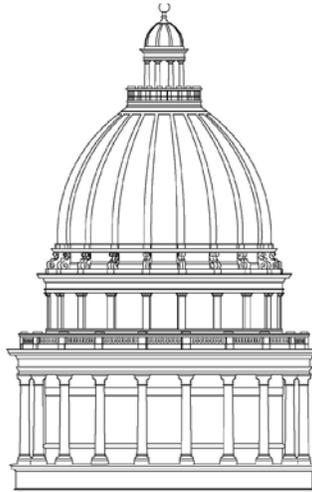


REPORT TO THE  
**UTAH LEGISLATURE**  
Number 2012-12



**A Performance Audit of  
State Printing Costs and Practices**

August 2012

Office of the  
LEGISLATIVE AUDITOR GENERAL  
State of Utah





STATE OF UTAH

# Office of the Legislative Auditor General

315 HOUSE BUILDING • PO BOX 145315 • SALT LAKE CITY, UT 84114-5315  
(801) 538-1033 • FAX (801) 538-1063

**Audit Subcommittee of the Legislative Management Committee**  
President Michael G. Waddoups, Co-Chair • Speaker Rebecca D. Lockhart, Co-Chair  
Senator Ross I. Romero • Representative David Litvack

JOHN M. SCHAFF, CIA  
AUDITOR GENERAL

August 1, 2012

TO: THE UTAH STATE LEGISLATURE

Transmitted herewith is our report, **A Performance Audit of State Printing Costs and Practices** (Report #2012-12). A digest is found on the blue pages located at the front of the report. The objectives and scope of the audit are explained in the Introduction.

We will be happy to meet with appropriate legislative committees, individual legislators, and other state officials to discuss any item contained in the report in order to facilitate the implementation of the recommendations.

Sincerely,

A handwritten signature in black ink that reads "John M. Schaff" with a stylized flourish at the end.

John M. Schaff, CIA  
Auditor General

JMS/lm



# Digest of A Performance Audit of State Printing Costs and Practices

This audit was initiated due to concerns voiced by the requesting legislator about the amount of printed material received from state agencies, given advances in electronic communication. This perception that the Legislature receives too much printed material led to concerns that excessive printing is occurring in statewide operations.

For the purposes of this report, when we refer to printing, or printing practices or operations, we are referring to forms, brochures, and other materials printed by state agencies for the benefit of the public, as well as documents printed and dispersed internally in order to fulfill their missions. We are also referring to photocopying for the same purposes.

Three organizations have been established within state operations to facilitate cost-efficient printing of materials. These organizations are State Print Services located within the Department of Administrative Services, Utah Correctional Industries (UCI) Printing within the Department of Corrections, and the Legislative Printing Office under the direction of the Legislative Fiscal Analyst.

While the audit request was for an examination of state agencies, the judicial branch and higher education, we note that the Legislative offices are not ignoring the importance of managing printing costs and practices. The Office of the Legislative Auditor General, the Office of Legislative Research and General Counsel and the Office of the Legislative Fiscal Analyst have all indicated that they have been analyzing their operations to determine which functions need to continue to be printed and which can be performed electronically.

Because of legislator concerns over printed material, we conducted a survey of all legislators, which indicated that over half feel there is too much printed material distributed. In addition, a majority felt that electronic materials are more useful to them.

## **Chapter I: Introduction**

## **Chapter II: Best Practices Could Further Reduce Utah's Already Declining Print Costs**

In the last five fiscal years (since 2007) statewide printing volumes have declined about 23 percent. The costs accompanying this volume drop have declined about 43 percent. This reduction includes all three branches of government.

In order to fulfill the legislative interest in reducing printed material, as well as maximize the efficiency of resource use, state entities should determine how best to regulate their printing usage. While Utah has no statewide printing statute or policy, some other states and the federal government have created specific policies to guide their operations. In addition to formalized policies, there are best practices in the field of printing that Utah agencies should examine to determine what would work while still meeting their agency goals. If these best practices lead agencies to consider paperless operations, limited analysis shows that the costs of storage for such a system may not be prohibitive.

Printing costs for higher education institutions have declined at a slower pace than for the rest of the state agencies we examined. In the past three fiscal years, higher education costs have reduced 5 percent. Most institutions report having taken some actions to reduce costs, but the majority of these actions appear to be department-specific. The University of Utah and Weber State University have experienced the steepest decline and have accompanying school-wide actions and initiatives to explain some of that reduction. We recommend that institutions of higher education examine their printing costs and practices to determine where efficiencies can be achieved.

REPORT TO THE  
UTAH LEGISLATURE

Report No. 2012-12

**A Performance Audit of  
State Printing Costs and Practices**

August 2012

Audit Performed By:

Audit Manager           Darin Underwood

Audit Supervisor       Leah Blevins



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# Chapter I

## Introduction

This audit was initiated due to concerns voiced by the requesting legislator about the amount of printed material received from state agencies, given advances in electronic communication. This perception that the Legislature receives too much printed material led to concerns that excessive printing is occurring in statewide operations.

For the purposes of this report, when we refer to printing, or printing practices or operations, we are referring to forms, brochures, and other materials printed by state agencies for the benefit of the public, as well as documents printed and dispersed internally in order to fulfill their missions. We are also referring to photocopying for the same purposes.

The *Utah Code* offers little guidance regarding printing practices among state agencies. Figure 1.1 lists possibly applicable sections of the *Utah Code*, and gives a brief description of what each section specifies.

**Figure 1.1 Little Printing Guidance Exists in Statute.** This guidance allows for, but does not require a reduction in printed annual reports or other material.

Code Section	Explanation
68-3-14	Allows for required annual reports to be submitted electronically and posted online
63G-4-601	Allows agencies to make rules regarding electronic records and conversion of written records
46-4	Known as the “Uniform Electronic Transactions Act”, allows electronic records to satisfy requirements for a record to be in writing, as well as allowing agencies to make rules regarding which transactions they are willing to transact through electronic means

Source: *Utah State Code*

Section 68-3-14 is the most widely applicable printing section, as it applies to any required annual report. The only change made to this statute since it was enacted in 1997 was to broaden it from any

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**Concerns have arisen about the amount of printed material received by the Legislature.**

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**Little incentive exists in the *Utah Code* to reduce printed amounts.**

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construction reports required to “an annual report . . . required by a statute in the Utah Code.”

None of these statutes require state agencies to submit reports or conduct business electronically, but only states that they may do so. In fact, 46-4-501(4)(a)-(b) instructs, “. . . nothing in this chapter requires any state governmental agency to conduct transactions by electronic means; or use or permit the use of electronic records or electronic signatures.” Because there is no statutory requirement to submit documents electronically as opposed to a printed copy, there is no disincentive to distributing printed reports. In addition, there is no statutory guidance regarding printing within agencies for their day-to-day operations.

### **The State Operates Specific Printing Organizations**

Three organizations have been established within state operations to facilitate cost-efficient printing of materials. These organizations are State Print Services located within the Department of Administrative Services, Utah Correctional Industries (UCI) Printing within the Department of Corrections, and the Legislative Printing Office under the direction of the Legislative Fiscal Analyst. Figure 1.2 discusses the functions of these organizations.

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**State Print Services, UCI Printing and the Legislative Printing Office cover the state’s printing needs.**

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**Figure 1.2 Statewide Printing Organizations Exist to Streamline Printing Services.** Agencies reimburse these operations for their own printing expenses. Legislative offices do not reimburse Legislative Printing for expenses because the expenditures are already factored in to the Legislative Printing Office budget.

Organization	Function
State Print Services	“Manages essential document production services including Digital Print Services and the State Copy Center.”
UCI Printing	“A full service print shop . . . serves state government at every level, as well as non-profit organizations of every size. UCI printing is a full-service printer on State contract.”
Legislative Printing Office	Prepares various Legislative documents, including daily and final Senate and House Journals, House and Senate bills, agendas, status sheets, Laws of Utah, reports, manuals, management audits, and miscellaneous printing.

