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Office of the City Auditor

Audit Report

AUDIT OF SOFTWARE LICENSE COMPLIANCE

(Report No. A14-010)

April 11, 2014

City Auditor

Craig D. Kinton

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Executive Summary

The City of Dallas (City) does not have an effective software asset management plan for the acquisition, use, and disposal of software. The City also cannot properly track software and assess software license compliance Citywide because the following are not available:

- A Citywide inventory of all software and related software licenses
- Documentation of the purpose of each software
- How each software is actually used, configured, and how it impacts the City's operations
- A formal method to monitor software license compliance

Background

Software is a portable and decentralized asset and an effective management plan must address asset acquisition, use, and disposal. Within the City, software asset management is shared amongst various departments, including:

- Department of Business Development and Procurement Services (BDPS) for procurement
- City Controller's Office (CCO) for accurately accounting for software costs
- Individual departments which identify needs and determine the life cycle of software usage
- Department of Communication and Information Services (CIS) for daily management of certain enterprise software

Source: Business Software Alliance: *Government Guide for Software Management*, Pages 7-19; City of Dallas

The Department of Communication and Information Services (CIS) does track and can generally assess software license compliance for enterprise software (a collection of computer programs with common business applications), such as Microsoft Office. Neither CIS nor the individual departments, however, completely track and consistently assess software license compliance for non-enterprise (desktop/laptop) software purchased and installed for use¹.

The City's operations are decentralized and software management is shared amongst various departments (see text box above). Therefore, it is more difficult to establish an effective software asset management plan and monitor software license compliance. The following issues are based on the audit procedures

¹ To evaluate the City's software asset management plan and software license compliance, the Office of the City Auditor (Office) asked the following 15 departments to complete a software license survey: (1) Aviation; (2) Business Development and Procurement Services; (3) **City Attorney's Office**; (4) City Controller's Office; (5) Code Compliance Services; (6) **Convention and Event Services**; (7) **Court and Detention Services**; (8) Dallas Fire-Rescue; (9) Dallas Police Department; (10) Dallas Water Utilities; (11) **Human Resources**; (12) Library; (13) Office of Financial Services; (14) Park and Recreation; and, (15) **Trinity Watershed Management**. The five departments that did not respond to the survey are noted in bold (see Appendix II for the software license survey).

noted in Appendix I and the software license survey responses received from the ten of 15 departments that responded to the auditor's request:

Software Licenses' Usage and Compliance Cannot Be Readily Identified

The City cannot readily identify software licenses in use and software licenses available for use because the City does not have a Citywide inventory of all software and related software licenses. According to CIS, a Citywide inventory is being developed. The CIS recently scanned the City's network and identified 9,000 executable files which CIS summarized into four software categories. The CIS acknowledges its awareness and daily management of two of the software categories (e.g., Microsoft Corporation {Microsoft}). For the remaining two software categories, it is not clear whether CIS or the departments are responsible for daily management, including license usage and compliance. As a result, the City cannot readily determine software license compliance and could pay additional fees for violations of software licensing agreements or incur unnecessary costs for purchased, but unused licenses.

Administrative Directives Are Not Consistently Followed or Clear

Administrative Directives (ADs) related to software licenses are not consistently followed or clear. For example, AD 2-26: *Use of City Microcomputer Equipment and Software* (AD 2-26) requires departments to complete an annual software inventory. The software license survey responses showed that one hundred percent of the departments have not recently completed inventories of software licenses purchased, in use, and available for use. Additionally, AD 4-05: *Contracting Policy* is not clear on whether software licenses procured through Administrative Actions² (AAs) have to receive prior approval from CIS similar to procurement items where formal bidding occurs. As a result, the departments may not fully comply with the ADs and may purchase unnecessary software licenses and/or violate software licensing agreements.

