln_PC_Income	.02 (.258)	.052 (.241)	-.45* (.288)	-.027 (.339)	1.80* (1.30)	2.79* (1.93)
<b>Intercept</b>	<b>5.31</b>	<b>6.13</b>	<b>32.8</b>	<b>29.73</b>	<b>11.3</b>	<b>19.6</b>
<b>N</b>	<b>420</b>	<b>378</b>	<b>252</b>	<b>252</b>	<b>126</b>	<b>126</b>
<b>R-sq</b>	<b>.88</b>	<b>.62</b>	<b>.78</b>	<b>.66</b>	<b>.65</b>	<b>.47</b>

Standard errors in parentheses: \*significant at 10 percent level; \*\*significant at 5 percent level, \*\*\*significant at 1 percent level.

As reflected in Table 27, six models were conducted using two distinct dependent variables, federal expenditures and aid, and three different time periods. The first two models reflect the entire period under examination but only incorporate total compliance observations as the independent variable. Model FE-3 and FA-4 incorporate the potential impact to financial statement opinions. Meanwhile, the final two models incorporate compliance opinions of major programs during the final four years of the program. Unfortunately, the entire ten year period was not examined due to data limitations contained in the FAC dataset.

Similar regression diagnostic methods as those deployed by Lago-Peñas (2008) were applied in this study, and the regression model presented in Table 27 suggests that individual fixed effects are highly significant. A Wald test on the need of individual effects was carried out, and the hypothesis of homogeneity of intercepts is clearly rejected ( $p$  value  $< 0.001$ ). As discussed previously, multicollinearity and serial autocorrelation were not a significant problem within this model. In the few instances where variables were correlated, such as land area and density, one or more of the variables were omitted from the model. Consequently, adverse and disclaimer of opinions over financial statements were correlated and omitted from models FE-5 and FA-6. Lago-Peñas (2008) notes when using the AR(1) process the hypothesis of autocorrelation may be discarded. As a final measure, the inclusion of time fixed effects did not significantly change results (pp. 229-230).

In model FE-1 the total compliance observation ratio variable was regressed against the change in funding in the next year, but the model found that there was not a strong and significant association between compliance observations and funding levels. The coefficient on the compliance variable is negative and not statistically significant, which indicated that with all other variables held constant for given states the occurrence of a compliance observation tends to

decrease funding proceeds slightly, but this relationship is not significant. Meanwhile, several demographic, economic, and political variables were statistically significant and strongly correlated with funding levels. As expected, there is a very strong observed relationship between funding levels and: population, poverty rates, unemployment rates, median household income, and political power, reflected as the number of house delegates in the majority party. The first model reflects a coefficient of determination  $R^2$  of .88 that suggests a high degree of predictive value. When using federal aid in model FA-2 for the same time period, the results were essentially identical with the same key variables were found to be significant, but not the single audit results factor.

If these models are accepted, a relatively high volume of compliance observations across multiple programs does not appear to impact aggregate funding levels. Models FE-3 through FA-6 suggest neither do unfavorable compliance opinions of major programs nor statewide audit opinions of the financial statements. None of the models provided evidence of a statistically significant relationship between single audit results and federal expenditures or aid. While the significance of key variables in a panel dataset is undoubtedly diminished as observations decrease (as with the final four models), key control variables, such as the unemployment rate, remained significant with nearly all of the models generated. Further, while the  $R^2$  value decreased, such a change in estimated effects is not unusual in lagged-response models since the estimates now have a different interpretation, as the estimated effects of covariates on the response after controlling for the previous response.

As evidenced by the contextual analysis, these models suggest that other determinants play a greater role in the allocation and disbursement of federal aid. In other words, after controlling for socioeconomic factors and political characteristics, all three types of single audit

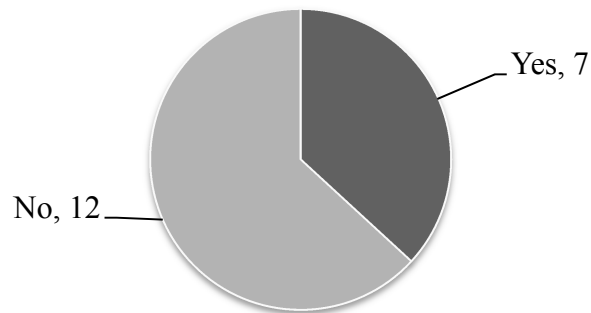
observations generally have a negative impact on federal funding levels; however, none of the independent variables are statistically significant. As a general rule, since funding did not decrease, evaluating the factors that may have contributed to such declines was of limited value since the null hypothesis has not been rejected.

While there was insufficient quantitative evidence to support the claim that information contained within single audit report impacts funding levels, the hypothesis is broadly stated to encompass all forms of reliance. Furthermore, value can be derived by assessing stakeholders' perceptions of the usefulness of the reports and comparing such information to the quantitative results. In order to accommodate this view, interview participants were directly presented with the question of whether the single audit report is used for decision-making purposes. Interview respondents generally felt the single audit reports did not significantly influence funding levels.

As reflected in Figure 18, only seven interview respondents felt that the Single Audit Act had achieved the goal of being used to the maximum extent possible in decision making. In answering this question, many of the respondents expressed confusion over what the legislature intended by inserting the statement "information and audit work is relied upon pursuant to the Act" in the legislation. Respondents also found language embedded within the legislation requiring "the maximum level of reliance" to be ambiguous. For instance, one participant indicated that he or she had not received any training or guidance with regard to how the single audit report was supposed to be used within his or her agency. This same individual questioned "if a state government received a qualified opinion on their financial statements, did this mean that no assurance was provided with regard to all of the major programs?" Despite some confusion over key terms, most participants generally agreed that Congress' primary intent was for single audits to be used by federal officials as a controlling device, which includes denying

support to particular programs or commissioning further analysis into the entity. While this may have been the broadest purpose of the Act, most agreed that the single audits have not lived up to this expectation.

Figure 18: Is the single audit report being relied upon by federal officials?



Of those who indicated “no,” the reasons varied. These participants did not feel that the Single Audit Act was relied on to the maximum extent for a number of different reasons, include that: the work of the auditors performing the single audit reports could not be trusted, the single audit procedures were not detailed enough for program-specific matters or to detect improper payments, and, federal officials do not have the power to actually act upon the findings. In other cases, participants indicated that they had been explicitly told by OMB officials not to rely upon the reports. According to some federal officials, the Office of Management and Budget had explicitly stated that “single audit reports should not be the exclusive source of information used by federal agencies to determine program compliance or influence funding decisions.” Under the prior OMB Director, directives were given which indicated that the reports should also not be used for improper payment test work. Beyond conducting quality reviews on the single audit process, interview respondents suggested that there appears to be little momentum towards

increasing reliance upon the reports. In general, interview respondents provided mixed signals concerning the extent to which federal officials are relying on single audit results.

Quantitative and qualitative data suggests that the single audit reports are not generally being used for funding decisions; however, state governments are still mandated to submit their single audit reports. A logical follow-up question to the aforementioned topic is that if these reports are not being used for funding decisions, what are the implications of an unfavorable single audit report? Respondents identified three potential scenarios that could play out if a state government or agency received unfavorable single audit report findings, in which the entity may be:

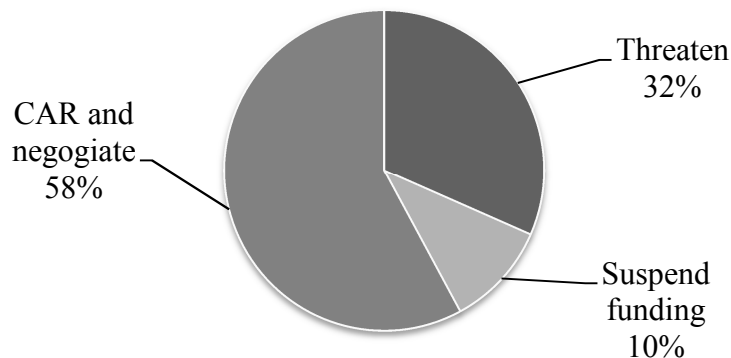
- 1) placed under a corrective action plan and forced to negotiate a solution;
- 2) threatened by the grant officer that their funding could be suspended in future periods; or
- 3) funding could actually be suspended in future periods for specific programs.

Of these three scenarios presented, 58% of participants felt that the most likely scenario would be for the entity or program to be placed under a corrective action plan. After this occurred, state managers would be forced to find specific solutions and report on their progress in meeting these goals. Consequently, this course of action would tend to support the position that federal officials seek a middle-ground path by incrementally seeking a solution with recipients.<sup>68</sup>

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<sup>68</sup> This position also tends to support the theory that the impact of individual findings is typically buried, in terms of overall context, with other findings contained within the report.

Figure 19: What are the consequences of SAA findings?



As reflected in Figure 19, 32% of respondents suggested that grant administrators are usually more “bark than bite” in that they will consistently threaten to suspend funding or engage in other punitive action, but will very rarely act upon those threats. Only a small percentage of participants, 10%, believed the federal government will go so far as to actually suspend funding. One respondent indicated that the notion of suspending is more “wishful thinking than reality” because of constraints imposed on grant administrators with regard to formula-based grants and the underlying belief the single audit reports cannot be relied upon in all cases (a perspective reinforced by the 2007 PCIE report<sup>69</sup>).

In addition to raising concerns about the ability to impose funding restrictions, several respondents also raised concerns in regard to the overall effectiveness of the corrective action report (CAR). As discussed previously, the CAR was believed to be the primary device used to correct problems identified in the single audit report. However, it is unclear whether the CAR activities are resolving the problem in all cases. For instance, one respondent suggested that a child support program had been under a corrective action plan for years, but no remedial measures were undertaken by program managers. The single audit had found that individual

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<sup>69</sup> This study has raised some questions of the respondents that the single audit reports can even be relied upon as being accurate due to professional standards.



claims could not be traced back to supporting documentation and there were adjusting journal entries with no supporting detail representing millions of dollars. According to this respondent, despite these findings, the federal government continued to channel millions of dollars into the program. Consequently, this particular state never had its funding suspended from the federal government due to the impact that such an action may have on vulnerable populations. While the state was eventually fined with regard to the management of this particular program, the cost of implementing a solution, or, in this case, costs associated with implementing a new financial management system, outweighed the cost to the state of simply paying the fee. As a consequence, the state elected to pay the fee year-after-year as opposed to paying for a solution to fix the problem identified in the single audit.<sup>70</sup>

Other individuals presented a more optimistic viewpoint concerning the middle-ground strategy. For instance, one respondent indicated that the federal government's strategy is to "negotiate a plan to try to get most entities to comply with the appropriate corrective action steps. In most cases, this strategy works." Another individual indicated that the sole purpose of the single audit is to simply serve as an "early warning signal," which elevates risk levels for particular entities and leads to further program reviews or OIG/GAO audits. According to this individual, "recapturing payment is the atomic bomb," a tactic that had only been used once with New York City. In light of the general nature of these research findings, the hypothesis is rejected. There is simply insufficient evidence to suggest that overall grant funding levels are impacted by the results contained in single audit reports. The next section focuses in greater depth on the lack of relationship between audit findings and grant funding levels.

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<sup>70</sup> To preserve confidentiality I was unable to obtain confirmation that this example was true, as such the case example should serve as an illustration of what can go wrong, not necessarily viewed as the collective circumstances surrounding this particular event.

*Ho2.a: Unfavorable financial statement opinions do not decrease the total amount of federal aid distributed to states.*

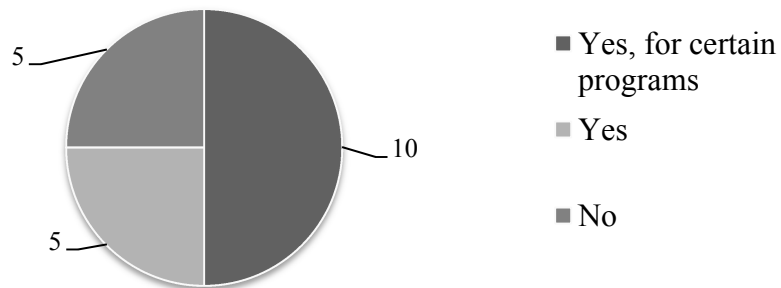
Unfavorable audit opinions at the state government level are a relatively rare occurrence. Between 2001 and 2007, there have only been thirty-nine instances; thirty-six of these cases involved a qualified opinion. Despite the infrequency, it is not uncommon for many states to receive the same unfavorable audit opinion year after year (See Appendix F, Tables 30 and 31). In many cases, unfavorable financial statement opinions relate to particular funds or component units of a state government that have failed to comply with U.S. GAAP. In every case, the deficiency had a material effect on the financial statements. In other words, millions, if not billions, of dollars could not be properly accounted for at the end of the fiscal year.

Despite the potential impact of the financial statement opinion, grant funding levels are rarely reduced at the statewide level. When examining grant funding levels the immediate year following the unfavorable audit opinion it was discovered that during the past ten years funding actually increased in many cases. Of sixteen states that received an unfavorable audit opinion of their financial statements during the ten year period in question, thirteen states (or 82%) received an overall funding increase in constant dollars the immediate year following the financial audit. Alaska, California, and Louisiana were the only states to experience a funding decrease; however, this may be for other reasons beyond the financial statement opinion (see Tables 19 and 20). California, as one example, experienced its funding decline in the year 2005 when federal aid to all states decreased -3.4% when adjusted for inflation. Louisiana's decline occurred as Hurricane Katrina relief funds began phasing out. As such, the descriptive data suggests that unfavorable financial statement opinions do not decrease the total amount of

federal aid distributed to states. Consequently, this research finding was further confirmed after performing regression analysis.

When interview participants were asked whether the financial statement opinion impacts funding levels, interview participants were generally inclined to suggest that the opinion would matter under certain conditions, such as whether the grant officer was managing a discretionary grant program. However, most respondents indicated that it would take a series of unfavorable audit opinions for funding levels to be impacted. One individual who indicated that the audit opinion was not terribly valuable suggested federal managers tend to be more singularly focused on their particular programs; while they may follow-up on individual findings pertaining to a specific grant, there is a general lack of coordination at the federal level for taking a holistic perspective on the state’s overall financial performance. Figure 20 highlights the disparity between participants as to whether the financial statement opinion contained within single audit reports impacted grant funding levels.

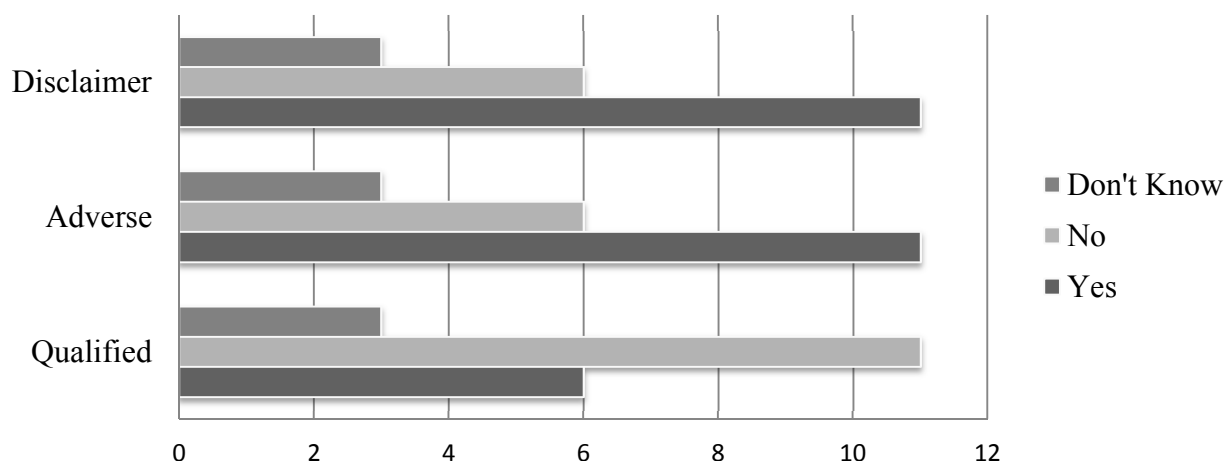
Figure 20: Does financial audit opinion impact funding?



Of those surveyed who believed that the audit opinion does or may have an impact in limited circumstances, the majority of respondents believed that “disclaimer” or “adverse” Single Audit Act independent audit opinions would influence a decision-maker when making funding

determinations more so than a qualified audit opinion. The majority of respondents argued that the “qualified” opinion was not severe enough to influence the officer.

Figure 21: Does the type of SAA audit opinion impact funding levels?