Source: State Print Services, UCI and Legislative Printing Websites

While the first two organizations are open for use by all state agencies, the Legislative Printing Office is budgeted primarily to meet the print needs of the Legislature and legislative staff offices, although they will occasionally cover some overflow for State Print Services. State Print Services and UCI Printing are operated as internal services funds, which are reimbursed by the agency using their services. Both of these operations report that they work together a great deal, sending jobs back and forth depending on which operation would be most efficient for the requested print job.

State Print Services performs two major functions: operating the State Copy Center and the Digital Copier Service. The Copy Center prints orders sent in from state agencies. The Digital Copier Service is “designed for self service or walk up copying.” State Print Services purchases copy machines and leases them back to the agencies for walk up copying. Each agency is charged an administrative fee of \$0.004 per copy, a fixed-fee depreciation, and a maintenance fee per copy. State Print Services provides over 1,000 copiers through this service.

State Print Services reports that along with a drop in amounts spent, they have experienced a marked drop in total volume printed, which will be discussed in Chapter II. However, despite the reduction in printing expenses and volume, the state Datawarehouse shows none

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**State Print Services operates the copy center and leases copy machines to state agencies.**

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of these state run printing operations experiencing any reduction in staffing. State Print Services employs three people, and UCI print employs two.

## Utah Legislative Offices Are Examining Their Print Usage

While the audit request was for an examination of state agencies, the judicial branch and higher education, we note that the Legislative offices are not ignoring the importance of managing printing costs and practices. The Office of Legislative Research and General Counsel and the Office of the Legislative Fiscal Analyst both indicated that they have been analyzing their operations to determine which functions need to continue to be printed and which can be performed electronically. In an effort to further this goal, all three legislative staff offices tested a cloud based electronic method of committee information distribution (DropBox) in the 2012 General session, and are currently selecting a final product for this distribution. In addition, legislative leadership, through their role on the Subcommittee for Oversight, instructed all three offices at the May 2012 meeting to look into the possibility of moving towards more paperless operations.

Our own Office of the Legislative Auditor General is researching methods for reduced printing. In addition to exploring alternate methods of dispersal for our reports, we are researching methods to reduce the amount of paper used for internal operations. An internal committee has been formed to consider the efficiency and effectiveness of moving to electronic documentation of our audit process.

Other state legislatures have started moving to paperless operations for their sessions and general operations. Connecticut reports knowing of “17 other states that have implemented a paperless initiative or policy for certain legislative documents.” For example, starting in 2008, the Senate of the State of Hawaii started an initiative to move to paperless operations. During their legislative session, the number of printed pages dropped over two-thirds. Our own Fiscal Analyst informed us that at some point in the future they will be conducting a feasibility study of options to move our own Legislature to more paperless operations.

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**The three legislative staff offices are determining where printing costs can be cut.**

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**Other state legislative sessions have moved to paperless operations.**

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## **Audit Scope and Objectives**

In light of the significantly lower-cost and prevalent electronic alternatives available, we were requested to review the costs in state agencies and education associated with the printing and circulation of materials necessary to conduct state business.

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## **Chapter II**

# **Best Practices Could Further Reduce Utah's Already Declining Printing Costs**

Some legislators were concerned with the amount of printed material being distributed. According to a recent survey, the Legislature appears to be supportive of agencies moving towards relying more on electronic means of communication to cut down on waste. This could further the trend of statewide printing volumes and costs declining steadily for at least the last five years, dropping in aggregate over \$10 million from fiscal year 2007 to 2011. Agencies report having made various changes to achieve these savings, including increased emphasis on emailing links instead of printing reports, and other electronic means of communication. Other states, in addition to the federal government, have developed policies and best practices to reduce the use of printed material, a number of which could be adapted for use in Utah. Finally, while higher education printing costs have also declined, they have done so more slowly than the rest of the state. Because of this, we recommend that higher education further examine their printing practices to determine where improvements can be made.

### **Legislature Appears Open to Greater Reliance on Paperless Communication**

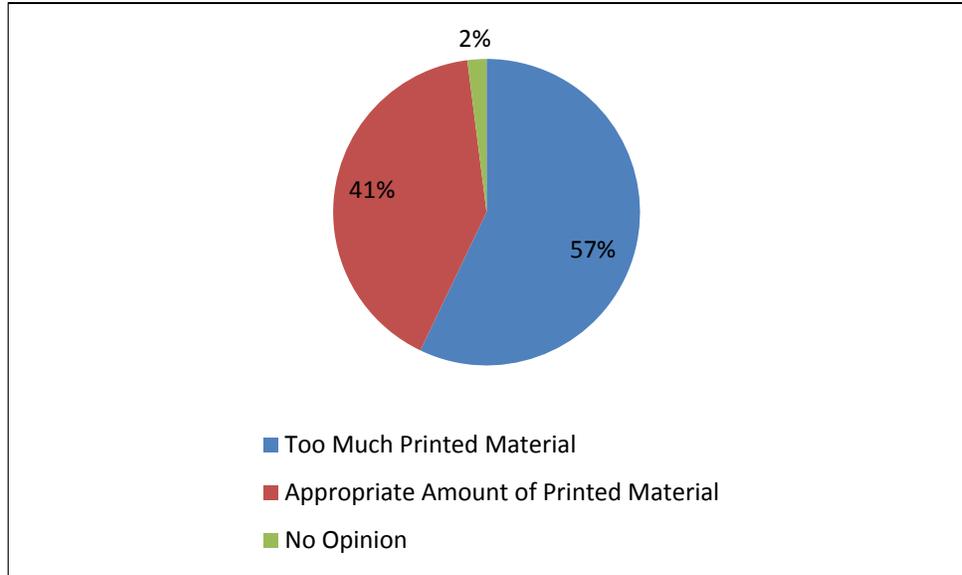
Because of the concerns over printed material, we conducted a survey of all legislators, which indicated that over half feel there is too much printed material distributed. In addition, a majority felt that electronic materials are more useful to them. Figure 2.1 shows the distribution of opinions among legislators regarding printed material.

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**Over half of responding legislators feel there is too much printed material distributed.**

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**Figure 2.1 Over Half of Legislators Feel They Receive Too Much Printed Material.** No legislators responded that they do not receive enough printed material.



Source: Legislative Audit Survey of legislators. 53 of 104 responded.

**49 percent of responding legislators prefer electronic material.**

The majority of responding legislators feel they receive too much material in printed form. A follow-up question asked whether electronic or printed materials are more useful in their legislative duties. Forty-nine percent responded electronic, 16.3 percent said printed, and 34.7 percent said they are equally as effective. Legislators also provided information regarding what format they would prefer to receive various reports. These results are shown in Figure 2.2.

**Figure 2.2 The Majority of Responding Legislators Prefer an Emailed Link to Relevant Reports.** Other various means of distribution are also acceptable.

Preferred Distribution Method	
Emailed Link to Reports	45.8%
Hard Copy of Summary Report	39.6
Emailed Copy of Reports	33.3
Available in Dropbox File Folder	29.2
Hard Copy of Complete Report	2.1
No Opinion	2.1

*Source: Legislative Audit Survey of legislators. 53 of 104 responded. More than one answer to this question was accepted.*

These results demonstrate that there are ways to distribute necessary information to legislators while still reducing the amount of printed material. Appendix C details more complete results of the legislator survey.

Another concern voiced by the audit requestor and volunteered by responding legislators is the amount of money spent on mailing. One legislator stated, “my biggest frustration comes when I get a single sheet of paper in an 8½ by 11 manila envelope with \$1.35 for postage.” While agencies consider best practices to further reduce printing expenditures, mailing policy should also be included.

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**Mailing expenses are also a concern to legislators.**

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## **Printing Volume and Expenses Are Steadily Declining Statewide**

In the last five fiscal years (since 2007) statewide printing volumes have declined about 23 percent. Figure 2.3 shows this decline.