Annual Software Licenses' Costs Are Not Readily Identifiable

The City's annual cost for software licenses, including purchases and renewals, is not readily identifiable. Departments do not consistently use the software and software-related object codes specified in the City's Chart of Accounts to record software license costs. For example, the most frequently used object code is 3070 – *Professional Services*. As a result, the City cannot effectively:

² AAs allow department directors to procure items without City Council approval as long as the total procurement cost is below \$50,000.

- Perform analysis of renewing licenses against alternatives (e.g., procuring new software against using existing software)
- Evaluate price reasonableness when procuring software and related software licenses

Software License Policy Is Not Communicated Effectively

The City's primary software license policy, AD 2-26, is not effectively communicated. The communication methods departments rely on to educate and train employees on software license policy are new employee orientation which happens once upon hire and the Security Authorization Request (SAR) form which is completed only as needed and only by those employees who use software to perform their functions. As a result, City employees may not understand the software license policy sufficiently to meet software licensing agreements.

We recommend the City Manager:

- Develop a formal software license compliance program for the two software categories for which software license management is not clearly understood
- Ensure City departments comply with AD 2-26 and perform annual software inventories of software licenses

We recommend the Director of CIS:

- Continue to develop and maintain an inventory of software and related software licenses in the two categories that CIS knows of and has control over managing daily and/or manages for departments with their approval
- Update AD 2-26 to clarify what the departments, including CIS, should do with the annual software inventories and specify a method to periodically evaluate software licensing activities using the software inventories
- Ensure that software license policy is communicated periodically to City employees with formal acknowledgement that the employee has read and understood the policy

We recommend the Director of Business Development and Procurement Services (BDPS) update AD 4-05 to clarify that high technology items procured through AAs also require consultation with CIS prior to procurement.

**An Audit Report on –
Software License Compliance**

We recommend the City Controller's Office clarify the object codes that should be used by departments with a focus on accurately and consistently accounting for software license costs.

The objective of the audit was to evaluate the City's management of, and compliance with the terms of, software licensing agreements and determine if the licensing programs were effective. The audit scope covered CIS and 15 departments selected for software license survey based on a risk assessment for the period October 2010 to June 30, 2013. We also reviewed certain related transactions and records before and after that period.

Management's response to this report is included as Appendix IV.

Audit Results

Overall Conclusion

The City of Dallas (City) does not have an effective software asset management plan for the acquisition, use, and disposal of software. The City also cannot properly track software and assess software license compliance Citywide because the following are not available: (1) a Citywide inventory of all software and related software licenses; (2) documentation of the purpose of each software; (3) how each software is actually used, configured, and how it impacts the City's operations; and, (4) a formal method to monitor software license compliance.

The Department of Communication and Information Services (CIS) does track and can generally assess software license compliance for enterprise software (a collection of computer programs with common business applications), such as Microsoft Office. Neither CIS nor the individual departments, however, completely track and consistently assess software license compliance for non-enterprise (desktop/laptop) software purchased and installed for use. In addition, Administrative Directives (ADs) are not consistently followed or clear, annual software licenses costs are not readily identifiable, and the City's software license policy is not communicated effectively.

Software Licenses' Usage and Compliance Cannot Be Readily Identified

The City cannot readily identify software licenses in use and software licenses available for use. As a result, the City cannot readily determine software license compliance and could pay additional fees for violations of software licensing agreements or incur unnecessary costs for purchased, but unused licenses.

A Citywide Inventory of All Software Is Not Available

The City does not have a Citywide inventory of all software and related software licenses. According to CIS, a Citywide inventory is being developed. The CIS scanned the City's network and identified 9,000 executable files. Based on the scan, CIS was not able to determine whether these executable files were distinct software or merely multiple copies of the same software. The CIS summarized its assessment of the City's scanned software into the following categories:

- (1) Software that CIS knows of and has complete control over managing daily
- (2) Software CIS knows of and manages for departments with their approval

(3) Software CIS knows of, but the responsibility for managing the software resides internally within other departments

(4) Software CIS does not know of and is not responsible for managing

The CIS concluded that the risk of software license noncompliance is low for enterprise software which generally falls into categories one and two. The risk is considered low for enterprise software because software license compliance is typically monitored by the software vendor. Most of the software installed on City computers, however, falls into categories three and four. Therefore, the responsibility for managing software license compliance for these departments' software is currently outside the purview of CIS.

