



STATE OF TENNESSEE  
**COMPTROLLER OF THE TREASURY**  
DEPARTMENT OF AUDIT  
DIVISION OF COUNTY AUDIT  
SUITE 1500  
JAMES K. POLK STATE OFFICE BUILDING  
NASHVILLE, TENNESSEE 37243-0269  
PHONE (615) 401-7841

April 14, 2003

Sequatchie County Executive and  
Board of County Commissioners  
Sequatchie County, Tennessee

To the County Executive and County Commissioners:

In conjunction with the annual audit of Sequatchie County, we have performed a limited review of the information systems in the Offices of County Executive, Highway Superintendent, Director of Schools, Trustee, County Clerk, Circuit and General Sessions Courts Clerk, and Register as of March 14, 2003. This letter transmits the results of our review.

Our audit of Sequatchie County is required to be conducted in accordance with standards contained in Government Auditing Standards, issued by the Comptroller General of the United States. These standards specify that we perform general and application control reviews of computer-based accounting and information systems to determine whether an entity's existing procedures and controls provide adequate assurance of data accuracy and financial and operating statement reliability.

Because of inherent limitations in any internal control structure, errors, irregularities, or control weaknesses may exist and may not be detected. However, our information system reviews performed in the Offices of County Clerk and Register did not reveal any matters that we considered to be a reportable condition. Reportable conditions were identified in the Offices of County Executive, Highway Superintendent, Director of Schools, Trustee, and Circuit and General Sessions Courts Clerk. These reportable conditions may be included in the comprehensive annual financial report of Sequatchie County. These matters are also presented in detail in the enclosed Review of Internal Controls Regarding Information System Operations — Findings and Recommendations.

A brief summary of the reportable conditions by office is presented below:

**COUNTY EXECUTIVE**

1. The office had deficiencies in computer system back-up procedures.

**HIGHWAY SUPERINTENDENT**

1. The office had deficiencies in computer system back-up procedures.

**DIRECTOR OF SCHOOLS**

1. The office had deficiencies in computer system back-up procedures.
2. Adequate inventory records were not maintained.

**TRUSTEE**

1. The office did not develop a disaster recovery plan.

**CIRCUIT AND GENERAL SESSIONS COURTS CLERK**

1. The office had deficiencies in computer system back-up procedures.

Please contact Penny Austin, our Information Systems Audit Manager, or me if you have any questions regarding our review of the information systems in the aforementioned offices of Sequatchie County, Tennessee.

Sincerely,



Richard V. Norment  
Assistant to the Comptroller

RVN: pa

cc: The Honorable Roy T. Johnson, Highway Superintendent  
The Honorable Johnny Cordell, Director of Schools  
The Honorable Larry S. Lockhart, Trustee  
The Honorable Charlotte Cagle, County Clerk  
The Honorable Karen L. Millsaps, Circuit and General Sessions Courts Clerk  
The Honorable Connie E. Green, Register  
Mr. Daniel Wilson, Mid-East Tennessee Audit Manager

**SEQUATCHIE COUNTY, TENNESSEE**  
**REVIEW OF INTERNAL CONTROLS REGARDING INFORMATION SYSTEM**  
**OPERATIONS — FINDINGS AND RECOMMENDATIONS**  
**AS OF MARCH 14, 2003**

The review of controls over information systems in the Offices of the County Executive, Highway Superintendent, Director of Schools, Trustee, and Circuit and General Sessions Courts Clerk indicated a need for improvement. It should be noted that this was the first information system review to be performed in the Offices of Trustee and Circuit and General Sessions Courts Clerk. The following findings and recommendations have been made to aid these offices in the implementation of controls to better secure their computer systems and the information contained therein. We reviewed these matters with management to provide an opportunity for their response. Management offered oral responses to these items but did not submit written responses. We did not include oral responses in this report.

**OFFICE OF COUNTY EXECUTIVE**

**THE OFFICE HAD DEFICIENCIES IN COMPUTER SYSTEM BACK-UP PROCEDURES**

**1. FINDING**

The following weaknesses regarding computer system back-up procedures in the Office of County Executive were identified:

- A. Daily backups were not stored in a secure location. Unsecured access to system backups exposes the data to environmental hazards, as well as to possible sabotage.
- B. System backups were not stored off site. In the event of a disaster, all back-up data could be destroyed, resulting in costly delays in generating and recording information accounted for through the automated process.
- C. A back-up log was not maintained. If system backups are not labeled and inventoried systematically, discrepancies may occur and affect the integrity of system backups in the event of a hardware or software failure.

**RECOMMENDATION**

Management should store backups in a secure, fireproof location. In addition to daily system backups, a weekly system backup should be performed, and two copies of this backup should be maintained. These backups should be rotated off site on a weekly basis. A complete systems backup should also be performed at fiscal year-end. These year-end backups should be stored off site and retained indefinitely. Some possibilities for an off-site storage location would be another county office building with a fireproof vault or a safe deposit box at a local bank. Furthermore, a current log of all backups that includes label descriptions, date of creation, contents, and storage location should be maintained.