**Figure 2.3 The Volume of Material Printed by State Print Services Is Declining.** In the past five years, print volume has declined 23 percent

FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
21,229,325	28,903,340	26,773,188	19,798,178	16,410,354

Source: State Print Services Report

The volume of material printed by State Print Services has reduced almost a quarter in the last 5 years.

This represents a decline of almost a quarter of the volume of printed material. In addition, since fiscal year 2001, State Print Services produced almost 300 million impressions. This amounts to a decline from 2001 to 2011 of approximately 67 percent.

The costs accompanying this volume drop have declined about 43 percent. This reduction includes all three branches of government. Figure 2.4 shows the total aggregate decline.

**Figure 2.4 Statewide Printing Expenses Have Steadily Declined.** In the past five years, printing costs have declined by almost half (43 percent). Appendix A details the expenditure codes included in these numbers and discusses what these codes include.

FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
\$24,317,193	\$21,482,105	\$18,574,727	\$14,141,160	\$13,777,419

Source: Utah State Datawarehouse

\* Although these numbers are from the State Datawarehouse, we have not conducted a full audit of whether all expenses have been appropriately included for all agencies.

The number of American printing firms has dropped by 23.5 percent in the last 8 years.

This decline is not unique to the state of Utah. The Printing Industries of America report that there were 47,700 printing firms in America in 2000. In 2008, that number dropped by 23.5 percent to 36,500, and the organization predicts the number will drop to fewer than 27,000 by 2020 (a further 26 percent). Other states, including Washington and Montana, also report decreases. It appears that a great deal of this decline has been a natural result of changing opinions and technologies. Similar opinions were expressed in our survey conducted of all state agencies which will be discussed in more detail later in the chapter.

While examining these numbers in more detail, it became apparent that there are 11 agencies responsible for the bulk of the state's printing expenditures. The top 11 agencies comprise about 88 percent of the printing total. These 11 agencies have declined slightly more

than the state as a whole, at a 45 percent decrease. Figure 2.5 lists these agencies and details their progression.

**Figure 2.5 Printing Expenditures by the 11 Agencies Spending the Most on Printing Declined in the Past Five Fiscal Years.** For more complete year-by-year detail, see Appendix B.

Agency	2007	2011	% Change
Transportation	\$1,153,015	\$407,509	(65)%
Governor's Office	11,851,610	4,870,286	(59)
Office of Education	1,107,597	582,167	(47)
Tax Commission	1,026,290	577,622	(44)
Human Services	1,150,220	872,598	(24)
Workforce Services	896,848	648,052	(28)
Natural Resources	956,319	757,228	(21)
Corrections	500,633	418,571	(16)
Alcoholic Beverage Control	1,759,311	1,576,040	(10)
Health	1,100,299	1,004,921	(9)
Public Safety	426,272	444,802	4
<b>TOTAL</b>	<b>\$21,928,416</b>	<b>\$12,159,798</b>	<b>(45)%</b>

Source: State Datawarehouse

The Department of Public Safety (DPS) stands out as the only agency experiencing a slight increase in costs. A representative from DPS explained that this is because both the Driver License Division and the Bureau of Criminal Identification (BCI) are operated within DPS. The bulk of DPS printing expenses come from these two entities, and many of their operations require large amounts of printing and mailing to the public, which cannot be feasibly or legally adapted to electronic means at this time.

The largest expenditure in Figure 2.5 came from the Governor's Office. This office went from comprising about 49 percent of the state printing total to comprising 35 percent. The bulk of this decline is attributable to the efforts of the Office of Tourism within the Governor's Office of Economic Development. Their printing costs declined 61 percent from fiscal year 2007 to 2011. In 2007 Tourism spent \$10.8 million, or 91 percent of the printing expenses within the Governor's Office. In 2011, the amount spent dropped to \$4.18

**The largest drop in printing expenses can be attributed to the Office of Tourism.**

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**Despite having no formal policies, the Office of Tourism has taken actions to reduce their printing amounts.**

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million, now 86 percent of the Governor’s Office expenses. While the Office of Tourism reports having no formal policies guiding printing operations, they also report taking many actions to reduce their printing impact. These actions include

- Emailing links instead of printing and mailing
- Optimizing printer usage, meaning the number of printers per staff
- Regularly purging mailing lists to discontinue unnecessary printing/ mailing
- Regularly analyzing the necessary number of printed copies both internal and external
- Redesigning the web site, making it more user-friendly to access online information, including the previously printed comprehensive travel guide

Although the printing expenses shown in Figures 2.4 and 2.5 appear to represent a natural decline due to the increased use of technology, this reduction trend could potentially be sped up by a formalized effort to follow best practices to continually reduce the amount and cost of printing and copying.

### **Best Practices and Policies Exist that Could Further Encourage Declining Costs**

In order to fulfill the legislative interest in reducing printed material, as well as maximize the efficiency of resource use, state entities should determine how best to regulate their printing usage. While Utah has no statewide printing statute or policy, some other states and the federal government have created specific policies to guide their operations. In addition to formalized policies, there are best practices in the field of printing that Utah agencies should examine to determine what would work while still meeting their agency goals. If these best practices lead agencies to consider paperless operations, limited analysis shows that the costs of storage for such a system may not be prohibitive.

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**Some states and the federal government have policies to reduce the amount of printing.**

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## Formal Policies Should Guide Printing Practices

As discussed in Chapter I, Utah has no statewide printing policy or statute. Other states have reported specific actions, best practices and policies that they have enacted to control and reduce printing costs. In addition, the federal government, as well as individual federal agencies, have taken steps to decrease their paper usage and cost. Efficiencies range from something as simple as printing on both sides of a page, to moving an office to completely paperless operations. Figure 2.6 explains some policies and statutes created by government entities to govern their printing operations.

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**Utah has no statewide printing policy or statute.**

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**Figure 2.6 Other Entities Report Having Implemented or Recommended Specific Policies to Reduce Printing Amounts.** Many of these policies take the form of federal and state statute.

Entity	Formal Policy
Federal Government	Enacted the Government Paperwork Elimination Act, requiring federal agencies to allow submission of information electronically, and to maintain their own records electronically, when practicable.
Federal Government	Created the Electronic Government Act as well as the Office of Electronic Government to “promote better use of the Internet and other information technologies, thereby improving government services.”
Connecticut	A task force recommended implementing policies for the electronic transfer of documents.
Florida	Enacted statute requiring agencies to: (1) justify publications costing over \$50,000; (2) biennially purge their mailing lists; and (3) file public documents with the State Library.
Montana	Enacted statute requiring a statement printed on the cover of all public documents stating the cost per copy and the total cost broken down by printing and distribution.
Texas	Enacted statute requiring that “a state agency shall make each report required by law available to members of the legislature only in electronic format.” It also directs some agencies to submit reports only in electronic form, regardless of the destination audience.
Washington	The state auditor recommended a statewide strategy to track and reduce printing costs. This would include reducing costs for desktop printing equipment (known as print management) and “discouraging printing in favor of more economical and environmentally friendly options.”

The information in Figure 2.6 represents formal efforts to control printing costs. While we are not necessarily recommending the specific actions formalized by the listed entities, it would be useful for Utah state agencies to develop formal policies to guide their own practices. We recognize and recommend that each agency examine their own practices and needs to determine which practices would work best for them.

According to the Government Paperwork Elimination Act, federal agencies wishing to remain paperless have to demonstrate why it is preferable to do so, further demonstrating the importance of specifics in the process. Guidelines to complying with the act state that:

Agencies should develop and implement plans, supported by an assessment of whether to use and accept documents in electronic form and to engage in electronic transactions. The assessment should weigh costs and benefits and involve an appropriate risk analysis, recognizing that low-risk information processes may need only minimal consideration, while high-risk processes may need extensive analysis.

Printing and distribution policies do not have to be enacted statewide to be effective. In fact, these policies can be agency-division- or office-based. In a survey of all Utah state agencies, only 32.5 percent report having printing policies in place, while 5 percent report being in the process of developing policies. Examples of existing or developing policies in agencies are listed in Figure 2.7.