Records May Not Be Available

Software licenses and supporting records are not organized and may not be readily available to determine software license compliance. The software license survey responses show:

- Ninety percent of the departments' installed software and related software licenses are valid, but original disks and/or product keys with the serial numbers to show legitimacy of installation may not be available
- Eighty percent of the departments' original software licensing agreements are not maintained and the departments may only be able to produce invoices
- Eighty percent of the departments maintain inventory of all software and related licenses, but inventory cannot be readily validated because the inventory maintenance is distributed among individuals, divisions, and units within the same department
- Seventy percent of the departments store the master copies of software; the departments identified either CIS or the vendors as the responsible entities for maintaining all copies of software and related software licenses. The departments' responses, however, do not mirror CIS' assessment of the entities responsible for managing software licenses as explained in the four categories noted above.

According to Microsoft Corporation (Microsoft) and BMC Software, best practices for software asset management are to get organized, know what an organization has in place, and undertake a discovery phase to gain an accurate picture of what software is in use.

Recommendation I

We recommend the Director of CIS continue to develop and maintain an inventory of software and related software licenses in the two categories that CIS knows of and has control over managing daily and/or manages for departments with their approval.

Recommendation II

We recommend the City Manager develop a formal software license compliance program for the two software categories for which software license management is not clearly understood.

Please see Appendix IV for management's response to the recommendations.

Administrative Directives Are Not Consistently Followed or Clear

Administrative Directives (ADs) related to software licenses are not consistently followed or clear. As a result, the departments may not fully comply with the ADs and may purchase unnecessary software licenses and/or violate software licensing agreements.

AD Requirements Are Not Consistently Followed

AD 2-26: *Use of City Microcomputer Equipment and Software* (AD 2-26) Section 5.2.5, requires departments to complete an annual software inventory by October 31 of every year as part of the departmental Internal Controls. The annual inventory must list all software installed on each departmental personal computer (PC), as well as account for all software licenses. Random checks are also recommended to ensure software license compliance. The software license survey, however, shows the AD is not consistently followed because:

- One hundred percent of the departments have not recently completed inventories of software licenses purchased, in use, and available for use
- Ninety percent of the departments are confident software licenses meet the terms of software licensing agreements
- Eighty percent of the departments would not certify that they are currently compliant with the software licensing agreements

AD Requirements Are Not Clear

Although AD 2-26 requires completion of software inventories as part of departmental Internal Controls, AD 2-26 does not clarify what the departments, including CIS, should do with the completed inventories. Additionally, AD 2-26 does not specify how the City intends to analyze the software inventories to manage City software licensing activities. Without additional clarity, departments are less likely to comply with the AD 2-26 requirements, and the City does not have a method to evaluate departments' software licensing activities.

AD 4-05: *Contracting Policy* (AD 4-05) states departments should consult with the Department of Business Development and Procurement Services (BDPS) and CIS prior to procuring high technology items; however, the AD does not specify clearly that this consultation should apply to both formally bid items as well as Administrative Action³ (AAs) items. In situations where AAs are used,

³ AAs allow department directors to procure items without City Council approval as long as the total procurement cost is below \$50,000.

department directors can procure items without the direct involvement of either BDPS or CIS which may result in software licensing agreement violations.

Recommendation III

We recommend the City Manager ensure City departments comply with AD 2-26 and perform annual software inventories of software licenses.

Recommendation IV

We recommend the Director of CIS update AD 2-26 to clarify what the departments, including CIS, should do with the annual software inventories and specify a method to periodically evaluate software licensing activities using the software inventories.