Of those who indicated that the “disclaimer” or “adverse” opinion would play a factor in the decision-making process, many individuals speculated that the probability of a state government, or any government entity, receiving such an opinion would be very low. Of those individuals who felt that a certain type of audit opinion would impact budgetary decisions, some individuals indicated that the size of the entity may play a role. While the Single Audit Act focuses on dollars spent by recipients, some respondents indicated that smaller entities that qualify for the single audit, tend to be overlooked either because they do not meet the standard for being the largest and riskiest for compliance standards testing or because the program is simply more prone to be subject to inferior audit procedures due to complexity.

If the financial statements are not being relied upon, then what sources are being applied in making funding decisions? Respondents suggested that there were several other financial or related reviews that were more influential in making future funding decisions to state governments and agencies than the single audit reports themselves. For instance, one of the most

popular responses was the program reviews conducted by federal agencies. Program reviews may consist of an assortment of activities from risk assessments to interviews, from program evaluations to more in-depth audits than afforded by the single audits. In most cases, these reviews are performed by federal employees; however, state auditors indicated that in a few instances their organizational units had been contracted by a federal agency to conduct a “deep-dive” into programmatic matters using statistical sampling procedures. Respondents cited a number of reasons why these reviews were relied upon over the single audit report, including:

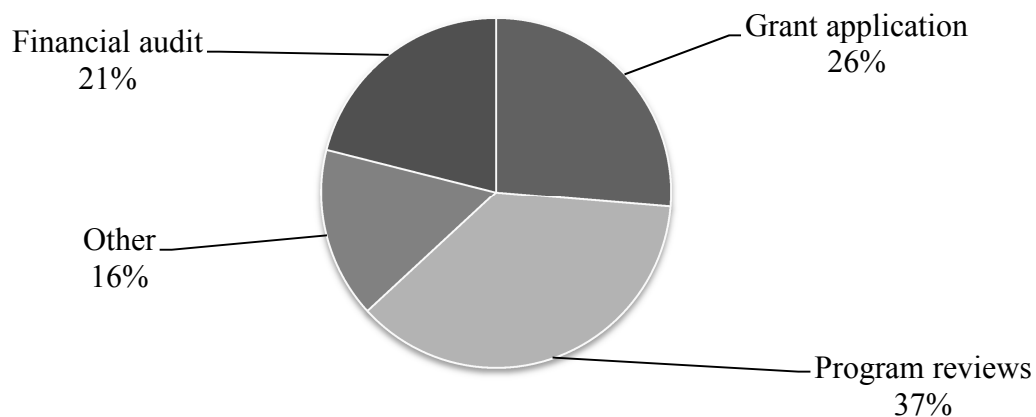
- single audit procedures are not program-specific enough;
- single audit reports are being filed so late they are not timely or relevant (currently, these reports are filed nine months after the program year). Meanwhile, quarterly reporting, such as required under the Recovery Act, provides more relevant information;
- single audit reports’ inherent value does not relate to specific program compliance matters, but rather in identifying material weaknesses in internal control, as well as evaluating the overall financial health and well-being of an entity.

In addition to the programmatic reviews, other sources of information that were also identified as being more useful to individuals include: bond ratings; budgets; and statistical reports.

In general, respondents’ highlighted four broad categories of information relied upon by grant officers for making funding decisions: grant applications, financial audits, program reviews, and other sources of information. As reflected in Figure 22, the majority of respondents, 37%, indicated that reviews conducted after the submission of the single audit or

Performance and Accountability Report (PAR)<sup>71</sup> was the single most important factor in allocating discretionary awards. Only 21% of respondents indicated that reliance is substantially placed on the results contained within the Single Audit Act. Meanwhile, 26% of respondents indicated that federal officials primarily rely upon the content and merits of a proposed project or program as furnished in an applicant’s grant application. A small number of respondents noted that risk assessments<sup>72</sup>, a type of program review, were particularly useful. Remaining respondents indicated that “other” factors, such as reputation, lobbying power, or peer reviews, were more important factors in the funding process. A small percentage of respondents did not know what types of information were relied upon in making funding decisions. Given the collective body of findings, the null hypothesis is not rejected.

Figure 22: What resources are relied upon to allocate discretionary funding?



<sup>71</sup> As a compliance measure, Federal agencies issue their performance and accountability report annually within 45 days after the federal fiscal year end to the OMB. In order to fulfill this requirement, Federal agencies request non-federal entities to channel information through their agencies.

<sup>72</sup> One example of a risk assessment would be a student loan program that took a statistical sample of eligible clients within a number of schools to determine whether schools and lenders were complying with rules and regulations. The idea behind such an undertaking is that the information can be eventually applied to the broader universe to determine error rates within the population at-large. The risk assessment exercise varies from an audit in that a smaller sample is typically being drawn and may only evaluate a select number of programs. It is important to note that many respondents who relied upon program reviews indicated audits were not useful, but they were helpful in identifying instances of fraud, waste, and abuse.

*Ho2.b: Unfavorable single audit opinions on major program compliance do not impact future funding levels of these same grant programs.*

In Chapter Four, the relationship between audit opinions and internal controls of major programs, as well as states' abilities to meet compliance requirements, was explored in greater depth. In addressing the research hypothesis, this section explores the results of the descriptive analysis in the context of interview findings. As discussed previously, major program compliance is assessed at two levels. First, an auditor assesses each major program for compliance with one or more of the fourteen compliance standards that are applicable to the entity. Then, the single auditor makes an overall assessment of the major program's system of internal controls in meeting the aforementioned compliance criteria. In other words, failure to comply with a specific compliance element does not always result in an unfavorable compliance opinion for the program at-large. This fact becomes readily apparent when evaluating the frequency of particular single audit observations.

When focusing on compliance violations in the aggregate and their relationship to federal aid to states, it was found that they only occur in twelve percent of instances. Moreover, some state auditors are much more likely to disclose compliance deficiencies than others; therefore, this figure may be higher or lower from state to state, regardless of state size. When examining a given grant program that has experienced one or more compliance violations, there is no clear pattern indicating that negative consequences will necessarily ensue. In the case of the timeframe evaluated, only three percent of grants to states were discontinued after a compliance observation had been made in prior years. Not only is there a low risk of the grant being suspended, there exists a 44% probability that funding will increase in subsequent years despite

the compliance observation. While funding declined in 56%, there is insufficient evidence to suggest that this is merely the result of a compliance audit finding.

The quantitative analysis also revealed that of the fourteen compliance provisions, the most common violation is allowable cost, which occurred over 27,725 times over the ten year period. In fact, 20% of all compliance observations related to allowable costs. Over 50% of the compliance observations related to sub-recipient monitoring, reporting, procurement, cash management, matching, level of effort, and earmarking; each of which represented about ten percent of the total cases. Equipment and real property, special tests, period of availability of funds, program income, activities allowed and unallowed, eligibility, and the Davis-Bacon Act issues are less common. Over the past ten years, there were only thirty-three cases of real property acquisition and relocation violations, which represented the least likely violation (see Table 15: Findings by Compliance Requirement). Given the fact there is a wide range of disparity in the frequency of compliance violations across categories, one might expect to find funding levels of certain programs disproportionately impacted by a particular compliance matters to be reduced, but this was generally not the case. However, the quantitative analysis did suggest that some compliance requirements were more prone to violation. One might infer that these same elements are relied upon to a greater extent by federal officials.

To determine whether the frequency of compliance element violations were consistent with stakeholders' perceptions and whether any of the elements would impact funding, research participants were asked whether particular compliance elements were more valuable than others. While the compliance data revealed only limited evidence that compliance factors are taken into account when making funding decisions, interview respondents had greater faith in the impact of



compliance violations.<sup>73</sup> Of the fourteen single audit compliance requirements, participants believed that there are specific requirements that are relied upon to a greater extent in awarding or limiting funds to sub-recipients. In responding to the question, several individuals indicated that their response was based on mere “speculation” since the requirements may vary significantly from program to program. In one or more instances, half of the fourteen compliance standards were perceived to be relied upon in the budget-making process. However, as reflected in Figure 23, a majority of respondents agreed that four of the compliance standards, reporting, cash management, eligibility, and allowable costs, tend to impact funding levels more so than others.<sup>74</sup>

When comparing compliance elements of high interest to the frequency of compliance findings, evidence shows that “reporting” is deemed both valuable and frequently found to be non-compliant (ranked 3<sup>rd</sup>). Allowable cost, which is the most common compliance requirement violated, is also highly valued by the interview participants. Meanwhile, some factors are rarely found to be non-compliant and are not valued by participants, such as real property acquisition and relocation assistance and program income. Figure 23 reflects elements deemed influential.

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<sup>73</sup> Some of this confidence can be explained by the way the question was framed. Interview respondents were asked “if we assume compliance elements impact funding decisions, which factors would have the greatest impact?”

<sup>74</sup>As discussed in Chapter 3, these compliance standards are defined as follows:

**B. Allowable Costs/Cost Principles** – The amounts were for allowable activities and charges that were reasonable, allowable, and allocable under the administrative requirements and grant agreement.

**C. Cash Management** – The non-federal entity followed procedures to minimize the time elapsing between the transfer of funds from the U.S. Treasury, or pass-through entity, and their disbursement.

**E. Eligibility** – The records show that those who received services or benefits, either directly or on behalf of someone else, were eligible to receive them—the right amount, person, purpose, and time.

**L. Reporting** – Federal financial reports are accurate and include all activity of the reporting period, are supported by applicable accounting records, and are fairly presented in accordance with program requirements.

Figure 23: Which provisions impact funding levels?

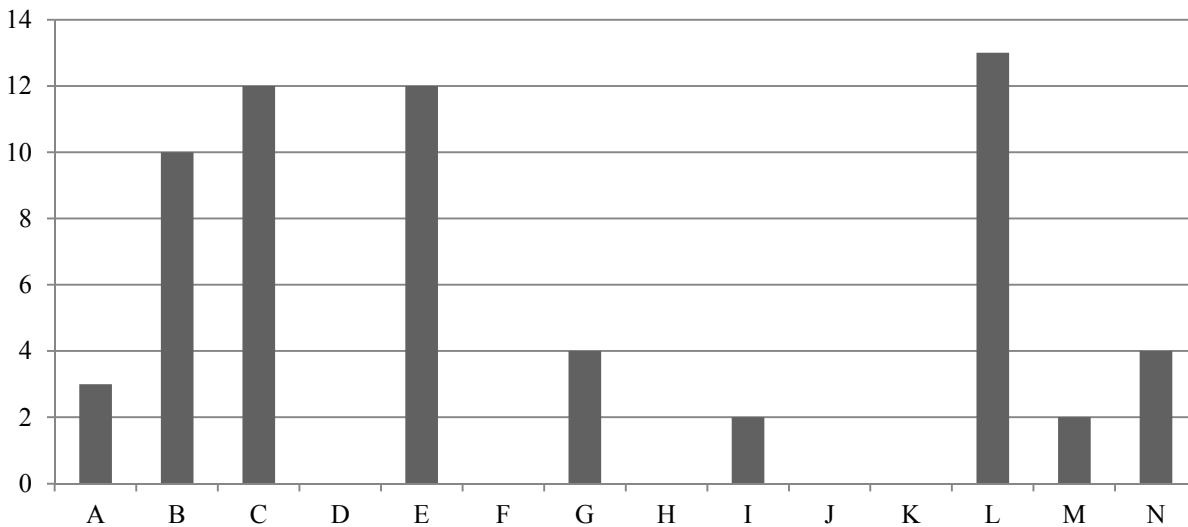


Table 28: Rank order: Non-compliance would impact funding level

<b>Compliance Finding</b>	<b>Yes</b>
<b>L: Reporting*</b>	13
<b>C: Cash Management (Tied)</b>	12
<b>E: Eligibility (Tied)*</b>	12
<b>B: Allowable Costs</b>	10
<b>G: Matching, level of effort, earmarking (Tied)*</b>	4
<b>N: Special Tests*</b>	4
<b>A: Activities allowed and unallowed*</b>	3
<b>M: Sub-recipient monitoring</b>	2
<b>I: Procurement</b>	2
<b>D: Davis Bacon Act</b>	0
<b>F: Equipment and real property management</b>	0
<b>H: Period of availability of funds</b>	0
<b>J: Program Income</b>	0
<b>K: Real property acquisition &amp; relocation assistance</b>	0

\* *Specific compliance standards, all others considered general.*

While matching, special tests, and allowable activities were found to be important by some individuals, others were less inclined to indicate that these measures had as great of an impact because they did not apply to all programs. Special tests, as one example, apply to the unique requirements found in the laws, regulations, and the provisions of contract or grant agreements pertaining to the program that could have a direct and material effect on a major program. In some cases, test work under this requirement is not needed. In the case of the

matching requirement, not all federal grants come with matching provisions. As such, test work under this scenario may not be warranted under many circumstances. Depending on the specific program that each interviewee was responsible for and requirements associated with that program, their responses could vary widely.

While the previous compliance measures were believed to have an impact, certain compliance standards were not perceived to impact funding decisions at all. For instance, no respondents suggested that the following compliance measures would be impactful: the Davis Bacon Act, equipment and real property management, period of availability of funds, program income, or real property acquisition and relocation assistance. While some individuals argued that the measures were simply not that important, most of the respondents felt that the failure to comply within these areas is so infrequent that those areas are simply not viewed as a significant area of concern for federal officials.<sup>75</sup>

While compliance audit opinion data has only been tracked within the FAC during the past four years, funding trends following unfavorable major program compliance opinions are clearly mixed. As a general rule, major programs that receive a qualified, adverse, or disclaimer of opinion have approximately a 50-70% chance that their funding will increase in future periods. This principle applies to formula and project-based grants. Only on rare occasions will the grant program be discontinued. In those circumstances where funding has declined, it is unclear whether the decline is the result of other socio-economic or political factors. The results of the panel data analysis suggest that there is not a relationship between the quantity of

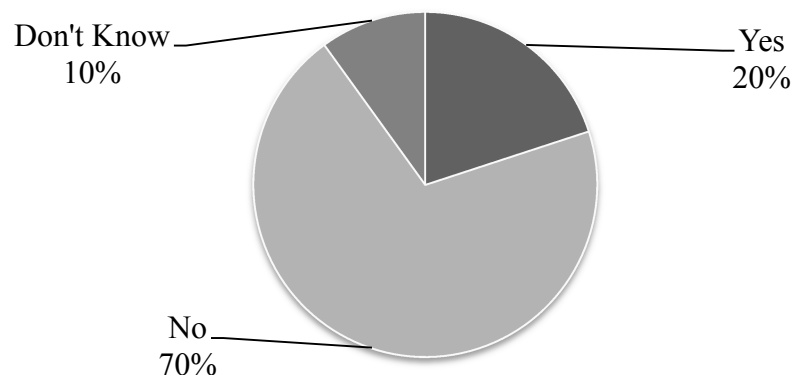
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<sup>75</sup> Although these compliance areas were not considered useful during the period in question (1997-2008), a couple of respondents indicated that certain compliance areas, such as Davis-Bacon Act, will be considered more important under the American Recovery and Reinvestment Act (ARRA) grant programs and will receive a higher degree of scrutiny in future periods.

unfavorable audit opinions received by an entity and its overall grant funding levels in future periods.

When presented with the question of whether compliance audit opinions matter, the majority of respondents indicated that the soundness of the internal control structure of a major program, as opined to in the single audit report, plays a role in the decision-making process, but that other sources of information outweigh this factor. Consequently, when these same individuals were asked whether the federal agencies rely on internal control assessments contained in single audit reports to make funding decisions, the answer remained unequivocally “no.” Seventy percent of the respondents indicated that the integrity of the internal control system, as opined to within the single audit report, does not impact the amount of funding made to state governments, particularly with regard to formula-based grants. Meanwhile, 20% indicated that it does impact funding levels and 10% did not know whether the opinion had an impact.

Figure 24: Do single audit internal control opinions impact funding?



Of those who indicated that it did not have an impact on funding levels, 60% indicated that the opinion would have other implications on monitoring activities. For example, such an opinion may move the state program into a higher-risk category for monitoring activities. One

respondent indicated that in regard to formula-based or entitlement grants, “the money has to go to the state regardless of their system of internal controls because there is no legally or politically appropriate way in which you could restrict funding.” In light of the collective body of findings, the null hypothesis is not rejected.

### **Chapter Summary**

While the Single Audit Act has led to many improvements in governmental auditing practices since its enactment, the quantitative and qualitative results of this study suggests that additional opportunities for improvement exist. The Single Audit Act results across state governments are not necessarily uniform. Such failure to generate consistent results has and will continue to undermine the overall usefulness of these reports. Meanwhile, this study also found that there do not appear to be severe consequences when a state government receives unfavorable audit findings, particularly as this relates to future funding.