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**Printing policy can be effectively enacted on an agency basis.**

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**Figure 2.7 Some Utah Agencies Report They Have Enacted Policies to Ensure Appropriate Printing Usage.** These policies are either in force, or in the process of being created.

Entity	Formal Policy
Human Services	All reports and communications are produced electronically. Reports, brochures, and communications are printed only upon request.
Labor Commission	All printing must be approved in advance by the Director of Administrative Services and the Department Director.
State Auditor	Hard copies of audits are sent to agency management and financial personnel and to the State Division of Finance. Electronic copies are sent to the Legislature and the Governor’s Office.
Tax Commission	All reports and publications will be generated and distributed electronically unless there is a unique need for the hard copy.
Workforce Services	Management formally reviews each publication to determine “value to the customer, benefit/advantage to the agency, and balance of costs.”

Source: Legislative Audit Survey of all state agencies conducted April through May 2012

While improvements can be made without a policy, as discussed below, Washington states that a “lack of direction contributes to inconsistent practices and varying levels of efficiency among state agencies.” Formalized policies can help ensure improvement. Discussions with the Governor’s Deputy Chief of Staff have indicated that executive branch agencies are willing to make any improvements recommended.

**Best Practices Should Be Considered When Developing Policies**

Best practices exist that could be included in these formalized policies. Other states and federal agencies have studied and put into practice some of these best practices, as listed in Figure 2.8. We recognize that this is not an exhaustive list, and other options could be discovered in the course of agency research.

**The executive branch is willing to make any improvements recommended.**

**Figure 2.8 Best Practices Exist that Utah Could Follow to Further Reduce Printing Costs.** Utah agencies should determine which practices could be beneficial.

Entity	Best Practice
U.S. Department of Education	<ul style="list-style-type: none"> <li>• Replace paper-based recordkeeping</li> <li>• Eliminate paper archival storage</li> </ul>
U.S. Department of Energy	<ul style="list-style-type: none"> <li>• Implement IT reforms to modernize paperless operations</li> </ul>
U.S. Department of the Interior	<ul style="list-style-type: none"> <li>• Eliminate requirements to print out electronic records to paper</li> </ul>
Connecticut	<ul style="list-style-type: none"> <li>• Print fewer copies of reports</li> <li>• Only print reports on demand</li> <li>• Encourage voluntary reductions</li> <li>• Implement policies for the electronic transfer of documents</li> </ul>
Florida	<ul style="list-style-type: none"> <li>• Regularly purge mailing lists, and offer the option of receiving the mailing via email</li> <li>• Justify publications costing over \$50,000</li> <li>• File public documents with the State Library</li> </ul>
Montana	<ul style="list-style-type: none"> <li>• Move from a printed state phone book to exclusively online</li> <li>• Agency supervisors review and approve all public document print jobs</li> </ul>
Washington	<ul style="list-style-type: none"> <li>• Employ “managed print” or increasing the number of shared printers</li> <li>• Create formalized policies</li> </ul>
Iowa	<ul style="list-style-type: none"> <li>• Develop software to track printer use and maintenance</li> </ul>
Oregon	<ul style="list-style-type: none"> <li>• Placing unemployment, food assistance and child support on debit cards</li> </ul>

**Utah agencies have begun to use some printing best practices.**

Depending on individual agency needs, Utah agencies can use these best practices to further encourage reduction in printing volumes and expenses. In fact, some agencies are already using some of these practices. Overall, 92 percent stated they have taken steps to reduce printing volume, and 5 percent reported they are currently considering action. Figure 2.9 shows the results of a survey of all Utah agencies conducted to determine which practices they are employing.

**Figure 2.9 Agencies Report Multiple Efforts to Reduce Printing Amounts.** The percentage represents the percentage of agencies reporting having taken the listed action.

Action	
Email links instead of printing and mailing reports	95%
Analysis of what information can be produced electronically	74
Regular analysis of number of printed copies needed	55
Analysis of printer usage in order to optimize	47
Opt-out for receipt of regular mailings	45
Send CDs as opposed to printed materials	42
Regularly purge mailing lists	40
Place reports in Dropbox feature	34
Opt-in for receipt of regular mailings	21

Source: Legislative Audit Survey of all state agencies conducted April through May 2012

Along with these actions, agencies report posting reports online and allowing the public to print their own copies if desired, instituting online submission of client information, and focusing on dual-sided printing. Reported specific examples of agency action include:

- Utah State Tax Commission – Reports are automatically emailed to staff to accomplish their daily work instead of being printed out.
- Department of Administrative Services – Meeting materials are kept on the website instead of hard copies being distributed.
- Department of Natural Resources – Digitized all accounting records in order to avoid maintaining physical files.
- Department of Human Resource Management – Standardized reports to eliminate some paperwork.

All agencies should examine these practices and determine which could feasibly be efficiently employed by their office. (The complete results of the agency survey can be found in Appendix D.)

**Storage Costs for Paperless Operations Do Not Appear Prohibitive**

Although concerns have been voiced about the cost of increased electronic storage space required when moving away from paper-based operations, it appears the effects may be fairly minimal and offset by

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**Agencies should examine best practices to determine what could work for their own operations.**

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**Efficiencies from going paperless could compensate for costs.**

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**The majority of agencies do not track the costs between printing and electronic storage.**

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**Higher education's printing costs have declined 5 percent in the last 3 years.**

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increased convenience. In fact, the Department of Technology Services (DTS) staff estimated that when the Department of Workforce Services recently moved to an electronic filing system, one year's worth of data took up about 800 gigabytes of storage, a comparatively small amount. DTS staff also said that, many times, going paperless would not increase storage requirements that much because most documents are already produced and saved electronically, with the added benefit that under a paperless system, they no longer have to be printed out. However, we acknowledge more agency specific analysis will need to be performed.

Our recent survey also demonstrated that more attention should be given to the cost relationship between printing and electronic storage. When asked in a survey, 50 percent of state agencies reported they do not know what percentage of electronic storage can be attributed to reducing printing amounts. Of those who could estimate what percentage could be attributed to reducing printing, 36 percent reported it is between 0 and 25 percent, while 7 percent or less reported 26 percent and above could be attributed to reduced printing.

### **Higher Education Institutions Need to Determine Where They Can Improve**

Printing costs for higher education institutions have declined at a slower pace than for the rest of the state agencies we examined. In the past three fiscal years, higher education costs have reduced 5 percent. Most institutions report having taken some actions to reduce costs, but the majority of these actions appear to be department-specific. The University of Utah and Weber State University have experienced the steepest decline and have accompanying school-wide actions and initiatives to explain some of that reduction. We recommend that institutions of higher education examine their printing costs and practices to determine where efficiencies can be achieved.

As noted, printing costs for the state as a whole have declined markedly over the last five years, while costs for printing in higher education have declined more slowly. Since printing cost numbers were less readily available for higher education, we were only able to compare the last three fiscal years instead of five. Aggregate printing

costs at all eight of the institutions of higher education have declined 5 percent in the last three fiscal years. This is a much smaller rate than for the state as a whole, even when considering the same three year period. From fiscal year 2009 to 2011, state printing costs declined 26 percent, compared to higher education’s 5 percent. Figure 2.10 shows the historic printing costs for higher education in the state.

**Figure 2.10 Institutions of Higher Educations’ Printing Costs Have Remained Fairly Static.** Amounts shown for fiscal years are in millions.

School	2009	2011	% Change
University of Utah	\$1,316,750	\$886,461	(33)%
Weber State University	584,999	473,547	(19)
Snow College	59,139	52,711	(11)
Southern Utah University*	225,158	200,397	(11)
Dixie State College	49,770	106,868	(4)**
Salt Lake Community College	1,221,751	1,220,379	No change
Utah Valley University	1,581,759	1,582,317	No change
Utah State University	609,452	829,543	36
<b>TOTAL</b>	<b>\$5,648,777</b>	<b>\$5,352,224</b>	<b>(5)%</b>

Source: Individual institution self reporting. These numbers have not been audited.