Recommendation V

We recommend the Director of BDPS update AD 4-05 to clarify that high technology items procured through AAs also require consultation with CIS prior to procurement.

Please see Appendix IV for management's response to the recommendation.

Annual Software Licenses' Costs Are Not Readily Identifiable

The City's annual cost for software licenses, including purchases and renewals, is not readily identifiable. As a result, the City cannot effectively:

- Perform analysis of renewing licenses against alternatives (e.g., procuring new software versus upgrading existing software)
- Evaluate price reasonableness when procuring software licenses

Object Codes Used for Software Procurement Are Not Consistent

City departments do not consistently use software and software-related object codes when procuring software and related software licenses. The City's chart of accounts indicates the departments should use one or more of the following three object codes (2735 – Software purchase of less than \$1,000, 3437 – Continual Software License Fee, and 3438 – Software Maintenance Fee) to record software license costs. The software license survey responses, however, show departments also often use other non-software license related codes, such as 3070 – Professional Services for software procurements (see text box).

The City Controller's Office (CCO) does provide annual training to ensure departments allocate expenditures accurately between the series of object codes (e.g., 2000, 3000, and 4000); however, the training does not focus on which specific object code should be applied within a series. For example, a department should allocate software maintenance fees to object code 3438 – Software Maintenance Fee, instead of 3070 – *Professional Services*, even though both object codes are in the 3000 series.

Object Codes Used by Surveyed Departments

1. 2110 – Supplies
2. 2560 – Sanitary Sewer
3. 2731 – Data Processing Equipment
4. 2735 – Software purchase of less than \$1000
5. 3070 – Professional Services
6. 3090 – City Forces
7. 3092 – Security Services
8. 3099 – Miscellaneous Special Services
9. 3110 – Repair and Maintenance
10. 3434 - Programming
11. 3438 – Software Maintenance Fee

Out of the 11 object codes, two object codes were specifically related to software licenses (2735 and 3438). The remaining nine object codes did not appear to relate to the purchase of software licenses.

Source: AMS Advantage Financials Chart of Accounts; Office Software License Survey

Total Software Expenditures Cannot Be Readily Determined

The Office of the City Auditor (Office) performed an analysis of software license related object codes (2735, 3437, and 3438) for fiscal years 2011 and 2012. The

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total expenditures for the three software license related object codes were \$18,254,013. This expenditure amount underestimates total software license expenditures because it does not include the most frequently used object code 3070, as reported by the surveyed departments. The total charges to object code 3070 during this time period were \$97,227,986; however, without a detailed analysis of supporting documentation, it is impossible to determine the extent of software license expenditures included in this amount.

Because software expenditures are not accurately recorded by object code, the Office could not determine total software license expenditures and it was unclear whether these expenditures also include: (1) additional fees that might be paid for software license non-compliance; (2) software licenses bundled with other software related purchases; or, (3) software and related software licenses hosted and supported by the vendor.

Business Software Alliance (BSA)

The BSA serves as the world's premier anti-piracy organization and as a respected leader in shaping public policies that promote technology innovation and drive economic growth. Through government relations, intellectual property enforcement and educational activities around the world, BSA protects intellectual property and fosters innovation; works to open markets and ensure fair competition; and, builds trust and confidence in information technology for consumers, businesses, and governments alike.

Source: www.bsa.org

Price Reasonableness Cannot Always Be Ascertained

The City does not require departments to use separate object codes to record high technology item procurements that are bundled with other professional services and/or software related purchases. For example, a City department may purchase hardware, software, and related professional services to upgrade an existing application or implement a new application. The related cost activities are recorded in one object code instead of

separate object codes. Therefore, the City cannot always determine price reasonableness when comparing the vendor's current offered price to a prior procurement for the same or similar high technology item.

According to Business Software Alliance (BSA), large organizations devote 25 percent of their budget to software expenditures and controlling software license costs is a fundamental element to managing the cost.