## **Chapter 6: Summary**

### **Introduction**

The previous sections explained how unfavorable single audit report observations are not uniform and do not have a significant impact on funding allocations. This conclusion was based on an examination of more than 400,000 unique single audit evaluations of grants, as well as interviews of stakeholders involved with the single audit process. The purpose of this chapter is to explore the implications of these research findings for scholars and practitioners.

### **Research Implications for Scholars**

This study makes a notable contribution to the existing body of research on this topic. Until now, few studies have examined the pattern of audit findings or the relationship between funding levels and single audit reports. By utilizing information contained within the FAC from the past ten years, this study expands the number of objective observations being utilized to assess the effectiveness of the Single Audit Act. Previous studies either exclusively relied upon a small sample of single audit reports or survey data for the purpose of arriving at research conclusions. A few studies have compared single audit results and government aid within local governments and non-profit organizations. However, this study is also unique in its focus on state governments, which permitted more effective control of political, institutional, and economic factors.

Second, this study is among a small handful of studies that has evaluated the Single Audit Act since the measure was amended in 1996, particularly at the state level. Recent budgetary challenges have made this study highly relevant. Each year state governments receive over \$400 billion dollars in aid from the federal government; this intergovernmental revenue supports millions of state employees, subsidizes numerous social programs, and has a significant

economic multiplier effect within the local region. While the positive impact of federal funding is profound, this resource is not infinite. In 2011, the federal government grappled with a 1.5 trillion dollar deficit and over 13 trillion dollar debt. During the 2011 Congressional session, lawmakers have proposed significant cuts in discretionary spending programs. The ability for the federal government to effectively target funding to those in need and those entities that can most effectively manage the federal aid will be a critical step in balancing the budget. If the single audit process can become more uniform and targeted, the activity may prove more useful in solving the United States' budget deficit and debt crisis.

A third and final distinction of this study was the use of the incremental versus principal agent theory. In developing the research hypotheses of this study, an assumption was made that the promulgation of uniform audit standards would lead to similar audit results across states. Also, federal officials would be inclined to restrict federal aid in future periods if unfavorable single audit observations were recurring. Principal-agent literature suggests that institutional controls would be established to manage outcomes. If these controls fail, the literature suggests that the principal, who are grant officers in this case, would engage in punitive action, such as restrict federal aid. However, the findings related to all seven research hypotheses suggested the contrary.

The findings of this study suggest that the principal-agent theory may lack a high predictive value when applied to the single audit process. Meanwhile, incrementalism tends to better explain the dynamics of this study. For instance, it appears that both auditors and federal officials “muddle-through” the single audit process, perhaps due to insufficient guidance or training, as evidenced by the lack of audit uniformity. Further, federal aid to states (in constant dollars) rarely appears to increase or decrease beyond the realm of 5-10% (see Table 17)

regardless of the outcome of single audit observations.

### *Implications for Democratic Theory*

Under a democratic theory framework, recipients of federal aid are accountable to citizens. Accountability can be generally understood as a system that requires elected officials to justify their actions. The term reflects a state of being within a governmental entity. While several objectives are specified under the Single Audit Act, the measure is primarily a tool used for proving federal aid is being spent as intended by Congress. The detailed system of debits and credits provide assurance information is accurate, consistent, and relevant; meanwhile, compliance test work ensures that laws and regulations are being adhered to. As such, the Act serves as a device political leadership uses to demonstrate they are being responsible with the public's resources. This standard or expectation is an enduring tradition within the United States.

There is an inextricable link between public accountability measures and our nation's long-standing distrust in absolute rule<sup>76</sup>. The very "concept of accountability in America is historically rooted in Anglo-Saxon values and distrust of authority" (Adair and Simmons, Summer 1998, p. 91). The American founding fathers were concerned with preserving the public trust to avoid replicating the capricious rule of the British Crown, particularly with regard to how resources were acquired and used by the government in a non-transparent fashion. Previts and Merino (1998) note these concerns are evidenced by the early accounting controls established during the Colonial era (p. 28-29). Consequently, these same leaders took great aims to ensure that it was one of the philosophical pillars of the new nation. If financial controls were

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<sup>76</sup> Americans' earliest conceptions of accountability trace as far back as the Classical Age. In the *Apology*, Plato discussed how the leaders of the first democratic city-state, Athens, had a moral obligation not to damage the fabric of social law and order deliberately in pursuit of self-interest. Aristotle held similar views that democracy was among the best forms of government because it emphasized equality, liberty, and accountability through majority rule (Saunders, 1981, p. 47). These underlying values would transcend the ancient Roman Republic, were awakened during the European Renaissance, and were to be tested in the New World by America's founding fathers.



absent in the new nation of America, the underlying fear was that “public monies that could otherwise help intended beneficiaries” (Berek and Shetterly, p. 113) would be misappropriated.

American founders’ perceptions of accountability played an important role in the design of institutions and control of bureaucracies. James Madison, as one example, has been often quoted “if men were angels, no government would be necessary” (Federalist Paper No. 51, 1788, Online). In Federalist Paper No. 57, James Madison (1788) elaborated on this phrase:

The aim of every political constitution is... first, to obtain for rulers those who possess most wisdom to discern, and most virtue to pursue, the common good of the society; and in the next place, to take the most effectual precautions for keeping them virtuous whilst they continue to hold their public trust.

Madison argued that there must be a proper balance struck between the powers of the state and tyranny. As such, many of the fiscal controls in place, including the appropriations process, are a reflection of original checks and balances discussed in the *Federalist Papers* (Wildavsky and Caiden, p. 13).

Caldwell (1988) notes Federalist and Anti-Federalists debates of upholding accountability are exemplified by the administrative theories advanced by Alexander Hamilton and Thomas Jefferson. Hamilton, a Federalist, not only advocated a strong administrative apparatus but also emphasized the importance of public officials upholding the legal requirements of the office (p. 29). Hamilton encouraged and tolerated a higher degree of discretion to be exercised by public officials in pursuit of the national interest (pp. 33-138). Meanwhile, Jefferson argued accountability was best demonstrated through the controls imposed on central government authority. Underlying this philosophical orientation, Jefferson held the strong belief that the American people had the right to conduct “their affairs to their mutual well-being without the undue aid or interference of self-constituted or even publicly constituted authority” (Caldwell, p. 106).

While Hamilton's administrative principles were formulated to affect the unitary, policy-making administrative system which he hoped America would adopt. Jefferson's principles described the rules by which administrators ought to be guided by in the pluralistic system of government to which America adhered. (Caldwell, p. 129)

Jefferson forcefully argued the most effective method to demonstrate accountability was to temper public extravagance and corruption.

From a historical perspective, early conceptions and institutional concerns over accountability stood front and center in the drafting of the United States Constitution. In fact, these early notions that the public should be empowered to hold the government accountable became a hallmark of American democracy itself. Tocqueville observed several distinctions between aristocratic Europe and America. "An essential spirit of American democracy, for Tocqueville, is reflected in a system of democratic administration organized primarily by principles of voluntary association and of self-government" (Ostrom, 1989, p.83). In other words, democratic institutions in America were distinct in their capacity to advance prosperity in society despite human self-interest. More recent research into international affairs suggests that accountability continues to be central to democratic society in America. Wesberry (1992) notes a key distinction between Latin American countries, where there exists a deep distrust in government due to corruption, and America appears to be the well-established value of public accountability, a "term which cannot even be translated directly into Spanish or Portuguese" (p. 62).

In Harris' (2005) survey of governmental accounting and auditing standards, he notes that "although not sufficient to establish public accountability, they are tools that are necessary in modern nation-states to establish public accountability" (p. 155). Despite the significance of the Act, this study suggests notable opportunities exist to enhance audit uniformity as well as efforts

to make single audit reports more useful to federal officials. From a democratic theory standpoint, these findings have important implications on our leaders' ability to uphold accountability principles. First, the development of sound public policy relies upon the:

Enlightenment, the fuller development of individuals in society, and the development of consent, consensus, social awareness and legitimacy, rather than simply the delivery of goods and services... some of the most important developments in public policy have taken place in the realm of the personal, through the increasing use of modes of evaluation and audit which aim to improve accountability via policing, controlling, and quantifying human relationships and activities. (Parsons, p. 613-614)

In the absence of an effective audit process, misinformation and abuse may thrive. Under this environment, the transmission of knowledge and democratic skill building are severely constrained.

Another challenge, offered by Vincent Ostrom, relates to the Single Audit Act's potential limitation in advancing democratic administration. Drawing upon the works of Madison, Wilson, Weber, Tocqueville, Ostrom argues that "restriction of power" (p. 78) and "legislative surveillance" (p. 82) are core principles of self-government as well as democratic administration.

Success depends on knowledge of both the capabilities and limitations of diverse organizational forms, which can be used to minimize the power of command and yield services to enhance the welfare of people. (Ostrom, 1989, p. 115)

Ostrom argues that by strictly following the administrative protocols of the bureaucracy, officials' run the risk of overlooking important steps in the democratic process. It is unclear whether repetitive audit procedures that lead to audit results controlled, tempered, and silenced by technocrats effectively engages the public or results in optimal resource allocation<sup>77</sup>.

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<sup>77</sup> Given these rigid bureaucratic routines, Osborne and Gaebler (1992) note that legitimate questions may arise concerning whether blindly following a particular practice because it has "always been done that way" is hindering an organization from becoming mission-driven. Citing Peter Drucker, who once noted that 'control of the last ten percent of phenomena always costs more than control of the first ninety percent,' Osborne and Gaebler explain that it is simply not practical to attempt to root out all forms of corruption (p.137). A balance must be struck concerning the proper scope of work activities because not every action contributes equally to the outcome.

As highlighted in Chapters 4 and 5, federal aid to state governments does not appear to be significantly influenced by the information contained within the single audit reports. At both a state-wide and program level, there are numerous examples of egregious violations to either accounting standards or laws and regulations that seemingly go unanswered by the federal grant officer or Congress. Appendix F details specific grant programs that had received adverse or disclaimer of single audit opinions (in some cases, across multiple years); nonetheless, funding continued to increase in subsequent periods notwithstanding such violations. Brooks and Pariser (1995) acknowledge “there is a need for additional research regarding audit follow-up systems and their implementation at all levels of government” (p. 82) to further advance accountability over government operations.

One interview participant discussed a situation whereby federal monies continued to be channeled to a large program in California year-after-year despite a recurring significant deficiency in the program’s accounting system detected through the single audit process. While federal officials did impose a nominal fine on the State, this interview respondent suggested accountability over the millions of dollars had not been achieved. The respondent questioned, “why not fix the problem before distributing additional aid?” As another interview participant indicated, accountability is not the only value of the federal administrator. Protecting vulnerable populations or achieving some specific policy goal may be just as important as ensuring every penny is accounted for.

While this study identifies potential flaws in the single audit process, a legitimate question remains whether the proper type of accountability is being advanced under the measure. Despite this general concept of the term, GASB has acknowledged that “the term accountability is used extensively... but suffers from imprecise meaning” (GASB, Concept Statement # 1, par.

80, Online)<sup>78</sup>. For instance, accountability in early part of the 20<sup>th</sup> century focused on limiting bureaucratic discretion through formal procedures, monitoring, and enforcement activities. The system was fundamentally reliant upon tightly drawn rules and regulations in a formal chain of command with sufficient supervision and oversight by higher authorities. As a compliance measure, the Single Audit Act is largely inspired by this school of thought. In her work *Policy Paradox*, Stone (2002) argues that policy decisions in the polis should be driven by other democratic values, such as equity, efficiency, security, liberty, and community. In practice, the Act does little to address social and economic goals, particularly when it is not being effectively leveraged within the federal bureaucracy.

#### *Comparison to Prior Research*

While this study is unique in its approach to evaluating the second and fourth stated objectives of the Single Audit Act, the results are generally consistent with the few studies focused on similar topical areas. While most studies dealing with the single audit have focused on how to improve the single audit process or the integrity of recipients' financial management systems attested to under the Act, some studies have also focused on federal officials' perceptions concerning the usefulness of single audit reports. Furthermore, a couple of studies have also explored the potential impact of using public versus private auditors.

For example, Cutler (1995) argued that federal officials cannot rely upon single audit results because the auditors conducting the audits do not possess sufficient technical knowledge. He attributes the shortcomings of the single auditor to the following limitations: inadequate time to review the broad spectrum of services offered by the program, inadequate coverage of audit requirements, and an insufficient examination of the role data processing systems play in the

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<sup>78</sup> This reality has hindered the organization's effort to require information necessary for achieving higher levels of 'accountability' through service efforts and accomplishment reporting standards, as one example (Patton, p. 165).

internal control structure. This study tends to support Cutler's assertion that cognitive limitations among auditors leads to non-uniformity in audit results.

Uehling (1991) also evaluated Federal officials' perceptions of the usefulness of the Single Audit Act. He found that single audit reports are of limited value due to generalized reporting, the absence of meaningful audit findings, distinctions in fiscal years between the states and federal government, including some cases in which distinctions between the auditees' program year and fiscal year, and inadequate audit testing of federal laws and regulations over non-major programs. He concludes that federal officials do not rely upon single audit reports to the maximum extent possible, which may explain why these reports are generally not used for funding decisions.

This study also observed differences in the number of audit observations detected by public versus private auditors. This observation is similar to the findings published previously (Engstrom & Reding, 1992; Jakubowski, 1995; Jakubowski, et al. 2002). Jakubowski (1995) finds that "state auditors reported significantly more material control weaknesses than both large and small CPA firms" (p. 69). He suggests this may be due, in part, to the fact that private entities are reluctant to issue highly critical audits in an effort to retain the client, whereas state auditors will conduct the audit regardless of prior year audit findings. Further, Copley and Doucet (1993) conclude that audit quality suffers when the auditor has an incentive to limit the amount of audit testing to assure that the engagement remains profitable. The findings of this study may support this theory. Keating, et al. (2005) also find significant variation in SAA observations across multiple criteria, including: organizational size, type of auditor, and functional area. Meanwhile, the probability of qualified, adverse, and disclaimer of opinions

appear to be similar across governmental and NGO entities<sup>79</sup>.

### *Research Limitations*

In conducting this research, a number of constraints were present. First, the Federal Audit Clearinghouse (FAC) reflects federal expenditures instead of federal aid, as reported in the U.S. Census Bureau's report *Federal Aid to the States*. Due to timing and measurement differences, these two sources of data are difficult to reconcile.<sup>80</sup> To overcome this challenge, regression models were performed using both federal expenditures and federal aid. Using both data sources, the conclusions remained the same.

Another limitation of this study was the reliance upon the integrity and accuracy of data contained within the FAC. Since information is keyed in at the state level by different people at varying points in time, this leads to inconsistencies in naming conventions and potential data entry errors. In about 40% of cases, spending by CFDA number could not be traced to grant type. These data entry errors were highlighted in a GAO report in which auditors identified several errors and discrepancies when matching single audit report information with the information contained in Inspector General's summary reports. This study estimated a 7-10% error rate in the database or approximately 1,800 reports (Government Accounting Office, 2000, 14).<sup>81</sup> Another complication is that the FAC includes many different types of grants<sup>82</sup>, which

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<sup>79</sup> Both this study and Keating, et al. study found that approximately 95% of unfavorable audit opinions are qualified.

<sup>80</sup> Depending on the terms of a grant agreement, a state may be permitted to spend a given award over the course of a number of years; therefore, the amount of money received by a state in a given year is not directly correlated with the amount that the state would be expected to expend. Additionally, the Federal Aid to the States report consists of different types of aid, such as: direct cash grants to state or local government units, payments for grants-in-kind, such as purchases of commodities distributed to state or local government institutions (e.g., school lunch and breakfast programs), payments to nongovernment entities when such payments result in cash or in-kind services passed on to state or local governments, payments to regional commissions and organizations that are redistributed to the state or local level, federal government payments to state and local governments for research and development that is an integral part of the provision of public services, federal revenues shared with state and local governments.

<sup>81</sup> Given the aforementioned challenges, disaggregating spending contained in the database was complex, and determining the portion of federal expenditure that was grant versus loan was difficult to discern.

complicated the coding exercise for hybrid grants. Further, state fiscal years may vary from one state to another and do not always coincide with the federal fiscal year. To remedy these problems a preliminary survey of the data was conducted. Grants that could not be classified were categorized as unknown.