\* This does not include amounts for the Shakespeare Festival as no other school has similar costs.

\*\* Since full amounts were unavailable for Dixie for FY2009, this is a one-year percent decrease from the FY 2010 total of \$118,296.

Most schools report having either decreasing or fairly constant costs. Utah State University (USU) reports that their increase (the only increase among the schools) was the result of merging with the College of Eastern Utah (CEU) in fiscal year 2011. They also report that CEU’s printing cost for fiscal year 2011 was about \$64,000. This means that even excluding CEU’s printing costs, USU’s expenses increased 20 percent. While this may be the result of increased administrative costs for CEU, USU should still carefully examine their printing expenses.

All the institutions reported having taken action to reduce printing, but the majority of this action was on a departmental, or action specific basis. These actions include

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**USU should examine the reason for and solution to their increasing printing costs.**

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- Salt Lake Community College – Most syllabi and classroom information is kept online.
- Southern Utah University – Departmental annual reports, and trustee agendas are no longer printed, and printings of the school-wide annual report have been cut in half.
- Utah Valley University – The largest effort has been the business office working to reduce or eliminate paper documents.

Some schools report having taken no specific action, just relying on numbers dropping naturally.

The majority of the cost reduction shown in Figure 2.10 comes from the University of Utah (with a 33 percent reduction) and Weber State University (a 19 percent reduction). Both of these institutions report school-wide campaigns and initiatives that appear to be having some effect. Weber State reports a fairly aggressive energy efficiency campaign, with an emphasis on “Think Before You Print” among others. The University of Utah reports having taken the following actions

- Switched from paper to electronic transactions
- Electronic recruitment of both students and faculty where possible, including applications and supporting materials
- Admissions brochures available on-line
- Faculty-student communications (including syllabi and assignments) conducted on an online system
- Paychecks and W-2 forms online
- Received documents scanned and stored electronically with no additional copies made

The University of Utah further reports that they “continue to actively pursue further reductions in all areas of campus.” We encourage all institutions of higher education to determine where they can pursue further reductions. USU in particular should examine the costs attributable to the former College of Eastern Utah to ensure those are contained.

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**The University of Utah and Weber State have more formalized efforts to reduce printing amounts.**

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**We encourage schools to determine where they can achieve printing reductions.**

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One explanation offered for the schools' costs declining at a slower rate than other state agencies is that enrollment numbers have been increasing, which could cause printing numbers to either increase or decrease more slowly. While we cannot determine what effect increases in student enrollment may have had, it appears that in total, printing costs per student have not changed. Figure 2.11 shows the printing expense per enrolled student.

**Figure 2.11 The Printing Cost per Student Has Remained Steady.** These numbers were obtained using an average tuition for one school year.

School	2010	2011	Percent Change
University of Utah	\$46.54	\$38.35	(17.6)%
Dixie State College	14.79	12.94	(12.5)
Salt Lake Community College	46.63	43.81	(6.0)
Utah Valley University	53.59	51.81	(3.3)
Weber State University	19.88	21.16	6.4
Utah State University	28.42	36.57	28.7
Southern Utah University	17.81	25.02	40.5
Snow College	8.87	12.85	44.9
<b>AVERAGE</b>	<b>\$36.35</b>	<b>\$36.42</b>	<b>(0.2)%</b>

Source: Auditor Analysis of School Data

The total cost per student for the institutions remained static from the 2010 to 2011 school years, but the effect of student enrollment on printing costs is inconclusive.

In the survey discussed above, legislators were asked whether there are any agencies that they felt distributed excessive printed materials. Of the 18 responses, 8 listed higher education as the entity distributing the most unnecessary documentation. The next most frequently listed agency was mentioned 3 times. These responses should provide incentive for institutions of higher education to look at their practices to determine where they can improve.

While we acknowledge that the mission of these institutions is different from that of other agencies within the state, the fact remains that higher education's printing costs have remained fairly static in the last three fiscal years. A formalized effort to determine where costs

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**The impact of increasing student enrollment on printing costs is inconclusive.**

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**Legislators listed higher education as distributing excessive printed materials.**

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can be controlled, and to develop printing/copying policies could help higher education keep pace with the rest of the state in this area.

## **Recommendations**

1. We recommend that state agencies and institutions of higher education examine existing or develop internal policies relating to printing, both internal and external.
2. We recommend that state agencies and institutions of higher education examine printing best practices to determine where improvements can be made in printing practices.

## **Appendices**

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## Appendix A

Printing Department of Finance Object Codes used to determine state agency printing costs.

Object Code	Description
6131	Advertising and Legal Publications – Includes printed or broadcasted advertising and other publicity expenses including market development activities and legal publication of official notices.
6182	Printing and Binding – Includes printing and binding, for annual reports, special law reports, forms, checks, or warrants.
6186	Photocopy Expenses – Includes rental, repair and maintenance costs of photocopy machines, microfilm reader/printers, fax machine usage charges, supplies, and payments to other agencies for copies made.
6221	Printed Forms for Public Distribution – Includes printed forms and publications which are furnished to the public in large quantities (such as income tax return forms and water conservation publications).

*Department of Finance expense codes*

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## Appendix B

Printing costs for top 11 printing expense agencies. These printing amounts are listed in millions.

Agency	2007	2008	2009	2010	2011	% Change
Transportation	\$1.15	\$0.69	\$0.51	\$0.41	\$0.40	(65)%
Governor's Office	11.85	8.45	7.19	5.37	4.87	(59)
Office of Education	1.11	1.04	0.83	0.67	0.58	(47)
Tax Commission	1.03	1.14	0.94	0.70	0.58	(44)
Workforce Services	0.90	0.87	0.83	0.74	0.65	(28)
Human Services	1.15	1.13	0.91	0.83	0.87	(24)
Natural Resources	0.96	1.25	0.99	0.78	0.76	(21)
Corrections	0.5	0.59	0.47	0.39	0.42	(16)
Alcoholic Beverage Control	1.76	1.88	1.69	1.13	1.58	(10)
Health	1.10	1.13	1.09	1.07	1.00	(9)
Public Safety	0.43	0.58	1.08	0.45	0.44	4
<b>TOTAL</b>	<b>\$21.9</b>	<b>\$18.7</b>	<b>\$16.5</b>	<b>\$12.6</b>	<b>\$12.2</b>	<b>(45)%</b>