Recommendation VI

We recommend the CCO clarify the object codes that should be used by departments with a focus on accurately and consistently accounting for software license cost.

Please see Appendix IV for management's response to the recommendation.

Software License Policy Is Not Communicated Effectively

The City's primary software license policy, AD 2-26, is not communicated effectively. Therefore, City employees may not understand the software license policy sufficiently to consistently comply with and/or enforce the requirements to meet Federal obligations (United States Copyright Law), and software licensing agreements.

The software license survey shows 50 percent of department executives did not communicate the following: (1) it is illegal for employees to copy software; (2) employees are accountable for unauthorized or unlicensed software usage; and, (3) software piracy is prohibited. Of the 50 percent of department executives who did communicate to employees about software license usage and compliance, the communication methods employed are not effective (repetitive or consistent).

Specifically, the communication methods departments rely on to educate and train the employees on software license policy are:

- New employee orientation which happens once upon hire
- Security Authorization Request (SAR) form which is completed only as needed and only by those employees who use software to perform their job functions

According to CIS, software piracy / violations is not a significant risk for enterprise software, such as Microsoft, Systems Applications, and Products in Data Processing System (SAP) and AMS Advantage 3 (AMS), because CIS relies on the vendor to perform annual software license reconciliations and invoice the City for additional software licenses used or violations that may have occurred. The risk, however, related to the non-enterprise software cannot be determined or quantified because the vendor's annual software license reconciliations process is not used for non-enterprise software.

The CIS has established certain security measures to prevent employees from violating software licensing agreements, such as requiring administrative rights for software downloads / installs. These security measures may not adequately

How Software License Violations Occur

Client-server overuse occurs where an organization or its employees fail to understand license restrictions in a network environment.

Online software theft occurs when employees download unauthorized copies of software via an Internet site.

Hard-disk loading occurs when a **computer hardware reseller loads unauthorized** copies of software onto the machines they sell to make the purchase of the machine more attractive.

End user piracy occurs when an individual or organization (the end user) reproduces copies of software without authorization.

Source: *Government Guide for Software Management*, Business Software Alliance, Pages 12-13

prevent employees from violating software licensing agreements (see text box on previous page).

According to the BSA, regular training is an important element to gaining employee acceptance. The implementation of a Citywide information and training program for employees should cover:

- Understanding the statement of policy, including the software management process, procurement procedures, and employees' responsibilities
- How to know if software, or its use, is illegal
- How to take advantage of the software assets supported by the organization

Recommendation VII

We recommend the Director of CIS ensure that software license policy is communicated periodically to City employees with formal acknowledgement that the employee has read and understood the policy.

Please see Appendix IV for management's response to the recommendation.

Background, Objective, Scope and Methodology

Background

Software is a portable and decentralized asset and effective management of software must address acquisition, use, and disposal. Within the City of Dallas (City), software asset management is shared amongst various departments, including:

- Department of Business Development and Procurement Services (BDPS) for procurement
- City Controller's Office (CCO) for accurately accounting for software costs
- Individual departments which identify needs and determine the life cycle of software usage
- Department of Communication and Information Services (CIS) for daily management of certain enterprise software

The CIS does track and can generally assess software license compliance for enterprise software (a collection of computer programs with common business applications), such as Microsoft Office. Neither CIS nor the individual departments completely track and consistently assess software license compliance for non-enterprise (desktop/laptop) software purchased and installed for use. It is more difficult to establish an effective software asset management plan and monitor software license compliance.

The City has established Administrative Directives (ADs) including AD 2-26: *Use of City Microcomputer Equipment and Software* and AD 2-24: *Computer Security*, related to software license and maintenance; however, these ADs have not been recently updated and indicate responsibility for software license and maintenance is at the departmental level. In practice, however, departments presume CIS will ensure software license compliance.