**OFFICE OF HIGHWAY SUPERINTENDENT**

**THE OFFICE HAD DEFICIENCIES IN COMPUTER SYSTEM BACK-UP PROCEDURES**

**1. FINDING**

The following weaknesses regarding computer system back-up procedures in the Office of Highway Superintendent were identified:

- A. System backups were not stored off site. In the event of a disaster, all back-up data could be destroyed, resulting in costly delays in generating and recording information accounted for through the automated process.
- B. A back-up log was not maintained. If system backups are not labeled and inventoried systematically, discrepancies may occur and affect the integrity of system backups in the event of a hardware or software failure.

**RECOMMENDATION**

In addition to daily system backups, a weekly system backup should be performed, and two copies of this backup should be maintained. These backups should be rotated off site on a weekly basis. A complete systems backup should also be performed at fiscal year-end. These year-end backups should be stored off site and retained indefinitely. Some possibilities for an off-site storage location would be another county office building with a fireproof vault or a safe deposit box at a local bank. Furthermore, a current log of all backups that includes label descriptions, date of creation, contents, and storage location should be maintained.

---

**OFFICE OF DIRECTOR OF SCHOOLS**

**THE OFFICE HAD DEFICIENCIES IN COMPUTER SYSTEM BACK-UP PROCEDURES**

**1. FINDING**

The following weaknesses regarding computer system back-up procedures in the Office of Director of Schools were identified:

- A. Daily backups of the Central Cafeteria Fund were not stored in a secure location. Unsecured access to system backups exposes the data to environmental hazards, as well as to possible sabotage.
- B. System backups of the General Purpose School and School Federal Projects Funds were not stored off site. In the event of a disaster, all back-up data could be destroyed, resulting in costly delays in generating and recording information accounted for through the automated process.

**RECOMMENDATION**

Management should store daily backups in a secure, fireproof location. In addition to daily system backups, a weekly system backup should be performed, and two copies of this backup should be maintained. These backups should be rotated off site on a weekly basis. Year-end backups should be stored off site and retained indefinitely. Some possibilities for an off-site storage location would be another county office building with a fireproof vault or a safe deposit box at a local bank.

---

**ADEQUATE INVENTORY RECORDS WERE NOT MAINTAINED**

**2. FINDING**

The Office of Director of Schools did not maintain adequate inventory records of tangible assets. Generally accepted accounting principles require accountability for all county assets such as vehicles, furniture, and computer equipment. Inadequate inventory records may result in a loss of control over assets.

**RECOMMENDATION**

Inventory records should be established and maintained to properly account for assets, as required by generally accepted accounting principles. Furthermore, personnel who are independent of maintaining the inventory records should periodically verify inventories.

---

**OFFICE OF TRUSTEE**

**RECOMMENDATION**

**1. A DISASTER RECOVERY PLAN SHOULD BE DEVELOPED**

Management should develop and regularly update a disaster recovery plan defining procedures for personnel to follow in the event of a major hardware or software failure, or temporary or permanent destruction of facilities. The plan should contain provisions for a contingency operations site, as well as the adequate backup of data files, system programs, user documentation, supplies, and computer hardware so that operations could continue as normally as possible. A copy of the plan should be kept in a secure area within the office, as well as at a secure, off-site location.

**OFFICE OF CIRCUIT AND GENERAL SESSIONS COURTS CLERK**

**RECOMMENDATION**

**1. SYSTEM BACK-UP PROCEDURES SHOULD BE IMPROVED**

The following procedures regarding the system back-up process should be implemented:

1. Management should store daily backups in a secure, fireproof location.
2. Two copies of the weekly system backup should be rotated off site on a weekly basis.
3. Year-end backups should be stored off site and retained indefinitely.
4. A secure, fireproof location should be used to store weekly and year-end backups. Some possibilities for an off-site storage location would be another county office building with a fireproof vault or a safe deposit box at a local bank.
5. A current log of all backups that includes label descriptions, date of creation, contents, and storage location should be maintained.

---

**PRIOR AUDIT RECOMMENDATIONS NOT IMPLEMENTED**

(Ref: Review of Internal Controls Regarding Information System Operations as of November 29, 2000)

**OFFICE OF DIRECTOR OF SCHOOLS**

<b>Finding Number</b>	<b>Page Number</b>	<b>Subject</b>
1	3	The Office Had Deficiencies in Computer System Back-up Procedures
2	3	Adequate Inventory Records Were Not Maintained

---

**PRIOR AUDIT RECOMMENDATIONS IMPLEMENTED**

(Ref: Review of Internal Controls Regarding Information System Operations as of November 29, 2000)

**OFFICE OF COUNTY EXECUTIVE**

<b>Finding Number</b>	<b>Page Number</b>	<b>Subject</b>
1	1	The Office Did Not Have Formal Policies and Procedures for Computer Operations
2	1	The Office Did Not Develop a Disaster Recovery Plan