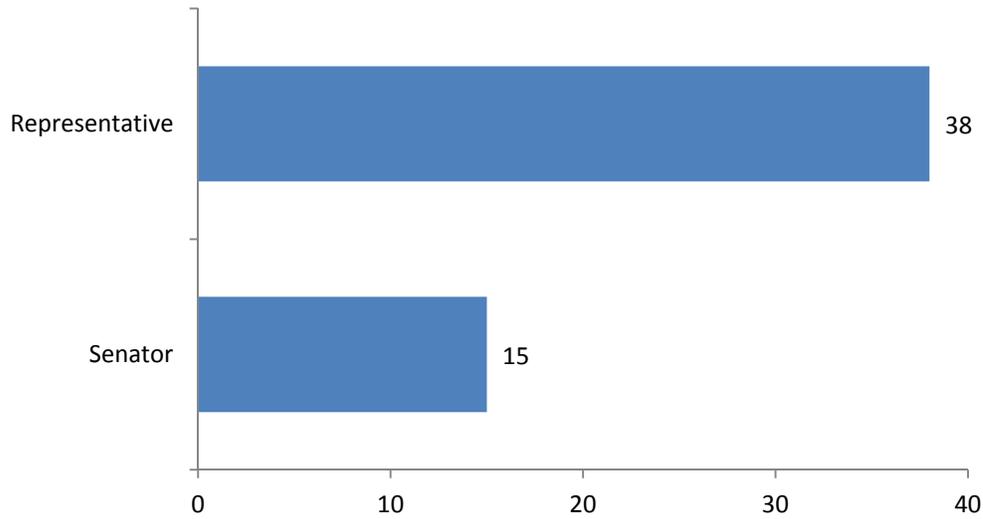
Source: Utah State Datawarehouse

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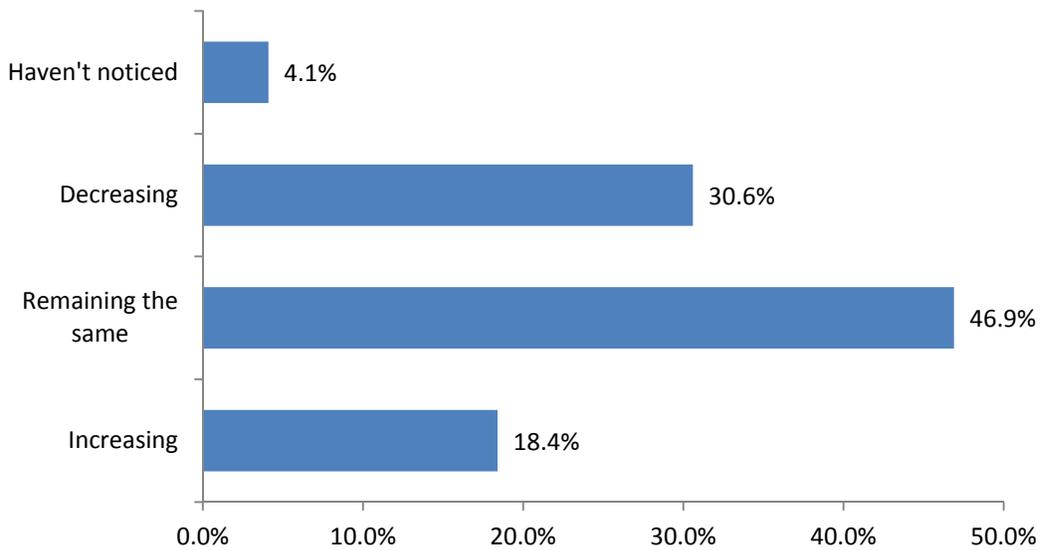
## Appendix C

Results of survey of all legislators. 53 of 104 responded.

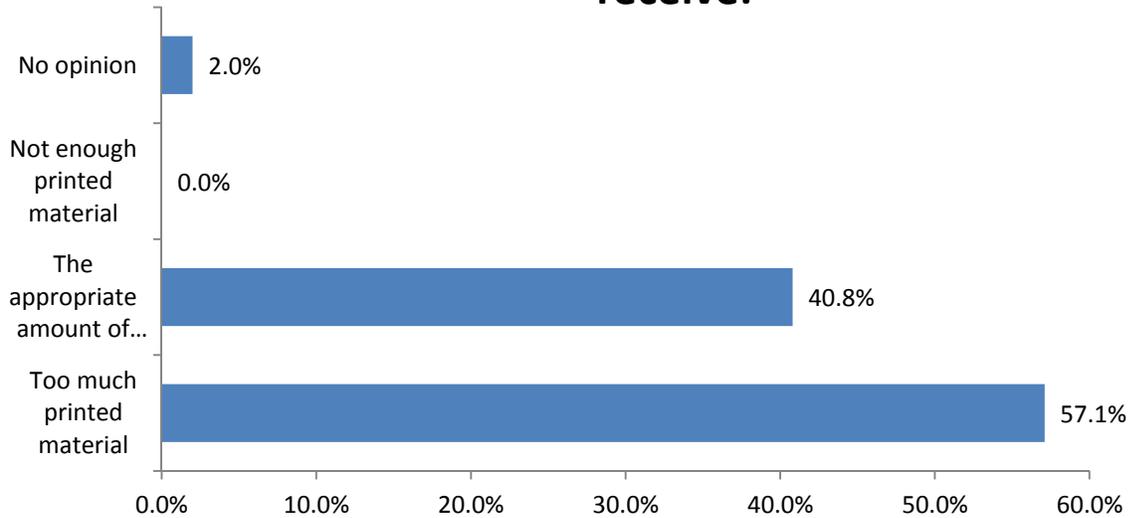
### Are you a Senator or a Representative?



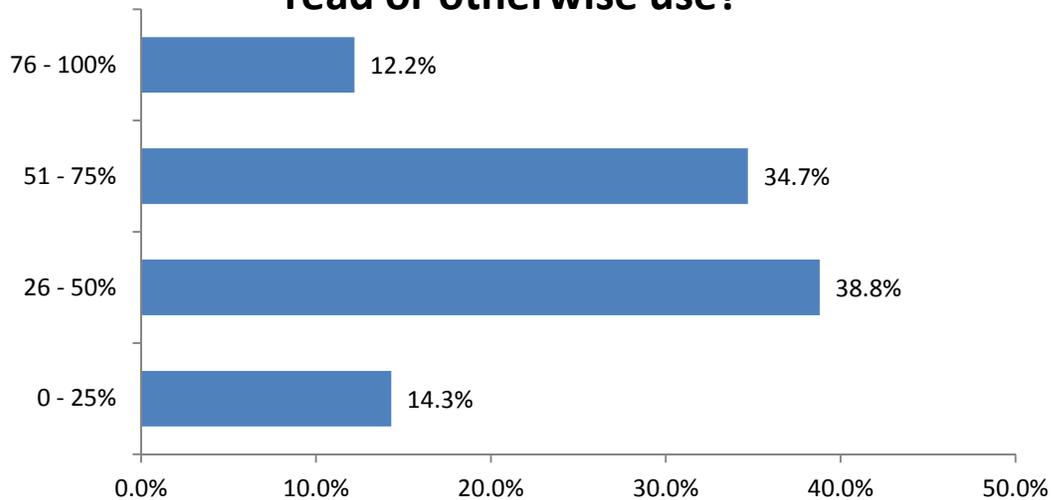
### In your time in the Legislature, have you noticed the volume of printed material:



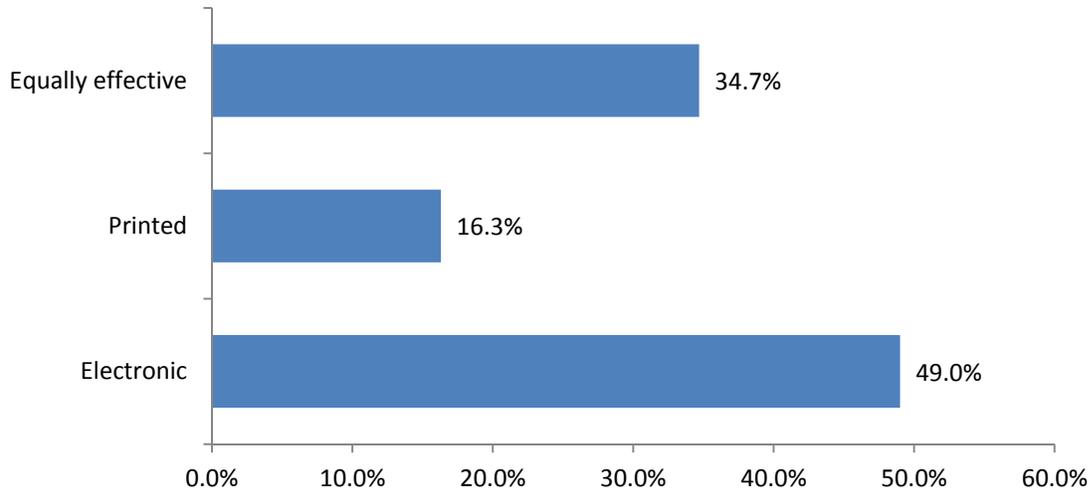
### For your informational needs, do you think you receive:



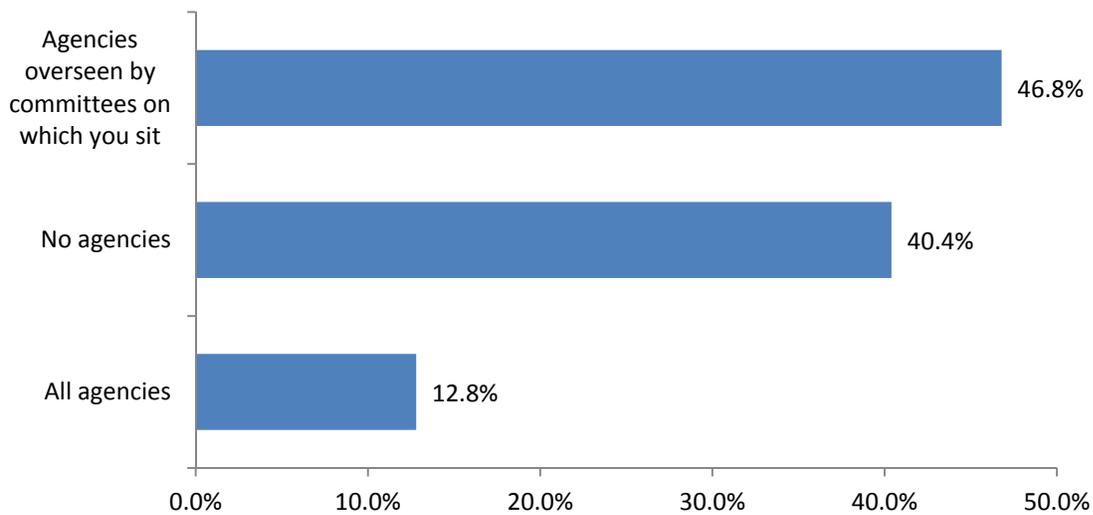
### What percentage of printed material distributed to you would you estimate you read or otherwise use?



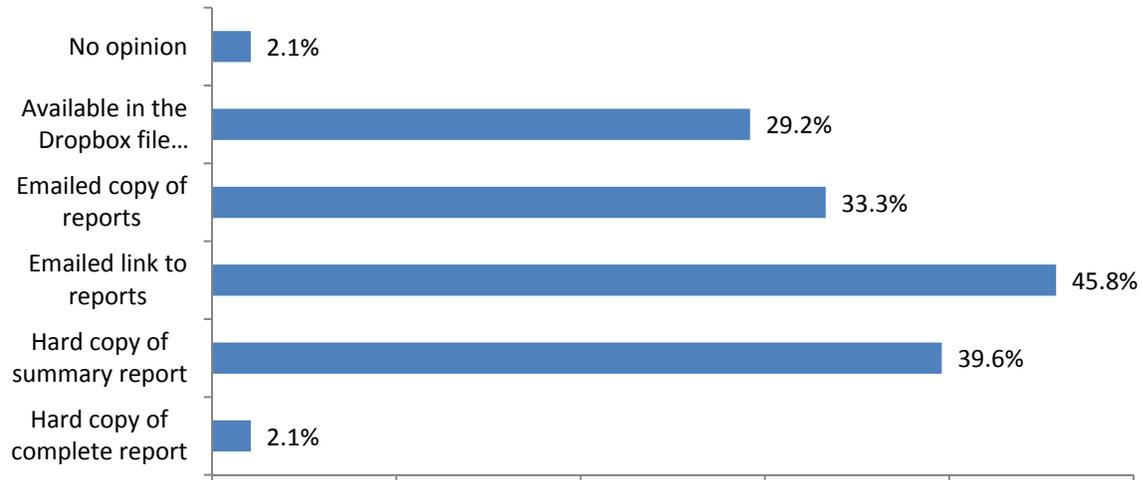
## Do you feel electronic or printed materials are more useful to you?



## Which copies of agency annual reports would you prefer to receive in hard copy?



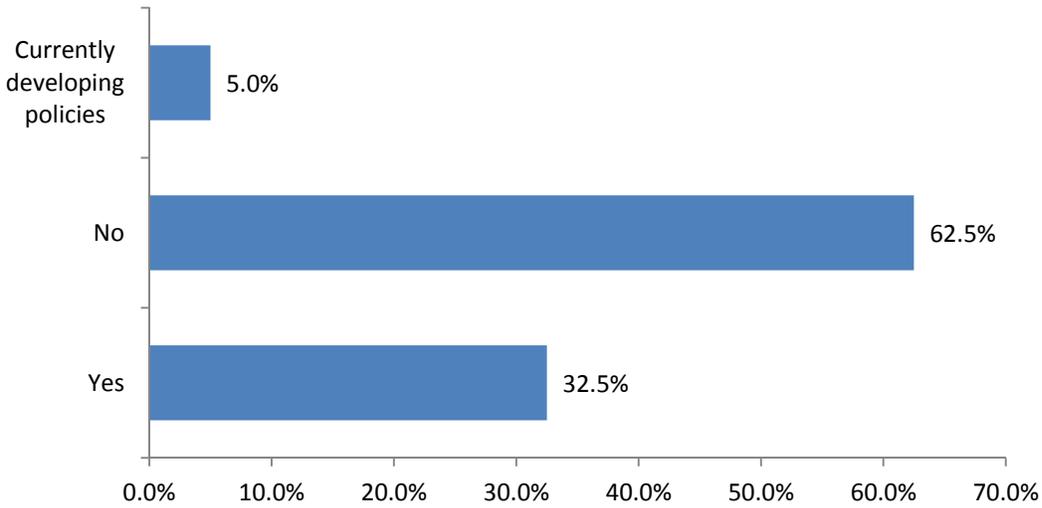
## Which format of agency report distribution would you prefer?



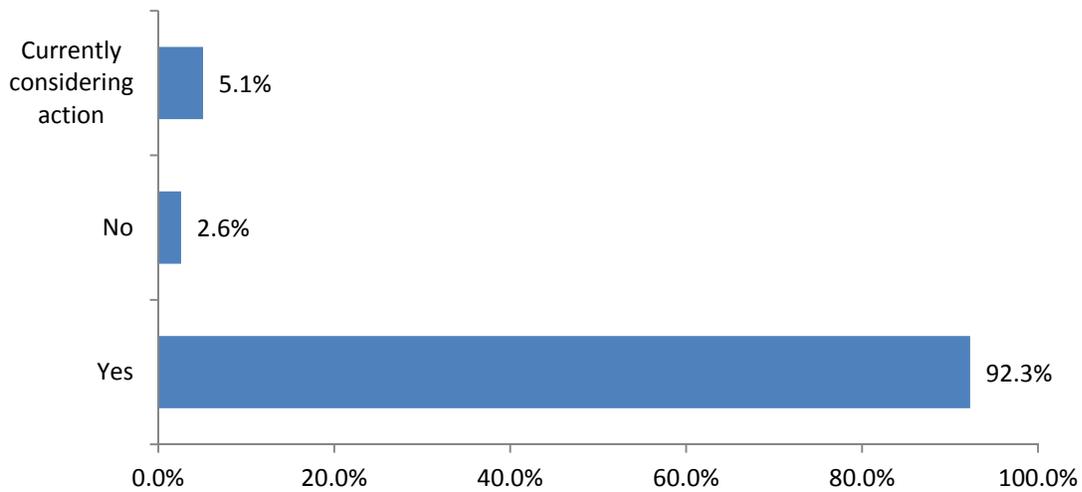
## Appendix D

Results of survey of all state agencies.