Another limitation of the dataset was the inability, in a limited number of cases, to readily identify state governments through a unique identifier. Michigan, Hawaii, and New Mexico were omitted from analysis for this reason. In some cases, states were late adopters in submitting results to the FAC. To correct for this problem these states were omitted from the balanced dataset used for regression analysis. However, this did have the effect of reducing the total number of observations. The fact funding levels were examined at an aggregate level for the purpose of conducting the regression analysis may have led to different results than running the same analysis on a grant-by-grant basis. As such, it is possible that the time period examined in this study may not have been ample or a sample size large enough to support the research conclusions derived from this study.

#### *Suggestions for Further Research*

While this study relied upon information available within the FAC, the Single Audit Act has been in effect since 1984. One could recode findings from the period 1984 through 1996. Once this action had been undertaken, an individual could conduct a pre-and-post test of the overall effectiveness of the amended version of the 1996 Act. With regard to the current data set, an individual could further examine how Single Audit Act observations are impacted depending upon the nature or structure of the grant (e.g., project versus formula based grants).

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<sup>82</sup> Including: project grants, formula grants, cooperative agreements, direct payments for a specified use, dissemination of technical information, provision of specialized services, advisory services and counseling, guaranteed/insured loans, direct loans, training grants, direct payments with unrestricted use, insurance, investigation of complaints, sale exchange or donation of property or goods, use of property facilities or equipment, and federal employment grants.



Using the grant name or deciphering the intent behind the CFDA number, a person could recode approximately 200,000 grants in an effort to better understand whether the conclusions of this research remain consistent across different types of grants through the use of a stratified regression analysis.

Additional study is warranted into why principal-agent theory did not appear to have a high degree of explanatory power over the single audit process. In addressing this question, a researcher could apply different research methods. Focusing on the communication channels across the federalist system may prove useful. For instance, the extent of coordination that occurs between various key stakeholders, such as cognizant agencies, federal agencies, the FAC, the OIG, and the GAO, with regard to single audit reports is unclear at this point. It is also unclear how single audit reports are being interpreted by employees. One may want to focus on whether key stakeholders are even aware of what entities are deemed as high risk or which entities should have their funding suspended? Alternative theories, such as fiscal federalism or public accountability, could also be employed to determine whether they more effectively predict decision-making patterns under the single audit process.

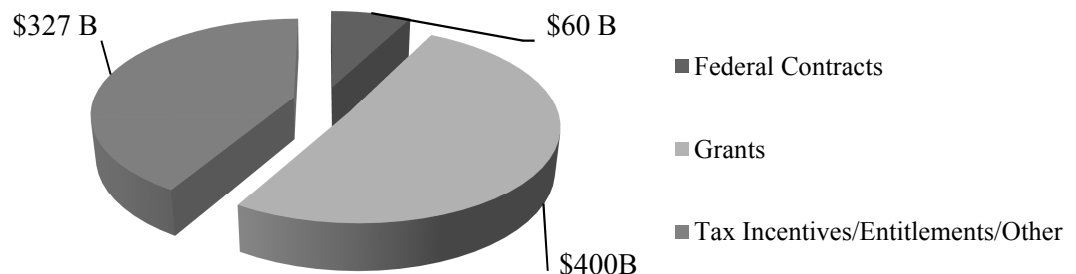
In addition to more broad questions previously identified, several narrowly targeted questions could serve as a basis for further research including: How can the quality of the single audits improve? What funding mechanism should be used for the single audit process? Are the results of this study able to be generalized to local government and non-profit entities? What can be done to standardize the single audit process? How can single audit reports be designed to be more useful for federal budget decision-makers? What improvements could be made to the FAC in order to improve transparency and accountability demands of the public? Does time impact audit quality?

## Research Implications for Practitioners

Based on interviews with participants and the findings of this study, a number of potential recommendations have been generated for practitioner consideration. Results of this research show that the single audit has been only moderately successful in achieving two of its stated goals. Improvements need to be made to the uniformity of audit practices and the extent of reliance on single audit reports at the federal level. Further, this study has immediate implications for the largest fiscal stimulus programs being managed within the United States.

On February 17<sup>th</sup>, 2009, President Barack Obama signed into law the American Recovery and Reinvestment Act (ARRA or Recovery Act). With the enactment of the Recovery Act, a major portion of this \$787 billion dollar fiscal stimulus package was allocated as federal grants to states in attempt to close historic budget shortfalls (see \$400 billion in Chart 1). In launching this ambitious economic revitalization effort, President Obama demanded “vigorous oversight and strict accountability for achieving results” (Rochelson, Online).<sup>83</sup>

Figure 25: Breakdown of ARRA by Funding Priorities



Source: Wall Street Journal (2008)

As the executive-level financial management coordinator, the Office of Management and Budget (OMB) has been charged with overseeing and promulgating rules associated with the collection of recipient and sub-recipient ARRA data to be ultimately submitted to Recovery.gov.

<sup>83</sup> Under the provisions of Section 1526 of ARRA, Recovery.gov has been launched to provide accountability information, “including findings from audits, inspectors general, and the Government Accountability Office” (111<sup>th</sup> Congress, Section 1526).

Recent updates to A-133 compliance supplement have indicated that the “single audit process will be a key factor in the achievement of accountability” (OMB A-133 Compliance Supplement- Appendix IIV, p. 1) over both the use of funds and identifying potentially fraudulent activity. Several scholars have published materials on the potential implications of ARRA for the audit community (e.g., Manning, 2010; Hayes, 2009). According to these articles, renewed emphasis will be placed on particular single audit compliance requirements, auditors will need to test the proper segregation of funds, and a greater emphasis will be placed on evaluating internal controls and report timeliness. Schmutte and Duncan (2010) propose an audit risk model that among other factors highlights the impact of ARRA on A-133 audits. Based on recent guidance and scholarship in this area, it appears that the White House would like to use the Single Audit Act (SAA) as a key tool for promoting accountability over the use Recovery Act funds. However, interview participants of this study were mixed on whether the Obama administration’s goal would be sufficiently met.

While most interview participants agreed that there has been much stronger language around transparency and accountability under the Recovery Act, several individuals did not believe this threatening rhetoric would have real implications on how future grant awards would be made. Many individuals suspected that federal officials would be more inclined to make threats than to actually act upon those threats. One respondent pessimistically indicated that ARRA transparency is more about “huffing and puffing than anything else.” Another individual pointed out that the major point of ARRA is to get “money out into the economy, not to ensure that all expenditures are valid.” As such, federal officials are not going to be inclined to take the money back that was supposed to be used to stimulate the economy once the two year program

period expires. Consequently, this observation is consistent with historical spending patterns outlined in this study.<sup>84</sup>

### *Recommendations for Improving the Single Audit Process*

In an effort to enhance the single audit process, there are a number of recommendations for policy makers and practitioners being proposed. These recommendations, which were informed by the findings of this study, are arranged in the order of broad topical areas. In developing these recommendations, similar proposals made by other research groups have been integrated. For instance, on June 4<sup>th</sup>, 2010, President Obama issued Executive Order 13520-Reducing Improper Payments. Section 4(b) of the Executive Order charged a workgroup to develop recommendations to improve the effectiveness of single audits and reduce improper payments. The workgroup, which consisted of a wide range of experts at the federal/state government level and professional organizations, developed over nineteen recommendations. As such, several of the recommendations of this workgroup have been integrated into the five major recommendations presented in this section.

#### *1) Promote Audit Uniformity through Targeted Audit Tests*

One of the conclusions of the President's workgroup was that the single audit process needs to be more targeted in nature (Workgroup, pp. 23-29). In this study, several interview participants expressed concern over different audit standards being applied to non-federal entities of a different size or nature. Based on discussions with interview participants and review of existing literature, evaluation of internal controls is clearly deemed among the most important components derived from the single audit process. By focusing the single audit scope on states'

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<sup>84</sup> If the federal government continues to operate under historical precedent, the results of this study tend to confirm the argument the grant officers may threaten or attempt to embarrass recipients (using Recovery.org website), but will not necessarily be inclined to recapture public funds or restrict federal aid in future periods.

internal control system, this may help target audit resources. The results of this study suggest that standardizing and tailoring procedures around complex programs would make single audit reports more useful. Further, the workgroup suggested that increasing the audit threshold by using a tiered approach to focus the more rigorous audit of major programs on the largest dollars (p. 22). This is a sensible compromise for making the audit workload more equitable across states.

In designing more targeted tests, efforts should be undertaken to ensure a higher level of audit uniformity. In selecting the appropriate tests to be performed, the quality of the audit work needs to be improved. One interview respondent suggested that auditors should obtain a stronger understanding of audit principles, such as the five elements of a finding (e.g., purpose, methodology, objective, cause, analysis, and conclusion). This individual suggested greater care should go into writing a quality cause description. It also appears that a greater understanding of the appropriate method of applying the materiality calculation needs to occur. The best way to ensure that these actions are undertaken is through the immediate adoption of the PCIE's 2007 recommendations concerning training, sanctions, and quality reviews.

## *2) Revisit the Funding Structure for Single Audits*

Conducting the single audits is a big business requiring extensive time and use of professional services. Most states spend several million dollars on audit activity. However, due to state budget shortfalls, some state audit departments have experienced significant staffing cutbacks. In an effort to stretch the dollar, some states have elected to contract work out to external CPA firms. One of the observations of this study was the tendency of private auditors to render fewer compliance observations on a per dollar basis than public sector auditors. As it becomes increasingly more attractive to outsource this function, greater attention needs to be

dedicated to understanding both the implications of outsourcing the audit function and the incentive structure between the auditee and auditor.

If differences in audit quality are detected, the funding structure for single audits may need to be revisited. For instance, would it make sense for the federal awarding agency to be the body responsible for funding the audit to eliminate a potential conflict of interest? Perhaps a portion of every federal award should be encumbered for audit purposes. Another option may entail providing incentives to the auditor in finding potential problems. For example, could the auditor be compensated, in part, based on the number of issues they legitimately detect? These actions may lead to greater audit uniformity and standardization in the application of audit procedures. Closely related to this topic is the question of how frequently the single audit needs to be performed. The working group posed the question of whether certain low-risk entities below a certain threshold should have their audits performed on a less frequent basis, which may afford greater test work in other areas.

### *3) Evaluate Compliance Requirements*

This study and the working group's report suggest that rigidly testing fourteen compliance functions due to administrative precedent may not be the most productive use of time (SAA Workgroup, 2010, p. 22-27). Interview respondents suggested that this distracted auditors from focusing on larger internal control matters. The workgroup proposed that the "OMB Circular A-133 and Compliance Supplement should be revised to focus on single audit internal control and compliance testing on the key types of compliance requirements most likely to result in improper payments" (p. 23). Moreover, they advised that some provisions could be eliminated from audit test work if they are neither valued nor impactful. The results of this study tend to support this view. Given the high degree of infrequency for which audit observations

occur during the single audit process several compliance requirements could be eliminated.<sup>85</sup> If these compliance requirements were important to unique programs, the SAA Workgroup suggested eliminated provisions could be incorporated into Special Tests and Provisions work.

#### *4) Create an Interactive FAC and Enhance Data Integrity*

Although the FAC has been in effect for over a decade and provides a level of transparency, the actual usefulness of the public website in reflecting meaningful information to decision-makers is relatively limited. In some cases, data is sporadic, unreliable, and untimely. Currently, there are no centralized metrics monitoring the financial health of entities submitting single audit reports. The FAC should be designed as a tool that exemplifies the benefits that governments are receiving from the single audit process. In June 2010, the AGA Corporate Partner Advisory Group released a report that highlighted opportunities for improvement. The following suggestions build off the strong foundation established within this report.

##### *Improve data quality*

To make the FAC more reliable, the information being imported within the database must be subject to greater edit checks and controls. The first step would be to ensure that every non-federal entity receiving federal aid files their report using a standardized process to ensure that all single audit reports are filed with the FAC.<sup>86</sup> Currently, some entities cannot be holistically viewed since multiple EINs are used for grant funds of these entities. Opportunities also exist to enhance the monitoring mechanism. Under OMB Circular A-133, each federal awarding agency and pass-through entity is required to individually determine whether the required reports have been filed. As the working group notes, this process is not efficient, as many non-federal entities

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<sup>85</sup> Potential candidates include: Real Property Acquisition and Relocation Assistance, Equipment and Real Property Management, Procurement and Suspension and Debarment, and Program Income.

<sup>86</sup> Although it was beyond the scope of this study, several interview respondents indicated that they believed that tribal organizations eligible for single audits were eluding the reporting process or were significantly delayed in filing their reports.

receive federal awards from multiple federal agencies and pass-through entities with duplicate follow-up efforts. Further, audit findings should be clearly linked to the audit reports, corrective action plans, and accompanying recommendations.

#### *Improve timeliness*

This study revealed a number of single audit reports being filed past the nine month deadline (Appendix F). There does not appear to be a mechanism for preventing non-federal entities from filing delinquent audit reports.<sup>87</sup> Further, many would question whether receiving the reports nine months after the fiscal year leads to actionable information. According to the stakeholders of this study (and the working group's research), the current nine months to complete the audit and then six months for audit resolution is too long.<sup>88</sup>

#### *Improve metrics*

The prior measures will only occur if there exists a proper reporting mechanism and non-federal entities are held accountable to these results. In order for this occur the FAC should be expanded to include baseline, metrics, and targets to provide meaningful information about the overall effectiveness of the single audit process. Potential metrics may include the following:

- Audit Submission Timeliness
- Compliance Violations by Major Program/Total Dollars
- Repeat Audit Opinion Findings by State/Major Program
- Repeat Compliance Requirement Violations

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<sup>87</sup> “Under the Recovery Act (Memorandum M-10-14), OMB advised federal agencies not to grant extension requests to grantees for fiscal years 2009 through 2011. Additionally, OMB clarified in Memorandum M-10-14 that in order to qualify as a low-risk audited, the Single Audit filing with the Federal Audit Clearinghouse must be timely”(Unknown- Workgroup Recommendations, 2010, p. 27).

<sup>88</sup> In order to improve timeliness, the working group suggested federal officials will need to improve their structures to ensure timely and consistent guidance to non-federal entities and their auditors. Non-federal entity management will need to close their books quicker. Recipients will need to know CFDA number and amount of federal awards disbursed earlier. Auditors may need to start the audits earlier or perform audit procedures on an interim basis.



- Funding Trends by Major Program

#### *5) Enhance Protocols among Agencies*

This study found that single audit results do not impact grant funding levels of states. There exist two potential causes for the conclusion. First, federal agencies are not coordinated; whereby, the agency distributing the money may not be reviewing the single audit report. Second, the federal agencies may be aware of the unfavorable single audit results, but reluctant to restrict or suspend grant funding. Under either scenario, existing protocols must be improved.

#### *Who is responsible for what?*

Grant officers need to be more informed about what single audit does, particularly relating to the sampling implications. While the FAC provides a central repository of single audit reports, the single audit working group found that the audit follow-up process is decentralized between agencies, within agencies, and again for individual findings with little coordination and no central reporting. Since each agency maintains its own audit follow-up system, agencies most likely have multiple follow-up systems. The results of this study suggest that few of these systems are effectively linked. This process needs to be centralized. The working group advised that the management of each major grant-making agency should designate one key officer to address single audit issues. This effort should be coordinated with existing single audit activities being performed by the OIG and GAO.

#### *What happens in the event of negative findings?*

The current approach to monitoring single audit results does not readily identify the source of the problem nor does it provide a feedback loop from the audit follow-up process to the resource allocation purposes. “Addressing the cause is key to improving program accountability and imposing consequences is critical to forcing agents to improve” (SAA Workgroup

Recommendations, 2010, p. 32). This study provides ample evidence the audit follow-up needs to be broadened to go beyond the finding-by-finding approach. Single audits should be reviewed in the context of multiple variables and perspectives (e.g., by program across all state governments; across all programs within any state government and between similar types of programs across the United States). When problems are detected and the entity fails to implement a corrective action plan, procedures should be in place for punitive action as called for by Congress.

### **Chapter Summary**

While the Single Audit Act has led to many improvements in government auditing practices since its enactment, the quantitative and qualitative results of this study suggest that additional opportunities for improvement exist. The Single Audit Act results across state governments are not necessarily uniform. Such failure to generate consistent results has and will continue to undermine the overall usefulness of these reports. Meanwhile, this study also found that there do not appear to be severe consequences when a state government receives unfavorable audit findings, particularly as this relates to future funding.

If it is assumed that the single audit is the primary tool used to control federal aid, this conclusion leads to a very important question that rests at the heart of the overall purpose of the Act. If recipients cannot be readily compared to one another due to inconsistencies in evaluation standards and single audit reports are not used for significant resource allocation decisions, then why spend millions of dollars each year in performing the single audit? While eliminating the single audit process is not a position being advocated, this research suggests that the Single Audit Act process could be substantially improved.