Objective, Scope and Methodology

The objective of the audit was to evaluate the City's management of, and compliance with the terms of, software licensing agreements and determine if the licensing programs were effective. The audit scope covered CIS and 15 departments selected for software license survey, based on a risk assessment,

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Software License Compliance**

for the period October 2010 to June 30, 2013. We also reviewed certain related transactions and records before and after that period.

The Office of the City Auditor (Office) developed a software license survey to identify the City departments' understanding of software license purchase, usage, and compliance with software licensing agreements. The software license survey was developed using requirements in AD 2-24 and AD 2-26 and addressed software license inventory and reconciliation, recording of software license cost, and communication of software license policy. The software license survey was discussed with CIS prior to distribution.

Departments Selected for Survey

Out of the 15 departments selected for the survey, only 10 responded. The five departments that did not respond to the survey are highlighted in bold.

- Aviation
- Business Development and Procurement Services
- **City Attorney's Office**
- City Controller's Office
- Code Compliance Services
- **Convention and Event Services**
- **Court and Detention Services**
- Dallas Fire-Rescue
- Dallas Police Department
- Dallas Water Utilities
- **Human Resources**
- Library
- Office of Financial Services
- Park and Recreation
- **Trinity Watershed Management**

Source: Office of the City Auditor

The software license survey was distributed to certain departments (see text box) using a risk based assessment, including: (1) the extent of software used by department to complete business processes; and, (2) the likelihood that the software used would be installed in multiple locations. The auditor sent an e-mail request to the selected departments (15 in total) on August 27, 2013 with a deadline of September 18, 2013 (approximately three weeks) and received the software license survey responses through October 28, 2013 from ten of the 15 departments. The resulting information was used to perform an analysis of the survey responses received and were incorporated into the audit results.

This audit was conducted under authority of the City Charter, Chapter IX, Section 3 and in accordance with the Fiscal Year 2012 Audit Plan approved by the City Council. This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

To achieve the audit objective, we performed the following procedures:

- Reviewed and analyzed best practices recommended by software companies and United States Copyright Law

**An Audit Report on –
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- Reviewed and analyzed ADs related to software license compliance, procurement, and internal controls over software
- Performed data analysis of accounts payable disbursement files to determine expenditure on software licenses
- Prepared, distributed, and analyzed software license survey
- Interviewed personnel from CIS, CCO, and BDPS

Software License Survey

Software License Survey | 2013

What the survey is about: The purpose of Software License Survey is to capture *your* department's internal process for purchasing, installing, tracking and ensuring compliance with software licenses and maintenance agreements.

Who has to complete the survey: Your department is solely responsible for completing the survey and *should not defer the response* to the Department of Communication and Information Services (CIS) unless the only departmental software used is Microsoft Office (e.g. PowerPoint, Excel, Visio, Word, Outlook) and the Internet.

The Department Director at their discretion may delegate the completion of the survey to the most knowledgeable personnel within the department.

Why the department has to complete the survey: The department was selected for the survey using a risk based analysis.

How to complete the survey: Complete the survey by responding to each question with a **Yes** or **No** response. Include all applicable comments and any documentary evidence to support the selected **Yes** or **No** response. The survey should be signed and dated by all personnel who completed the survey, in the event follow-up is necessary.

When: The deadline is **September 18, 2013**. The Office will send a reminder on September 11, 2013 to the Director to assist in meeting the deadline.

Where to send to the survey: After completing the survey, provide an electronic and hard copy of the survey to the Office at City Hall, 2FN, Attention: Mamatha Sparks (mamatha.sparks@dallascityhall.com).

Additional Questions: Contact Mamatha Sparks (214-670-4911) or Carol Smith (214-670-4517).