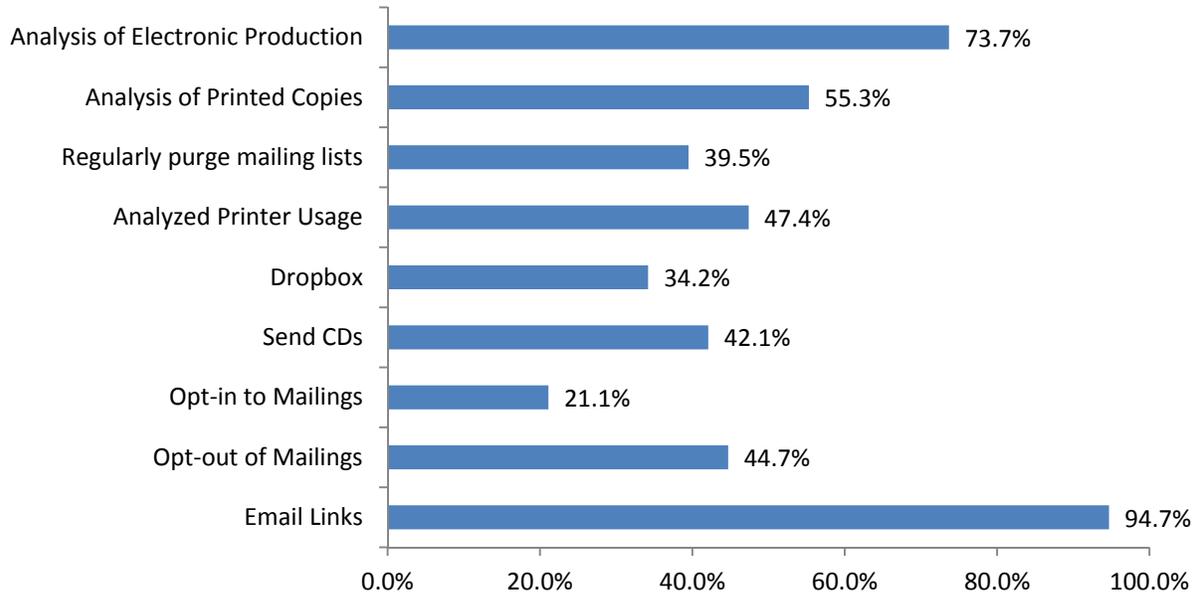
### Does your agency have any printing policies?



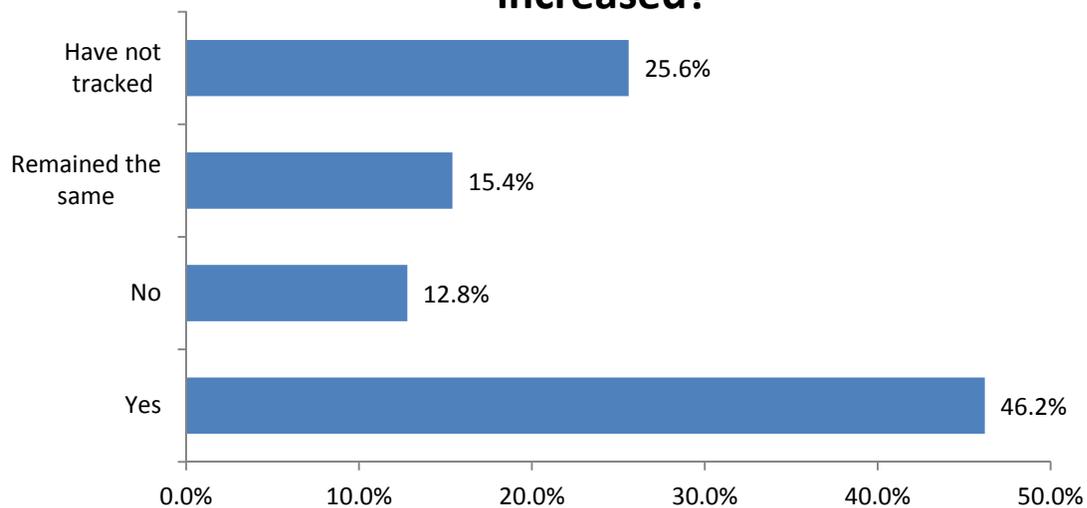
### Has your agency taken any steps to reduce printing volume and/or mailing costs?



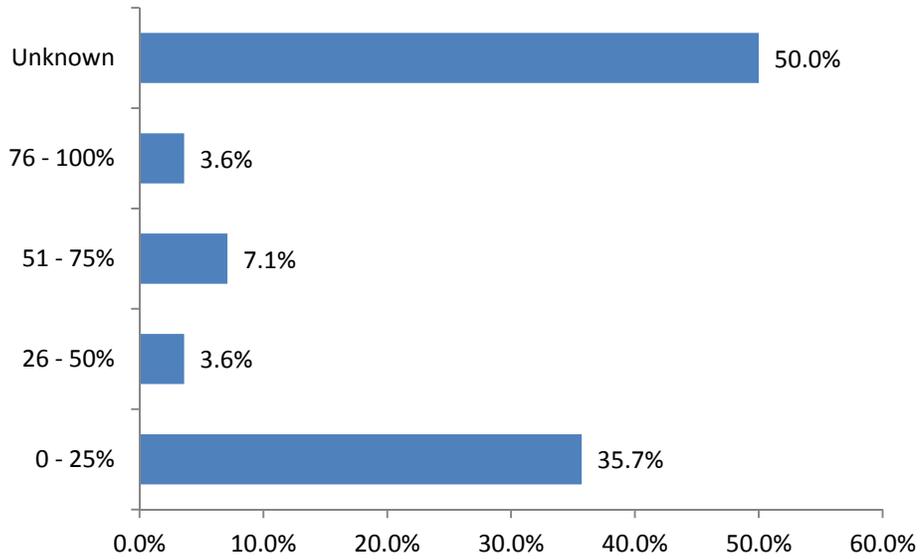
## If yes, which of the following actions have you taken to reduce those costs?



## Have your costs for electronic storage increased?



**If yes, what percentage of the increased costs do you attribute to moving towards paperless operations?**



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## **Agency Responses**

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State of Utah

GARY R. HERBERT  
*Governor*

GREG BELL  
*Lieutenant Governor*

## Office of the Governor

Michael Mower  
Deputy Chief of Staff and State Planning Coordinator

July 19, 2012

John M. Schaff, CIA  
Auditor General  
Office of the Legislative Auditor General  
W 315 Utah State Capitol Complex  
Salt Lake City, Utah 84114

Re: Report No. 2012-12, A Performance Audit of State Printing Costs and Practices

Dear Mr. Schaff:

I am writing as the Deputy Chief of Staff in the Office of Utah Governor Gary R. Herbert. I have reviewed the draft audit with Darin Underwood and Leah Blevins of your staff. I appreciate working with them and especially the useful feedback they provided to me.

For several years, the Office of the Governor has encouraged state agencies to reduce the amount of materials they print. This has been done to conserve resources, mailing expenses, and, in particular, limit the amount of printed material legislators receive from state agencies.

The findings of the audit show that this informal directive has been adhered to by state agencies. However, the audit recommends all state agencies formalize the policy in writing. A few state agencies have already done this (as is noted in the audit).

As proposed in the report, the Executive Branch is willing to make any improvements recommended. We recognize that some legislators prefer "hard copies" of reports and information and others prefer electronic links. To the extent possible, we have encouraged our agencies to work with individual legislators to accommodate their preferred means of receiving state-produced information.

If you have any questions, please call me at (801) 538-1924.

Regards,

A handwritten signature in blue ink that reads "Michael Mower".

Michael Mower  
Deputy Chief of Staff  
Office of Utah Governor Gary R. Herbert



July 20, 2012

Mr. John Schaff  
Legislative Auditor General  
W315 Utah State Capitol Complex  
Salt Lake City, UT 84114-5315

Dear Mr. Schaff:

On behalf of the Utah System of Higher Education (USHE), I am happy to respond to the audit of State Printing Costs and Practices. As noted in the audit, Utah's institutions of higher education have reduced the amount spent on printing, although not as dramatically as other entities. Higher Education's five percent decrease is more significant than it may seem given that at the same time enrollment has grown by 17 percent between 2009 and 2011— 103,000 to 121,000 budget-related FTE students. Also, the institution shown as increasing costs have traditionally lagged behind the amount spent by other institutions is now closer to average.

The audit recommends examining existing policies and best practices to determine where improvements can be made—and I agree. I am confident further progress can and will be made and have brought the audit to the attention of our presidents. We are fully committed to continue to look for appropriate cost saving measures that are both efficient and effective in the delivery of higher education to Utah's students.

Sincerely,



David L. Buhler  
Acting Commissioner of Higher Education