Furthermore, greater uniformity in audit practices could be realized by improving the quality of audits being performed and standardizing federal audit guidance to states. Additionally, protocols could be enhanced within federal agencies concerning the implications of unfavorable audit reports. As the demand for audit services increases with legislatures' renewed attention to oversight of the executive branch, general austere mood of the American taxpayer, and devolution trend (Walton & Brown, 1990, p. 3), the single audit process must evolve into a more meaningful and impactful tool.

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## Appendices



## Appendix B- Cover Letter

Dear Federal Official,

Hello, I am a Ph.D. candidate in Public Administration and Public Policy at Auburn University engaged in a research project on the Single Audit Act. My research is under the supervision of Dr. Cynthia Bowling.

You have been selected from a random sample of government entities that have submitted or reviewed single audit reports contained within the Federal Audit Clearinghouse (FAC) to participate in a study that evaluates funding patterns under the Single Audit Act (SAA). The purpose of the study is to determine how SAA findings impact funding levels or other outcomes within State governments. My research would be greatly enhanced if I could add your own perspective and insight into the effectiveness of the Act. All information you provide is considered completely confidential and your name will not be included, or in any other way associated, with the data collected in the study.

I would be grateful if you could find time to see me in your office, where we could explore your thoughts surrounding the Single Audit Act process. If an interview by phone would be preferable to you, please let me know and I will arrange time that is convenient for you to speak to me by phone. Please note that your participation in this study is strictly voluntary. You may refuse to participate or choose to stop your participation at any point in the research. However, if you elect to participate, the information you provide for this research will be treated confidentially, and all raw data will be kept in a secured file. Results of the research will be reported as an aggregate summary data only, and no individually identifiable information will be presented.

It will be my intention to contact you at your office number about a week after you receive this letter, to determine your reaction and, I hope, to establish a time and place for our meeting. You will also be asked to complete an *informed consent form* before participating in the interview. If you would like to reach me in the meantime, my telephone number is (334) 202-6952 and my email address is [jrz0001@auburn.edu](mailto:jrz0001@auburn.edu). I greatly look forward to talking with you.

Sincerely,

Joshua Zender, ABD, CPA, CGFM  
Auburn University

## Appendix C- Structured Interview Protocol

### Introduction:

Good morning (afternoon). My name is Josh Zender. Thank you for participating in this interview. This interview involves two types of questions: short-answer (yes and no) and open-ended questions. All questions relate to your experiences and understanding of the single audit process. The purpose of this questionnaire is to get your perceptions of how the Single Audit Act is used. There are no right or wrong or desirable or undesirable answers. I would like you to feel comfortable with saying what you really think and how you really feel. I assure you that all your comments will remain confidential.

### Questions:

- 1) Based on your experiences, can federal agencies exercise discretion in determining the most qualified recipient of federal funds, in some instances?

Yes  No

- 2) What are the most common examples of information used by your agency in determining whether to allocate discretionary funds to a state government or agency?

### Response:

- 3) Does the soundness of the internal control structure of a state government or agency, as opined to in the Single Audit Act report, play a role in the decision-making process?

Yes  No

- 4) Based on your understanding of the process, do adverse Single Audit Act independent audit opinions impact federal bureaucrats' decision-making process to award or limit funds to a sub-recipient? If yes, are there specific types of opinions (e.g., qualified, adverse, or disclaimer) that influence your decision-making process to a greater extent?

Yes  No : **Response:**



5) As you are most likely aware, the Single Audit Act requires compliance testing around 9 general and 5 specific requirements that involve significant national policy or could materially affect entity's financial statements. Of these 14 requirements, are there specific requirements that are relied upon to a greater extent in awarding or limiting funds to sub-recipients (5 = to a great extent; 1 = to a minimum extent)? Would non-compliance in any of these areas impact future funding decisions to these entities? Please let me know if you would like me to read the 15 requirements.

<u>Specific</u>					
Types services allowed, not allowed	5	4	3	2	1
Eligibility	5	4	3	2	1
Matching, level of effort, earmarking	5	4	3	2	1
Reporting	5	4	3	2	1
Special tests & provisions	5	4	3	2	1
<u>General</u>					
Political activity	5	4	3	2	1
Davis Bacon Act	5	4	3	2	1
Civil Rights	5	4	3	2	1
Cash Management	5	4	3	2	1
Real Property Acquisition & Relocation Assistance	5	4	3	2	1
Federal Financial Reports	5	4	3	2	1
Allowable Costs/Cost Principles	5	4	3	2	1
Drug-free Workplace	5	4	3	2	1
Administrative Requirements	5	4	3	2	1

**Response:**

6) Are there other financial or related reviews that are more influential in making future funding decisions to state governments and agencies?

**Response:**

- 7) With respect to both formula-based and project grants, what is the most likely consequence of a state government or agency receiving adverse Single Audit Act findings?

**Response:**

- 1) If a government entity were to receive findings with respect to their use of Recovery Act funds in their Single Audit Act report, what current remedies and future deterrence strategies would a federal agency most likely pursue?

**Response:**

- 9) In your opinion, has the Single Audit Act achieved the goal of assuring, to the maximum extent possible, information and audit work is relied upon pursuant to the act?

\_\_\_ **Yes** \_\_\_ **No**

- 10) If no, what improvements are warranted to make the reports more useful?

**Response:**

## **Appendix D: Single Audit Compliance Provisions**

**A: Activities allowed or unallowed:** Federal funds may only be expended for activities that are specifically allowed under the terms and conditions of the grant. For example, in most cases, funds can't be used to purchase alcohol or entertainment. In order to demonstrate compliance with this provision, state governments must properly classify their expenditures.

**B: Allowable costs/cost principles:** There are six general criteria that must be met to address this principle: 1) reasonable and necessary; 2) allocable to a particular cost objective; 3) costs must be net of all applicable credits; 4) costs must receive consistent treatment; 5) sufficient documentation must support the costs; 6) costs must conform to laws, regulations and sponsored agreements.

**C: Cash management:** Entities must follow procedures to minimize the time elapsing between when funds are passed from the U.S. Treasury from the time they are disbursed by the recipient. In addition, interest earned on advances must be reported and remitted in a timely fashion.

**D: Davis Bacon Act:** State governments that use federal funds to pay for construction contracts over \$2,000, must ensure contractors specify in detail labor rates in their contracts, pay prevailing wages as established by the Department of Labor, and certify payrolls.

**E: Eligibility:** States are expected to determine what individuals, groups, or service areas are eligible to qualify for federal funds. In most cases, this process entails ensuring that information technology controls exist to perform the appropriate calculations, allocate funds, maintain records, and generate exception reports to effectively control program eligibility.

**F: Equipment and real property management:** Any federally funded equipment with an acquisition cost of \$5,000 or more must be adequately safeguarded, documented, and

maintained. If the equipment is sold, the federal agency must be compensated for the fair market value of the asset disposed.

**G: Matching, level of effort, earmarking:** In order to prevent communities from replacing all local money with federal money or to induce increased local spending, matching provisions are typically included in most grant programs (Lee, Johnson, and Joyce, p. 521-522). In other cases, state governments are required to earmark local funds and/or maintain certain service levels of effort as a condition of receiving a federal grant award. In meeting these requirements, states are generally not allowed to supplant other sources of federal funding or non-budgeted state revenues.

**H: Period of availability of funds:** State governments are required to both obligate and liquidate federal funds within the period of availability as specified within the award document or related regulations. Generally, states must liquidate all obligations incurred under a federal award not later than 90 days after the end of the funding period, but extensions can be granted in some situations (Circular A-102 Common Rule).

**I: Procurement:** In procuring goods or services in excess of \$100,000, the state government must verify the entity is not suspended or debarred<sup>89</sup> or otherwise excluded. Contracts must include specific clauses required by federal statutes and follow federal procurement procedures (e.g., a clear and accurate descriptions of the project and service, identify all requirements that the provider must fulfill, and specify any other factors that will be used in evaluating bids or proposals (typically, the lowest responsible bidder must be selected).

**J: Program income:** Program income is gross income received that is directly generated by the federally-funded project during the grant period such as service fees, the sale of commodities,

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<sup>89</sup> Suspended and debarred parties are listed in the List of Parties Excluded from Federal Procurement or Non-procurement Programs, issued by the General Services Administration (GSA).

and payments of principal and interest on loans made with grant funds (excluding income generated under the Cash Management or Equipment and Real Property Management). This source of income must be correctly identified and managed in accordance with grant requirements (Circular A-102 Common Rule).

**K: Real property acquisition and relocation assistance:** State governments must use proper procedures in acquiring real property or the displacing households or businesses. Property acquired must meet the just compensation amount offered by the property owner as determined by a professional appraisal process. Persons displaced must be treated uniformly and equitably.

**L: Reporting:** State governments are required to submit a wide range of financial and programmatic reports to demonstrate both program performance and financial accountability on monthly, quarterly, annual or special basis. Reports submitted through this system must be fairly presented in accordance with generally accepted accounting principles (FASAB or GASB) and disclose material events, non-compliance with laws, regulations, or grant agreements.

**M: Sub-recipient monitoring:** With respect to all of the aforementioned federal requirements, state governments must ensure that an effective sub-recipient monitoring and, if necessary, corrective action infrastructure is in place. Key activities may include: passing down federal award identification and compliance requirements to the sub-recipient, monitoring the sub-recipient's use of federal awards through reporting (high risk entities must be monitored closer), conduct site visits, and evaluate the impact of sub-recipient activities (Circular A-133 & A-110).

**N: Special tests and provisions:** State governments are also expected to comply and properly disclose with the specific requirements, such as laws, regulations, and the provisions of contract or grant agreements pertaining to the program.

**Appendix E: Changes in Federal Aid to the States**

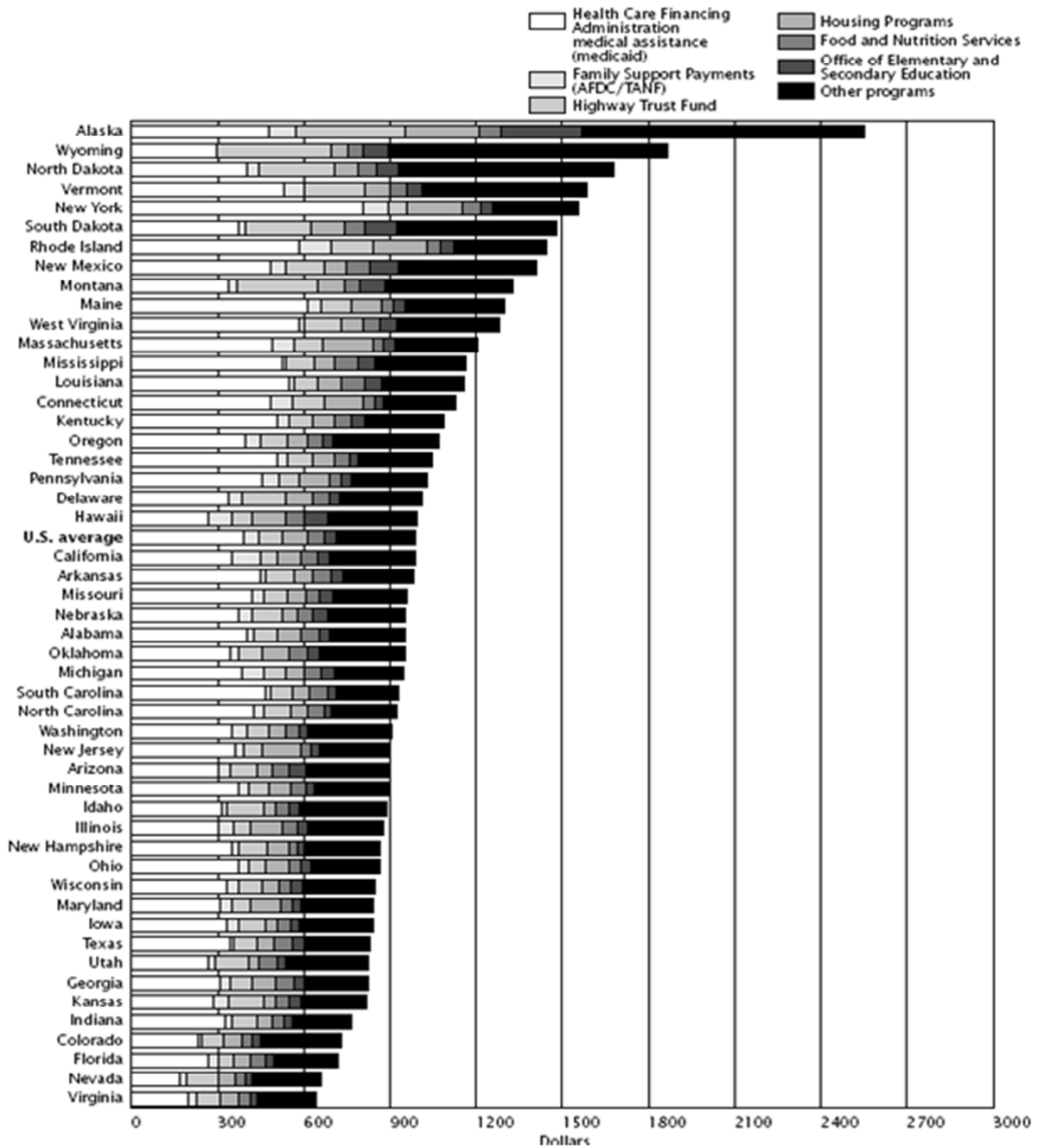
Table 29: Federal Aid to States- Real Dollars (1998-07)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL
U.S.	253,273,711	274,448,288	291,942,541	323,892,763	362,388,527	385,693,169	408,143,442	403,659,972	428,153,867	439,794,255	3,571,390,535
AL	3,813,535	4,164,745	4,569,788	5,085,099	5,557,322	5,895,622	6,057,110	6,306,208	6,565,179	6,869,216	54,883,824
AK	1,413,118	1,582,420	2,260,169	2,435,153	2,250,381	2,407,114	2,433,123	2,670,788	2,424,913	2,430,521	22,307,700
AZ	3,821,128	4,289,682	4,500,535	5,179,354	6,313,945	7,028,362	7,815,152	7,964,949	8,190,058	8,672,076	63,775,241
AR	2,414,475	2,504,398	2,657,353	3,134,219	3,559,074	3,850,593	4,123,682	4,179,098	4,334,951	4,474,127	35,231,970
CA	29,826,093	32,716,364	33,157,559	37,228,236	41,626,732	46,210,746	47,282,870	46,029,364	46,032,818	49,976,123	410,086,905
CO	2,632,328	2,950,835	3,272,542	3,529,481	3,950,885	4,232,375	4,606,194	4,537,740	4,750,651	4,899,828	39,362,859
CT	3,313,107	3,702,072	3,770,947	4,053,879	4,492,411	4,482,708	5,014,676	4,538,564	5,016,627	4,963,217	43,348,208
DE	679,519	763,394	817,675	895,926	958,328	1,024,668	1,113,239	1,141,691	1,194,354	1,225,147	9,813,941
FL	9,753,762	10,810,960	11,675,656	13,304,398	15,044,391	17,256,091	18,174,467	19,045,720	19,114,782	20,033,318	154,213,545
GA	5,696,449	6,432,026	7,192,114	8,093,304	9,299,597	8,949,450	9,539,616	8,913,857	9,278,483	10,464,667	83,859,563
HI	1,177,901	1,180,462	1,221,151	1,314,568	1,460,176	1,515,334	1,804,968	1,730,696	1,858,321	1,971,261	15,234,838
ID	934,244	1,108,582	1,229,225	1,383,654	1,560,005	1,651,106	1,900,491	1,813,746	1,829,057	2,031,444	15,441,554
IL	9,838,347	10,614,379	11,270,857	11,956,886	13,295,681	13,999,628	14,948,558	14,616,062	14,688,784	16,141,296	131,370,478
IN	4,051,738	4,534,679	5,141,961	5,786,367	5,997,400	6,282,796	6,964,886	6,483,034	6,990,053	7,258,217	59,491,131
IA	2,181,986	2,415,835	2,639,454	2,743,784	3,391,401	3,382,945	3,611,579	3,594,220	3,651,245	3,688,096	31,300,545
KS	1,861,073	2,173,919	2,314,551	2,511,055	2,888,801	2,758,845	2,931,480	2,872,410	3,241,836	3,414,547	26,968,517
KY	4,009,577	4,311,948	4,719,614	5,090,006	5,719,148	5,968,259	6,307,498	5,779,158	5,827,697	6,369,952	54,102,857
LA	4,793,714	5,068,954	5,247,616	5,589,550	6,819,627	6,486,491	7,035,351	7,147,843	9,013,736	13,277,649	70,480,531
ME	1,582,404	1,625,636	1,849,710	1,890,392	2,048,729	2,404,349	2,641,326	2,622,808	2,455,051	2,546,360	21,666,765
MID	4,029,777	4,358,936	5,538,103	5,657,491	5,659,855	6,329,819	6,645,802	6,800,280	7,005,925	7,371,973	59,397,961
MA	7,218,028	7,448,293	7,499,910	8,064,989	9,201,849	9,840,765	10,648,909	9,988,685	10,438,045	11,223,856	91,573,329
MI	8,334,410	9,333,413	9,486,173	10,270,468	11,185,364	11,513,627	12,209,779	12,112,688	11,645,205	12,821,817	108,912,944
MIN	4,086,413	4,283,450	4,599,300	5,107,132	5,775,611	5,710,257	6,330,747	5,878,396	6,441,320	7,000,530	55,213,156
MS	2,992,864	3,213,196	3,420,424	3,957,520	4,605,268	4,926,928	5,297,355	5,168,358	7,182,799	8,239,349	49,004,061
MO	4,703,737	5,226,648	5,671,188	6,502,305	7,137,207	7,139,839	7,717,009	7,407,482	7,374,130	7,955,220	66,834,765