An Audit Report on – Software License Compliance

Software License Survey | 2013

	Reference	Yes	No	Comments
1. Has the department communicated to employees that it is illegal to copy software?	Copyright Act, Title 17, Sections 109 and 117 of the US Code			
2. Are the department personnel responsible for purchasing, monitoring and tracking software licenses familiar with the terms of software license agreements and contracts?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Section 6.1			
3. Do all high-tech procurements such as software and related renewals of software licenses go through the City's procurement process and include BDPS, CIS and the CAO?	Administrative Directive 4-05 <i>Contracting Policy</i> , Section 7.6.2			
4. Has the department communicated to employees that they are held accountable for unauthorized or unlicensed software installation?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Sections 6.1.2 and 6.1.4 Administrative Directive 2-24 <i>Computer Security</i> , Section 6.5.5			

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Software License Survey | 2013

	Reference	Yes	No	Comments
5. Have employees' roles and responsibilities related to compliance with software usage including piracy been communicated?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Sections 5.2.3, 6.1.4 and 6.2.1 – 6.2.3			
6. Does your department maintain an inventory of all software and related licenses and maintenance agreements?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Section 5.2.5			
7. Does the department maintain records of software licenses that have been: a. Purchased b. Installed c. Available for Use?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Section 5.2.4			
8. Is there a central location where all the master copies of software (physical or electronic) are stored to prevent copying or unauthorized usage?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Sections 5.2.4 and 6.1.3			

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**An Audit Report on –
Software License Compliance**

Software License Survey | 2013

	Reference	Yes	No	Comments
9. Are the original contracts and proof of purchases for software licenses maintained on file?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Sections 6.1.1 - 6.1.3			
10. Has there been a reconciliation of the installed software to actual licenses owned within the past six months?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Section 5.2.5			
11. Are the software licenses in use compliant with the contract terms?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Sections 6.1.1 and 6.1.2			
12. Can the department certify that no unlicensed software exists in the department?	Administrative Directive 2-26 <i>Use of Microcomputer Equipment and Software</i> , Section 5.2.5			
13. What is your department's annual cost for software license(s)?				
14. What accounting codes (object and/or commodity codes) are used in your department to track software license cost?				

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Software License Survey | 2013

Please complete the table below to the best of your knowledge. To the extent possible, gather information from department personnel with the prior background and history of the applications.

An example is provided below.

Name of Application <i>(This does not include Microsoft Office).</i>	Purpose of Application	Applicable Business Process	How Long has it been in use	Software Owner (e.g. CIS, Vendor)
SAP	Billing, Collections, etc.	Revenue	6	DWU / CIS

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**An Audit Report on –
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Software License Survey | 2013

Signature Page

Print Name

Print Title

Signature

Date

Major Contributors to This Report

Carol Ann Smith, CPA, CIA, CFE, CFF – First Assistant City Auditor
Theresa Ann Hampden, CPA – Quality Control Manager
Mamatha Sparks, CIA, CISA – Project Manager

Management's Response

Memorandum

RECEIVED

APR 01 2014

City Auditor's
Office



CITY OF DALLAS

DATE: March 27, 2014

TO: Craig D. Kinton, City Auditor

SUBJECT: Response to Audit Report: Audit of Software License Compliance

Our responses to the audit report recommendations are as follows:

Recommendation I

We recommend the Director of CIS continue to develop and maintain an inventory of software and related software licenses in the two categories that CIS knows of and has control over managing daily and/or manages for departments with their approval.

Management Response / Corrective Action Plan

Agree Disagree

CIS will develop a central repository to track software and related software licenses for internal CIS applications and for CIS-managed applications (managed for departments).

Implementation Date

September 30, 2015

Responsible Manager

Sr. IT Manager

Recommendation IV

We recommend the Director of CIS update AD 2-26 to clarify what the departments, including CIS, should do with the annual software inventories and specify a method to periodically evaluate software licensing activities using the software inventories.

Management Response / Corrective Action Plan

Agree Disagree

CIS will update AD 2-26 to clarify what departments should do with the annual software inventories and will determine a method to periodically evaluate software licensing activities using the inventories.

Implementation Date

September 30, 2015

"Dallas: the City that Works: Diverse, Vibrant, and Progressive."

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Responsible Manager
Assistant Director

Recommendation VII

We recommend the Director of CIS ensure that software license policy is communicated periodically to City employees with formal acknowledgement that the employee has read and understood the policy.

Management Response / Corrective Action Plan

Agree Disagree

CIS will communicate the software license policy to employees and provide a methodology for formal acknowledgement and understanding of the policy,

Implementation Date
September 30, 2015

Responsible Manager
Sr. IT Manager

Sincerely,



William Finch, Director
Department of Communication and
Information Services



Jill A. Jordan, P.E.
Assistant City Manager

C:

"Dallas: the City that Works: Diverse, Vibrant, and Progressive."

Memorandum

RECEIVED

MAR 28 2014

City Auditor's Office



CITY OF DALLAS

DATE: March 28, 2014
TO: Craig D. Kinton, City Auditor
SUBJECT: Response to Audit Report: Audit of Software License Compliance

Our responses to the audit report recommendations are as follows:

Recommendation II

We recommend the City Manager develop a formal software license compliance program for the two software categories for which software license management is not clearly understood.

Management Response / Corrective Action Plan

Agree Disagree

CIS will develop a software license compliance program for the two software categories for which software license management is not clearly understood.

Implementation Date

September 30, 2015

Responsible Manager

Senior IT Manager, CIS

Recommendation III

We recommend the City Manager ensure City departments comply with AD 2-26 and perform annual software inventories of software licenses.

Management Response / Corrective Action Plan

Agree Disagree

CIS will provide a central repository to track software and related software licenses to assist the departments in complying with AD 2-26.

Implementation Date

September 30, 2015

Responsible Manager

Assistant Director, CIS

**An Audit Report on –
Software License Compliance**

Response to Audit Report: Audit of Software License Compliance, page 2

Sincerely,



A. C. Gonzalez
City Manager

C: Jill A. Jordan, P.E. Assistant City Manager
Jeanne Chipperfield, Chief Financial Officer
William Finch, Director, CIS
Tony Aguilar, Assistant Director, CIS
Renee Hayden, Internal Control Program Manager, CMO

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Memorandum

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MAR 07 2014

City Auditor's Office



DATE: March 6, 2014
TO: Craig D. Kinton, City Auditor
SUBJECT: Response to Audit Report: Audit of Software License Compliance

Our responses to the audit report recommendations are as follows:

Recommendation V

We recommend the Director of BDPS update AD 4-05 to clarify that high technology items procured through AAs also require consultation with CIS prior to procurement.

Management Response / Corrective Action Plan

Agree Disagree

The procurement process will be reviewed this fiscal year and all current practices will be reviewed to see if they meet the changing needs of the City.

Implementation Date
January 2015.

Responsible Manager
BDPS Director

Sincerely,



Michael Frosch, Director
Department of Business Development
and Procurement Services



Jeanne Chipperfield
Chief Financial Officer

**An Audit Report on –
Software License Compliance**

Memorandum

RECEIVED

MAR 07 2014

City Auditor's
Office



CITY OF DALLAS

DATE: March 7, 2014
TO: Craig D. Kinton, City Auditor
SUBJECT: Response to Audit Report: Audit of Software License Compliance

Our responses to the audit report recommendations are as follows:

Recommendation VI

We recommend the CCO clarify the object codes that should be used by departments with a focus on accurately and consistently accounting for software license cost.

Management Response / Corrective Action Plan

Agree Disagree

The City Controller's Office will include training on the proper use of object codes. Specific guidance will be provided for the purchase of software licenses. The training will be included with Controller's Office annual summer/fall training.

Implementation Date

October 2014

Responsible Manager

City Controller

Sincerely,


Edward Scott, City Controller
City Controller's Office


Jeanne Chipperfield
Chief Financial Officer

C: Jeanne Chipperfield, Chief Financial Officer

"Dallas: the City that Works. Diverse. Vibrant, and Progressive."