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL
MT	1,104,263	1,173,700	1,438,862	1,549,810	1,653,960	1,434,638	1,883,490	2,021,176	1,754,507	1,834,958	15,849,364
NE	1,394,868	1,588,928	1,682,451	1,816,863	2,028,389	2,079,263	2,321,736	2,256,205	2,240,164	2,328,166	19,737,033
NV	1,025,779	1,191,324	1,244,481	1,414,231	1,646,480	1,911,493	2,093,158	2,213,417	2,791,949	2,320,299	17,852,611
NH	916,340	1,039,006	1,115,854	1,158,435	1,326,159	1,424,871	1,507,991	1,482,737	1,579,258	1,626,335	13,176,986
NJ	7,040,847	7,344,102	8,212,241	8,822,002	10,238,743	10,169,482	10,855,746	10,478,748	11,116,547	11,929,042	96,207,500
NM	2,177,954	2,448,108	2,773,983	3,254,746	3,417,513	3,765,693	4,248,892	4,097,084	4,070,271	4,347,325	34,601,569
NY	28,293,226	28,364,039	30,037,681	33,567,318	38,637,072	43,463,311	42,575,872	43,437,913	41,862,883	43,297,002	373,536,317
NC	6,513,692	7,083,601	7,911,422	8,768,525	9,510,286	10,066,509	11,353,969	11,567,669	11,455,015	12,447,638	96,678,326
ND	989,474	1,062,099	1,154,518	1,120,051	1,188,590	1,203,215	1,315,929	1,393,928	1,274,461	1,280,610	11,982,875
OH	9,493,706	9,708,343	10,559,814	11,727,338	13,262,377	13,232,799	14,500,053	13,725,531	14,274,877	15,731,194	126,216,032
OK	2,800,103	3,190,944	3,586,855	4,204,719	4,510,332	4,726,105	4,936,582	4,935,306	5,091,793	5,515,791	43,498,530
OR	3,218,308	3,553,915	3,596,708	4,022,344	4,457,414	4,715,818	4,969,403	4,807,843	4,820,888	5,003,116	43,165,757
PA	11,104,385	12,361,776	12,764,734	14,107,267	15,602,811	16,654,854	18,032,599	18,102,694	17,963,117	18,980,785	155,675,022
RI	1,261,714	1,429,614	1,526,108	1,621,952	1,794,198	1,854,940	1,981,191	1,936,974	2,007,423	2,105,383	17,519,497
SC	3,355,030	3,609,909	4,017,245	4,381,619	4,882,759	4,913,647	5,543,917	5,325,780	5,851,210	5,863,090	47,744,206
SD	998,860	1,084,674	1,131,343	1,237,351	1,349,783	1,376,298	1,407,369	1,336,168	1,421,825	1,279,610	12,623,281
TN	5,364,437	5,742,474	6,160,429	6,899,085	7,374,182	8,152,838	9,128,666	9,082,887	8,168,733	9,030,547	75,104,278
TX	15,153,908	16,645,903	17,350,136	19,000,584	21,955,452	24,352,768	25,674,366	25,621,935	29,327,328	28,104,228	223,186,608
UT	1,551,263	1,760,177	1,910,316	2,056,119	2,207,616	2,337,320	2,638,792	2,632,767	2,774,118	2,844,957	22,713,445
VT	747,986	941,138	899,675	1,013,211	1,087,197	1,184,613	1,274,240	1,213,137	1,293,738	1,546,393	11,201,328
VA	3,708,037	4,405,165	4,615,448	5,295,020	6,233,015	6,200,198	6,598,051	6,329,528	6,996,529	7,172,601	57,553,592
WA	5,001,133	5,209,686	5,707,329	6,166,830	7,102,653	7,474,125	7,854,605	7,680,843	7,375,454	8,049,888	67,622,546
WV	2,184,810	2,314,606	2,541,963	2,910,072	3,034,462	3,301,375	3,384,459	3,481,864	3,353,390	3,571,196	30,078,197
WI	4,220,256	4,439,437	4,503,678	5,524,913	6,172,590	6,772,649	6,887,820	6,563,471	6,240,353	6,718,512	58,043,679
WY	775,395	894,476	1,014,391	1,162,618	1,191,697	1,420,298	1,582,886	2,242,622	1,997,742	1,897,562	14,179,687
N/A	367,206	1,501,098	955,536	1,699,248	1,015,363	906,616	759,971	664,660	16,117,073	1,128,269	25,115,040

Source: U.S. Census Bureau, *Federal Aid to the States*

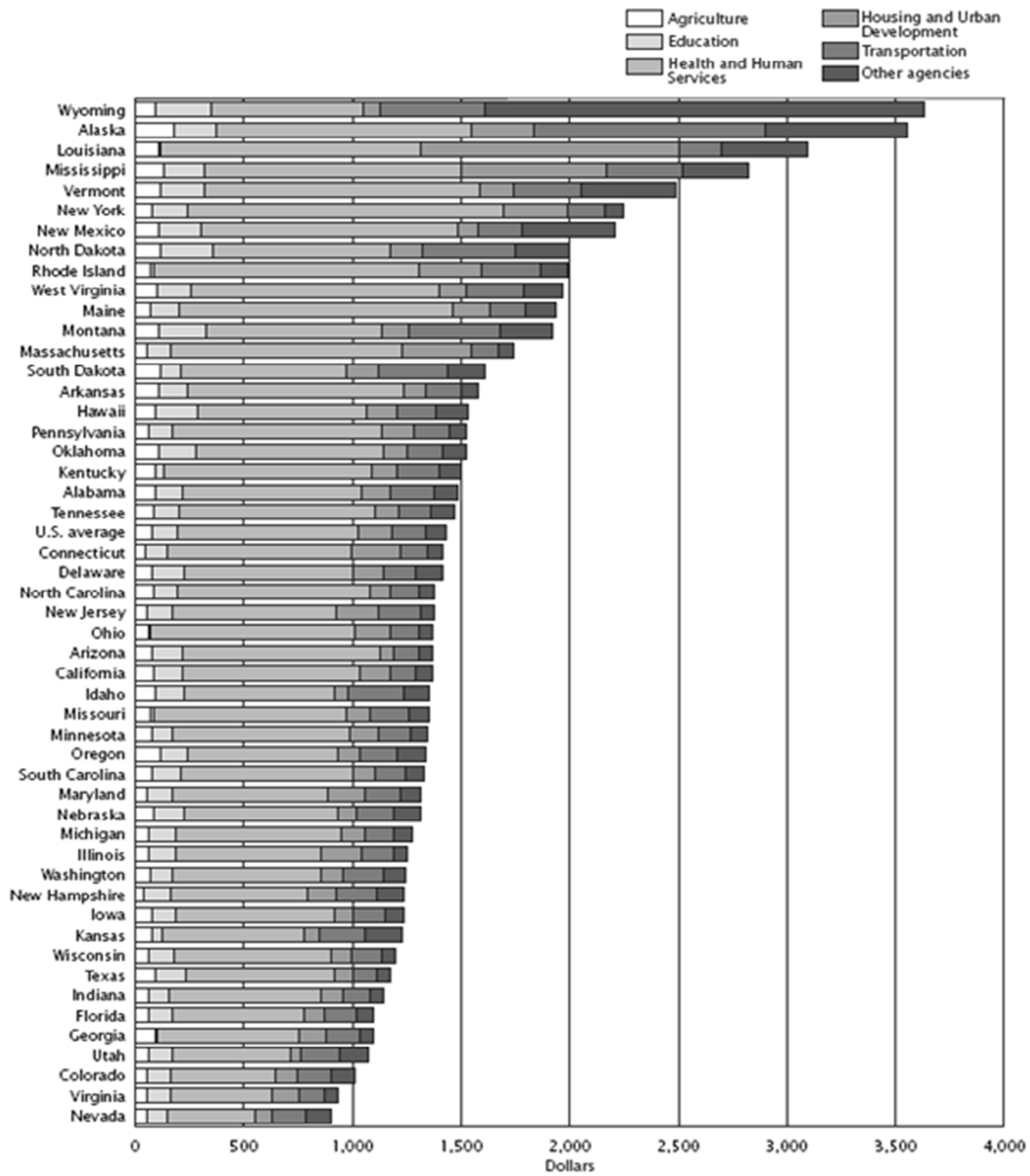
Figure 26: Federal Aid to State Governments- Per Capita (FY 1999)



Source: U.S. Census Bureau, Federal Aid to the States



Figure 27: Federal Aid to State Governments- Per Capita (FY 2007)



Source: U.S. Census Bureau, Federal Aid to the States

Figure 28: US Map Funding Levels- Per Capita (FY 1999)

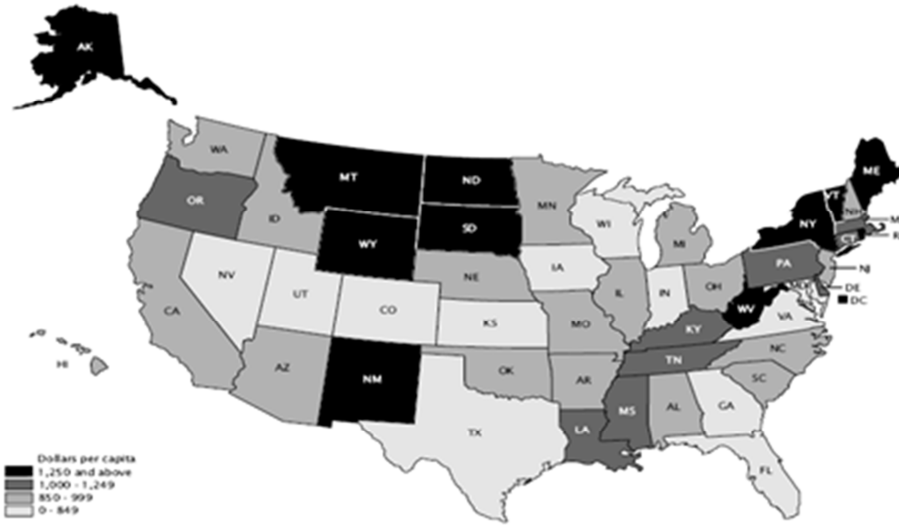
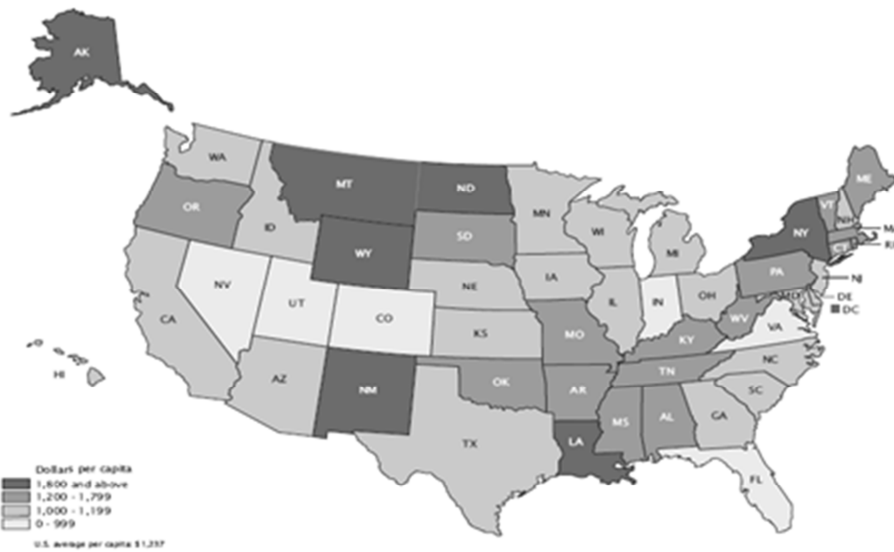


Figure 29: US Map Funding Levels- Per Capita (FY 2007)



Source: U.S. Census Bureau, Federal Aid to the States

Figure 30: US Map Funding Levels- Per Capita (FY 1999)

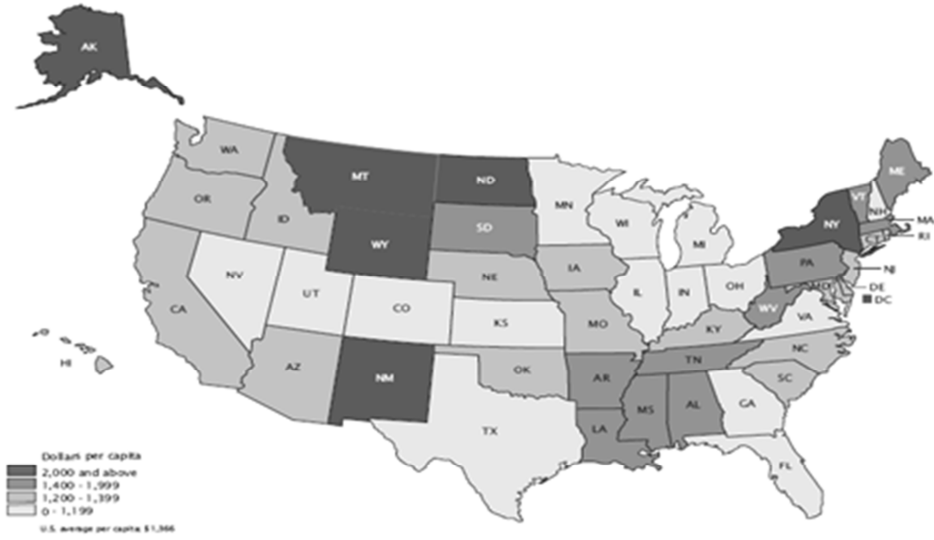
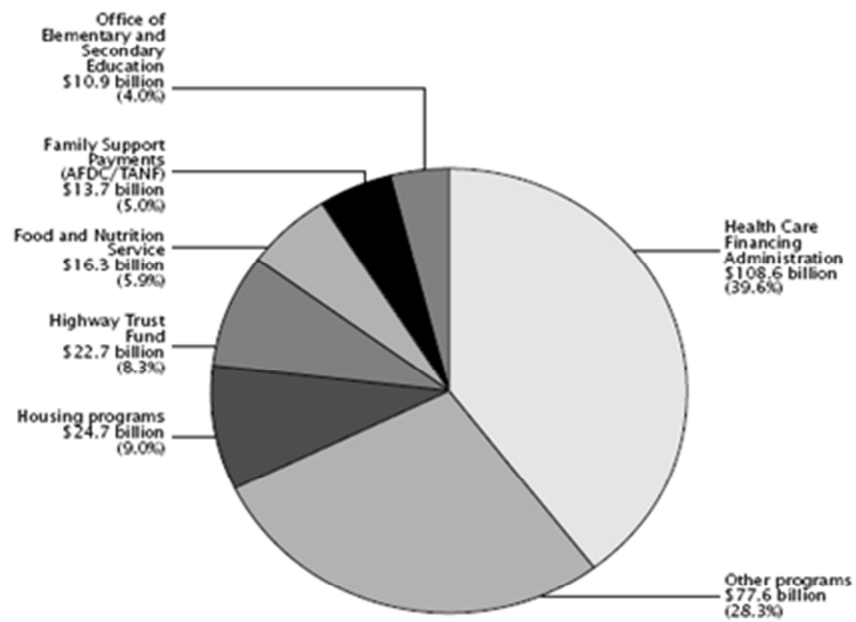
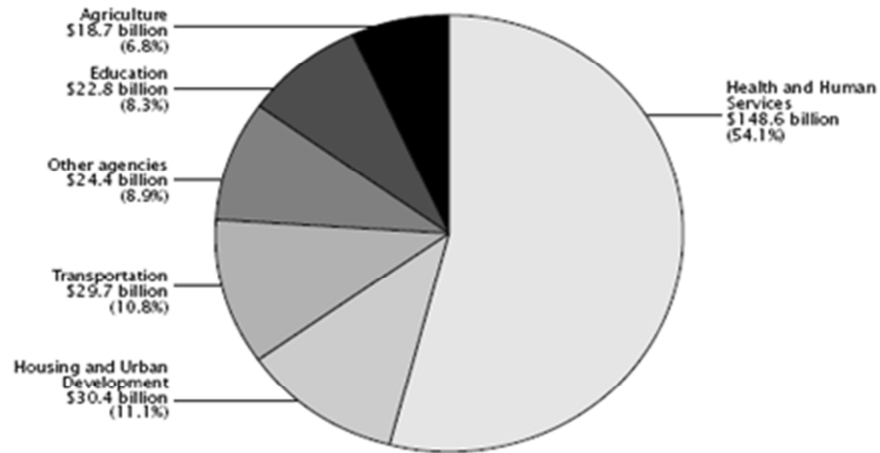


Figure 31: US Map Funding Levels- Per Capita (FY 2007)



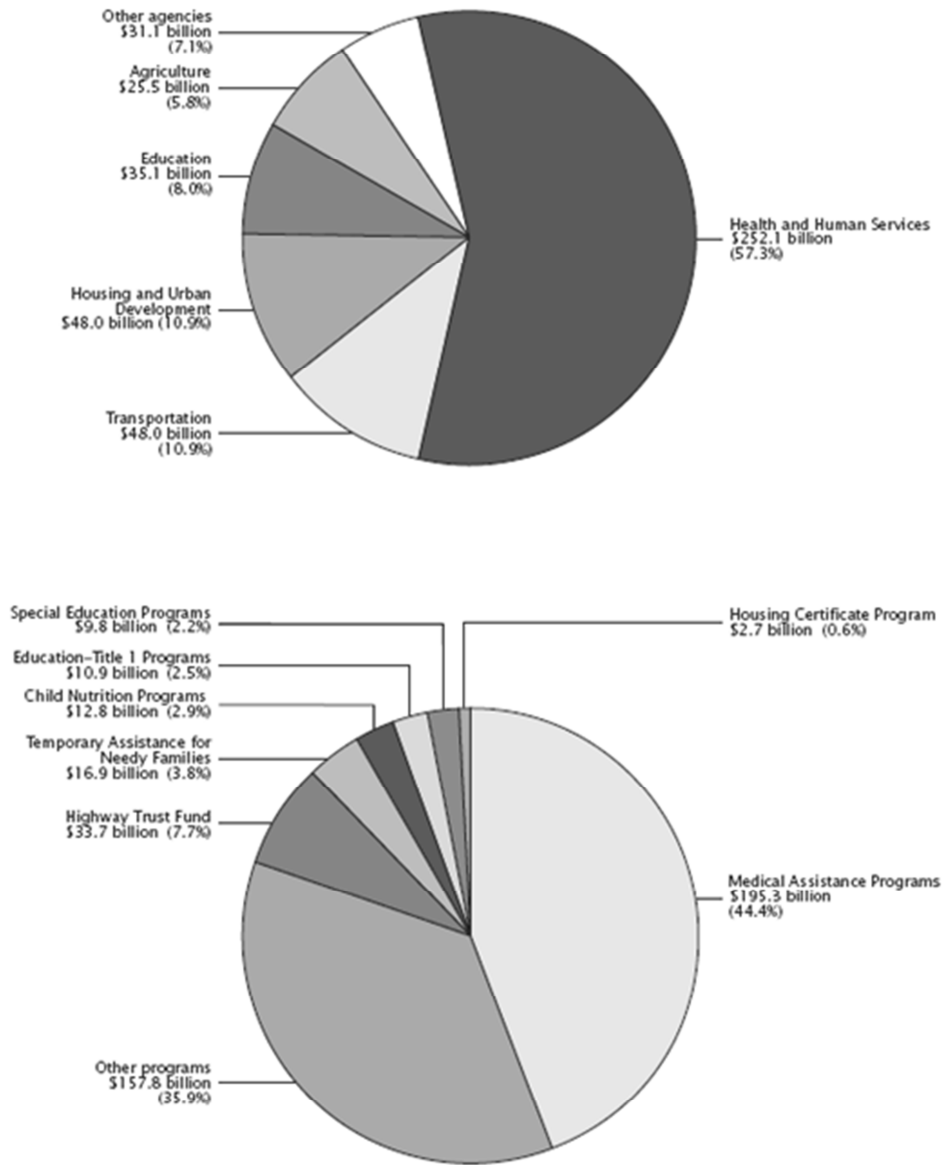
Source: U.S. Census Bureau, Federal Aid to the States

Figure 32: % of Aid to State Gov't by Major Agency/Program (FY 1999)



Source: U.S. Census Bureau, Federal Aid to the States

Figure 33: % of Aid to State Gov't by Major Agency/Program (FY 2007)



Source: U.S. Census Bureau, Federal Aid to the States

## Appendix F: Single Audit Act Opinion Analysis

Table 30: Unfavorable Financial Statement Audit Opinions

STATE	2001	2002	2003	2004	2005	2006	2007	TQ	TA	TD
Alabama								0	0	0
Alaska	1							1	0	0
Arizona			2					0	1	0
Arkansas			3					0	0	1
California			1	1				2	0	0
Colorado	1							1	0	0
Connecticut								0	0	0
Delaware								0	0	0
Florida	1	1	1	1	1	1		6	0	0
Georgia	1	1	1	1		1		5	0	0
Idaho								0	0	0
Illinois								0	0	0
Indiana								0	0	0
Iowa								0	0	0
Kansas	1							1	0	0
Kentucky								0	0	0
Louisiana						1	1	2	0	0
Maine	1							1	0	0
Maryland								0	0	0
Massachusetts								0	0	0
Minnesota								0	0	0
Mississippi								0	0	0
Missouri	1	1	1	1	1	1	1	7	0	0
Montana								0	0	0
Nebraska								0	0	0
Nevada								0	0	0
New Hampshire					1		1	2	0	0
New Jersey								0	0	0
New York								0	0	0
North Carolina								0	0	0
North Dakota								0	0	0
Ohio					3			0	0	1
Oklahoma								0	0	0
Oregon								0	0	0
Pennsylvania								0	0	0
Rhode Island	1	1	1	1	1	1		6	0	0
South Carolina								0	0	0
South Dakota								0	0	0
Tennessee								0	0	0
Texas								0	0	0
Utah								0	0	0
Vermont	1	1						2	0	0
Virginia								0	0	0
Washington								0	0	0
West Virginia								0	0	0
Wisconsin								0	0	0
Wyoming								0	0	0

Source: FAC

Table 31: Financial Audit Opinion Description

State	Justification for Unfavorable Financial Audit Opinion
Alaska	Buildings were reported at replacement or insured value rather than on a historical cost basis as required by generally accepted accounting principles.
Arizona	Financial statements of the State Compensation Fund are presented on a statutory basis of accounting that is not in conformity with U.S. In addition, the report was modified due to a change in reporting entity from fund reclassifications.
Arkansas	Not Available
California	Management did not include the California Earthquake Authority (CEA) in the State of California's financial statements. State of California's aggregate discretely presented component units is not reasonably determinable.
Colorado	Unable to obtain certain year-end accounting records supporting the financial activities of the Scholars Choice Fund. Financial activities of the Scholars Choice Fund represent two percent and nine percent of the assets and revenue, respectively, of the State's Fiduciary Funds.
Connecticut	Several component units failed to comply with GASB Statement No. 45, Accounting and Financial Reporting by Employers Postemployment Benefits Other Than Pensions (OPEB).
Florida	Inadequacy of records to document the ownership and valuation of a substantial portion of land reported within the governmental activities.
Georgia	Inadequate systems to identify, classify, and report leases as operating in conformity with GAAP. DOL unable to provide evidential matter to support \$34 million in adjusting entries.
Iowa	Unable to perform sufficient audit procedures on fourth quarter revenues, expenditures and cut off between fiscal years to satisfy ourselves as to the proper recording of revenues and expenditures of the General Fund and the govt. activities.
Kansas	Lack of determination of whether certain component units should be included in the reporting entity.
Louisiana	Scope limitation on the audit of the financial statements of Louisiana Citizens Property Insurance Corporation, a major discretely presented component unit.
Missouri	Auditors were not allowed access to tax returns and related source documents for income taxes.

Maine	State does not maintain adequate systems to identify, classify and report capital leases regarding the amounts at which fixed assets (stated at \$76.9 million), and obligations under capital leases (stated at \$26.7 million) are recorded in the Internal Service Fund.
New Hampshire	New Hampshire Retirement System (System), a Fiduciary Fund –Pension Trust Fund and the Pease Development Authority (Authority), a discretely presented component unit not been presented as required by U.S. G.A.A.P.
Ohio	The financial statements of the Ohio Bureau of Workers’ Compensation and Industrial Commission of Ohio (BWC) were not audited. This audit was commenced but not completed by independent public accountants under contract with the Auditor of State. The BWC represents 87 percent and 44 percent of the total assets and total revenue, respectively, of the business-type activities financial statements.
Rhode Island	Unable to obtain sufficient evidence regarding the completeness of accounts payable, amounts due from other governments and agencies, deferred revenue and related expenditures and federal revenue reported for the Intermodal Surface Transportation (IST) Fund, a major fund, due to weaknesses in accounting controls over the accumulation and reporting of information included in these account classifications. Unable to obtain sufficient evidence regarding the completeness and valuation of encumbrances outstanding for this entity.
Vermont	Lack of a detailed accounting record of fixed assets and construction in progress at the Department of Buildings and General Services.

*Source: Single Audit Reports of Selected States, Accessed via State Website*



Table 32: Audit Submissions (Exceeding Nine Months from FYE)

<b>Auditee Name</b>	<b>FYE</b>	<b>Date Received</b>	<b>Days</b>	<b>Months</b>	<b>Auditor</b>
Georgia	6/30/2003	3/31/2005	459	15.3	Public
New Jersey	6/30/2004	1/9/2006	399	13.3	Private
Vermont	6/30/2003	1/3/2005	396	13.2	Private
Connecticut	6/30/2004	1/3/2006	395	13.2	Public
Vermont	6/30/2002	12/23/2003	387	12.9	Private
Alaska	6/30/2005	11/20/2006	363	12.1	Public
Rhode Island	6/30/2002	11/17/2003	361	12.0	Public
Rhode Island	6/30/2003	11/15/2004	361	12.0	Public
Louisiana	6/30/2005	10/20/2006	342	11.4	Public
Ohio	6/30/2008	10/13/2009	337	11.2	Public
Alaska	6/30/2003	9/30/2004	329	11.0	Public
Maryland	6/30/2003	9/30/2004	329	11.0	Private
Connecticut	6/30/2005	10/2/2006	328	10.9	Public
Georgia	6/30/2004	9/30/2005	328	10.9	Public
Pennsylvania	6/30/2003	9/28/2004	327	10.9	Public
Maine	6/30/2006	9/26/2007	324	10.8	Public
New Jersey	6/30/2001	9/20/2002	320	10.7	Private
Illinois	6/30/2008	9/14/2009	316	10.5	Private
Alaska	6/30/2001	9/5/2002	309	10.3	Public
Pennsylvania	6/30/2004	9/1/2005	307	10.2	Public
Alaska	6/30/2002	9/2/2003	307	10.2	Public
Maine	6/30/2008	8/28/2009	305	10.2	Public
Illinois	6/30/2003	8/26/2004	304	10.1	Private
Illinois	6/30/2005	8/25/2006	302	10.1	Private
Tennessee	6/30/2009	8/25/2010	302	10.1	Public
Ohio	6/30/2005	8/21/2006	298	9.9	Public
Rhode Island	6/30/2004	8/15/2005	294	9.8	Public
Illinois	6/30/2009	8/12/2010	293	9.8	Private
New Jersey	6/30/2008	8/12/2009	293	9.8	Private
Alabama	9/30/2002	11/4/2003	287	9.6	Public
Arizona	6/30/2007	8/4/2008	286	9.5	Public
Maine	6/30/2003	8/2/2004	286	9.5	Public
Illinois	6/30/2004	8/1/2005	284	9.5	Private
Illinois	6/30/2006	7/31/2007	283	9.4	Private
Maine	6/30/2007	7/30/2008	283	9.4	Public
Arkansas	6/30/2002	7/28/2003	281	9.4	Public
Ohio	6/30/2006	7/26/2007	280	9.3	Public
New Jersey	6/30/2007	7/24/2008	279	9.3	Private
Washington	6/30/2005	7/24/2006	278	9.3	Public
Louisiana	6/30/2006	7/23/2007	277	9.2	Public
Nebraska	6/30/2003	7/16/2004	275	9.2	Private
Alaska	6/30/2004	7/18/2005	274	9.1	Public
Alaska	6/30/2006	7/16/2007	272	9.1	Public
New Hampshire	6/30/2005	7/14/2006	272	9.1	Private
South Dakota	6/30/2007	7/15/2008	272	9.1	Public

Source: FAC

Table 33: Timeliest Audit Submissions (Less Than Six Months from FYE)

<b>Auditee Name</b>	<b>FYE</b>	<b>Date Received</b>	<b>Days</b>	<b>Months</b>	<b>Auditor</b>
Montana	6/30/2005	1/9/2006	138	4.6	Public
Texas	8/31/2005	3/21/2006	145	4.8	<i>Private</i>
Texas	8/31/2009	3/24/2010	148	4.9	Public
Kentucky	6/30/2001	1/24/2002	149	5.0	Public
Oklahoma	6/30/2002	1/23/2003	149	5.0	Public
Massachusetts	6/30/2006	1/25/2007	150	5.0	<i>Private</i>
Montana	6/30/2007	1/28/2008	151	5.0	Public
Nevada	6/30/2006	1/30/2007	153	5.1	<i>Private</i>
Massachusetts	6/30/2001	2/1/2002	155	5.2	<i>Private</i>
Georgia	6/30/2005	2/2/2006	156	5.2	Public
Montana	6/30/2009	2/4/2010	158	5.3	Public
Georgia	6/30/2006	2/8/2007	160	5.3	Public
New Jersey	6/30/2002	2/12/2003	163	5.4	<i>Private</i>
Utah	6/30/2007	2/13/2008	163	5.4	Public
Virginia	6/30/2009	2/12/2010	164	5.5	Public
Georgia	6/30/2007	2/14/2008	164	5.5	Public
Texas	8/31/2003	4/15/2004	164	5.5	<i>Private</i>
Texas	8/31/2004	4/17/2005	164	5.5	<i>Private</i>
Minnesota	6/30/2003	2/17/2004	167	5.6	Public
Utah	6/30/2008	2/17/2009	167	5.6	Public
Texas	8/31/2007	4/23/2008	169	5.6	Public
Massachusetts	6/30/2003	2/20/2004	170	5.7	<i>Private</i>
Massachusetts	6/30/2004	2/22/2005	170	5.7	<i>Private</i>
Utah	6/30/2009	2/22/2010	170	5.7	Public
Virginia	6/30/2008	2/23/2009	171	5.7	Public
Ohio	6/30/2002	2/27/2003	174	5.8	Public
Texas	8/31/2006	5/2/2007	175	5.8	Public

Source: FAC

Figure 34: Small Strata (<\$5,000,000,000)

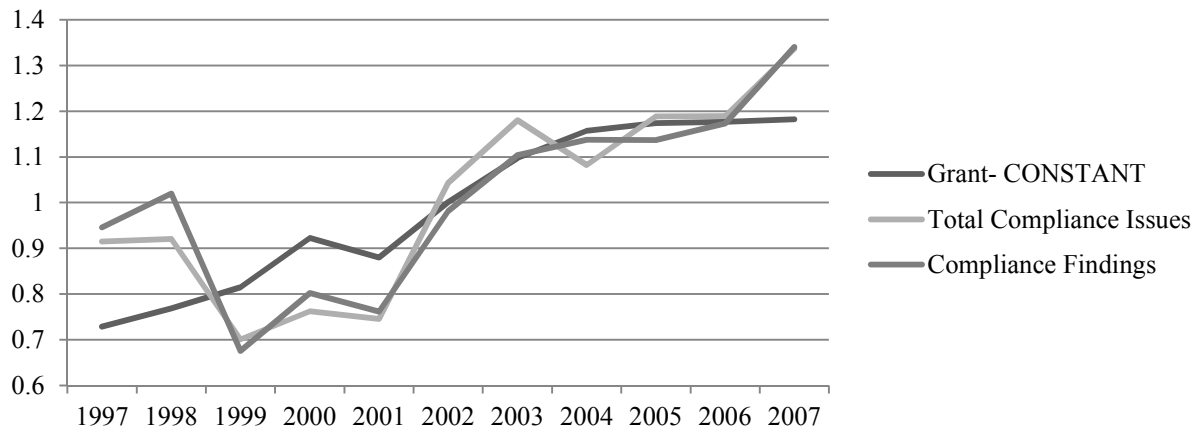


Figure 35: Medium Strata (\$10,000,000,000 > \$5,000,000,000)

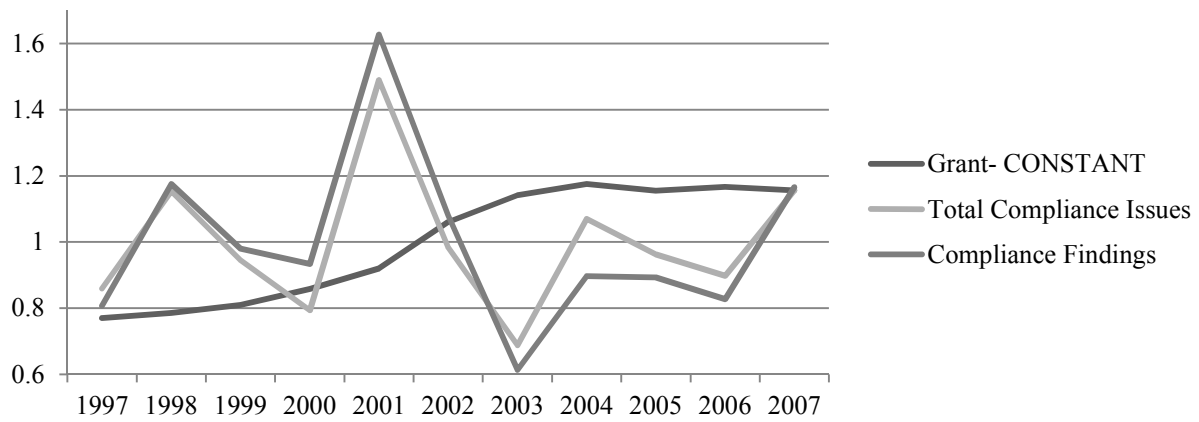
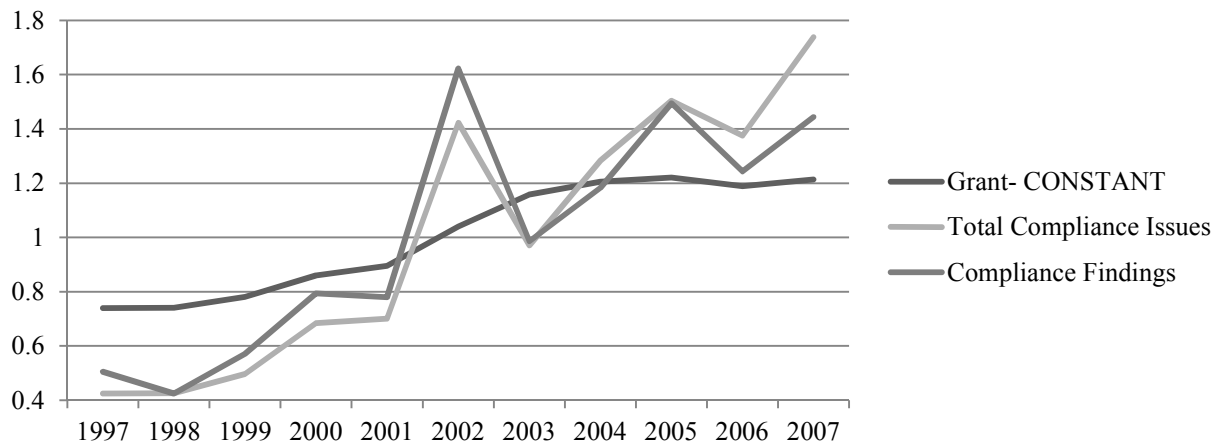


Figure 36: Large Strata (>\$10,000,000,000)



Source: FAC & U.S. Census Bureau, Federal Aid to the States

Table 34: Adverse Audit Opinions

State	CFDA	Year	# of Yrs	Program	Amount	Qual.	Suspend	Inc/Dec. in Funding
IL	84.032	2004	5	FEDERAL FAMILY EDUCATION LOANS	\$170,585,000	YES*	NO	\$3,065,595
IL	84.357	2004 2007	5	READING FIRST STATE GRANTS	\$30,109,000 : '04 \$30,753,000 : '07	NO	N/A	\$7,118,000 : '05
IA	97.036	2007	5	DISASTER GRANTS - PUBLIC ASSISTANCE	\$12,993,956	NO	N/A	N/A
NE	12.401	2005 2006	10	NATIONAL GUARD MILITARY OPERATIONS AND MAINTENANCE (O&M) PROJECTS	\$9,808,376 : '05 \$11,015,773 : '06	NO	NO	\$1,207,397 : '06 \$809,534 : '07
NE	16.007	2005	3	STATE DOMESTIC PREPAREDNESS EQUIPMENT	\$4,472,293	NO	NO	(\$1,606,186)
NE	64.005	2007	7	GRANTS TO STATES FOR CONSTRUCTION OF STATE HOME FACILITIES	\$6,794,702	NO	N/A	N/A
NE	66.458	2004, 2005	10	CAPITALIZATION GRANTS FOR CLEAN WATER STATE REVOLVING FUNDS	\$5,443,302 '04 \$8,477,178 : '05	NO	NO	\$3,033,876 : '05 (\$3,009,878) : '06
NE	66.468	2004, 2005	8	CAPITALIZATION GRANTS FOR DRINKING WATER STATE REVOLVING FUND	\$12,382,138 : '04 \$12,874,473 : '05	NO	NO	\$492,335 : '05 (\$4,338,025) : '06
NE	83.544	2005	7	PUBLIC ASSISTANCE GRANTS	\$445,449	NO	YES	N/A
NE	93.658	2005 2006	10	FOSTER CARE - TITLE IV-E	\$24,307,022 : '05 \$17,570,213 : '06	NO	NO	\$6,736,809 : '06 \$6,827,753 : '07
NE	93.667	2007	10	SOCIAL SERVICES BLOCK GRANT	\$10,802,496	NO	N/A	N/A
NE	93.959	2006	10	PREVENTION AND TREATMENT OF SUBSTANCE ABUSE- BG	\$7,466,399	YES	NO	(\$189,953)
NE	97.004	2005	4	STATE DOMESTIC PREPAREDNESS EQUIP.	\$13,265,931	YES	NO	(\$3,414,577)

State	CFDA	Year	# of Yrs	Program	Amount	Qual.	Suspend	Inc/Dec. in Funding
NE	97.036	2005	4	PUBLIC ASSISTANCE GRANTS	\$9,645,251	NO	NO	(\$3,630,870)
NE	97.042	2004, 2005	4	EMERGENCY MANAGEMENT PERFORMANCE GRANTS	\$1,731,785 : '04 \$1,499,744 : '05	NO	NO	(\$232,041) : '05 (\$1,143,376) : '06
TX	93.003	2004	4	PUBLIC HEALTH AND SOCIAL SERVICES EMERGENCY FUND	\$30,601,247	YES*	NO	(\$30,597,661)
VT	93.775	2007	10	STATE MEDICAID FRAUD CONTROL UNITS	\$420,729	YES	N/A	N/A
VT	93.777	2007	10	STATE SURVEY AND CERTIFICATION OF HEALTH CARE PROVIDERS AND SUPPLIERS	\$1,112,782	YES	N/A	N/A
VT	93.778	2007	10	MEDICAL ASSISTANCE PROGRAM	\$608,610,043	YES	N/A	N/A
WV	16.007	2005, 2006	5	STATE DOMESTIC PREPAREDNESS EQUIPMENT SUPPORT	\$6,970,065 : '05 \$699,736 : '06	NO	YES	(\$6,270,329) : '06
WV	17.258	2006	7	WIA ADULT PROGRAM	\$5,548,334	YES**	NO	(\$411,960)
WV	17.259	2006	7	WIA YOUTH PROGRAM	\$6,395,351	YES**	NO	\$301,224
WV	17.260	2006	7	WIA DISLOCATED WORKERS PROGRAM	\$8,274,972	YES**	NO	(\$3,005,221)
WV	97.053	2005	3	CITIZEN CORPS	\$63,327	NO	NO	N/A
DE	16.523	2004	9	JUVENILE ACCOUNTABILITY INCENTIVE BLOCK GRANTS	\$1,502,723	NO	YES	(\$668,288) : '05
CA	84.282	2007	10	FIGUREER SCHOOLS	\$24,766,678	NO	N/A	N/A
WV	97.067	2006 2007	2	HOMELAND SECURITY GRANT PROGRAM	\$650,933 : '06 \$16,000,146 : '07	N/A	NO	\$15,349,213 : '07
WV	97.004	2005 2006 2007	4	STATE DOMESTIC PREPAREDNESS EQUIPMENT SUPPORT PROGRAM	\$13,578,599 : '05 \$10,165,718 '06 \$1,077,631 : '07	YES	NO	(\$3,412,881) : '06 (\$9,088,087)

State	CFDA	Year	# of Yrs	Program	Amount	Qual.	Suspend	Inc/Dec. in Funding
WV	97.042	2005 2006 2007	4	EMERGENCY MANAGEMENT PERFORMANCE GRANTS	\$1,850,870 : '05 \$798,814 : '06 \$1,796,255 : '07	NO	NO	(\$1,052,056) : '06 (\$584,428) : '07 N/A
DE	16.579	1997	10	BYRNE FORMULA GRANT PROGRAM	\$2,803,303	NO	YES	(\$725,121) : '05
DE	93.283	2005 2006 2007	10	CENTERS FOR DISEASE CONTROL AND PREVENTION_ INVESTIGATIONS AND TECHNICAL AS	\$10,926,153 : '05 \$10,978,576 : '06 \$11,136,081 : '07	YES	YES	\$52,423 : '06 \$157,505 : '07

Source: FAC

Table 35: Disclaimer Audit Opinions

State	CFDA	YR	# of Yrs	Program	Amount (000's)	Qual.	Suspend	Inc/Dec. in Funding (000's)
GA	93.767	2004	8	STATE CHILDREN S INSURANCE PROGRAM	\$192,393	NO	NO	\$4,134
GA	93.777	2004	10	STATE SURVEY AND CERTIFICATION OF HEALTH CARE PROVIDERS AND SUPPLIERS	\$2,746	NO	NO	(\$682)
GA	93.778	2004	10	MEDICAL ASSISTANCE PROGRAM (MC)	\$4,520	NO	NO	
IL	17.225	2004	10	UNEMPLOYMENT INSURANCE	\$2,800,844	NO	NO	(\$720,424)
IL	84.181	2005	7	SPECIAL EDUCATION-GRANTS FOR INFANTS AND FAMILIES WITH DISABILITIES	\$36,428	YES*	NO	(\$10,221)
IL	93.268	2007	7	IMMUNIZATION GRANTS	\$54,627	YES	N/A	N/A
LA	14.228	2007	10	COMMUNITY DEVELOPMENT BLOCK GRANTS/STATE S PROGRAM	\$2,882	NO	NO	N/A
NE	17.258	2004	6	WIA ADULT PROGRAM	\$2,336	YES*	NO	\$1
NE	17.259	2004	6	WIA YOUTH PROGRAM	\$2,455	YES*	NO	\$319
NE	17.260	2004	6	WIA DISLOCATED WORKER	\$2,986	YES*	NO	(\$1,013)
NE	93.563	2004	10	CHILD SUPPORT ENFORCEMENT	\$25,701	YES*	NO	\$3,576
NE	93.777	2004	10	STATE SURVEY AND CERTIFICATION OF HEALTH CARE PROVIDERS AND SUPPLIERS	\$3,644	YES*	NO	(\$76)
NE	93.778	2004	10	MEDICAL ASSISTANCE PROGRAM (MEDICAID)	\$948,986	YES*	NO	(\$66,760)
NE	93.994	2004 2005	10	MATERNAL AND CHILD HEALTH SERVICES BLOCK GRANTS TO THE STATES	\$4,246 (2004) \$4,437 (2005)	NO	NO	(\$4,245) (\$442)

State	CFDA	YR	# of Yrs	Program	Amount (000's)	Qual.	Suspend	Inc/Dec. in Funding (000's)
NH	17.258	2005	6	WIA ADULT PROGRAM	\$1,882	YES	NO	\$560
NH	17.259	2005	6	WIA YOUTH PROGRAM	\$2,771	YES	NO	\$109
NH	17.260	2005	6	WIA DISLOCATED WORKER	\$3,999	YES	NO	(\$1,340)
NH	66.605	2007	10	PERFORMANCE PARTNERSHIP GRANTS	\$5,589	NO	NO	N/A
NH	84.007	2005	10	FEDERAL SUPPLEMENTAL EDUCATION OPPORTUNITY GRANTS	\$174	YES	NO	\$14
NH	84.032	2005	10	FEDERAL FAMILY EDUCATION LOANS	\$19,805	YES	NO	\$1,410
NH	84.033	2005	10	FEDERAL WORK-STUDY PROGRAM	\$290,275	YES	NO	(\$20)
NH	84.038	2005	10	FEDERAL PERKINS LOAN PROGRAM - FEDERAL CAPITAL CONTRIBUTIONS	\$1,671	YES	NO	(\$203)
NH	16.007	2005	10	FEDERAL PELL GRANT PROGRAM	\$6,093	YES	NO	(\$849)
NJ	93.568	2004 2005	10	LOW-INCOME HOME ENERGY ASSISTANCE	\$85,569 (2004) \$63,007 (2005)	YES*	NO	(\$22,563) \$37,130
NJ	93.775	2004 2005 2006	10	STATE MEDICAID FRAUD CONTROL UNITS	\$1,815 \$2,371 \$2,853	YES*	NO	\$557 \$481 \$162
NJ	93.777	2004 2005 2006	10	STATE SURVEY AND CERTIFICATION OF HEALTH CARE PROVIDERS AND SUPPLIERS	\$7,899 \$8,394 \$9,850	YES*	NO	\$496 \$1,456 (\$460)
NJ	93.778	2004 2005 2006	10	MEDICAL ASSISTANCE PROGRAM	\$4,303,956 \$4,297,432 \$4,805,587	YES*	NO	(\$6,524) \$508,155 \$94,791



State	CFDA	YR	# of Yrs	Program	Amount (000's)	Qual.	Suspend	Inc/Dec. in Funding (000's)
TX	14.871	2005	7	SECTION 8 HOUSING CHOICE VOUCHERS	\$8,925	YES	NO	(\$2,853)
TX	93.917	2004	10	HIV CARE FORMULA GRANTS	\$61,099	YES*	NO	\$21,889
TX	93.958	2007	10	BLOCK GRANTS FOR COMMUNITY MENTAL HEALTH SERVICES	\$36,207	YES	NO	N/A
WA	93.778	2004	10	MEDICAL ASSISTANCE PROGRAM	\$3,102,753	YES*	NO	(\$10,949)
CA	16.575	2004	10	CRIME VICTIM ASSISTANCE	\$44,723	YES*	NO	(\$10,990)
CA	66.468	2007	7	CAPITALIZATION GRANTS FOR DRINKING WATER STATE REVOLVING	\$115,414	YES	NO	N/A
DE	10.568	2004	10	EMERGENCY FOOD ASSISTANCE PROGRAM (ADMINISTRATIVE COSTS)	\$137	NO	NO	(\$17)
DE	10.569	2004	10	EMERGENCY FOOD ASSISTANCE PROGRAM (FOOD COMMODITIES)	\$1,014	NO	NO	(\$278)
DE	93.563	2004 2006	10	CHILD SUPPORT ENFORCEMENT	\$15,450 \$19,951	YES	NO	(\$450) (\$1,920)
DE	93.658	2004 2006 2007	10	FOSTER CARE - TITLE IV-E	\$7,389 \$5,672 \$4,555	YES***	NO	(\$1,555) (\$1,117)
DE	93.659	2004	10	ADOPTION ASSISTANCE	\$1,705	NO	NO	\$45

Source: FAC