

Village of Fayetteville

Information Technology Policies

MAY 2017



OFFICE OF THE NEW YORK STATE COMPTROLLER
Thomas P. DiNapoli, State Comptroller

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Report Highlights

Village of Fayetteville

Audit Objective

Determine if the Board established policies and procedures to adequately safeguard electronic data and computer resources.

Key Findings

- The Board did not adopt information technology (IT) policies and procedures for individual access rights, disaster recovery and password security management.
- Eight former Village Fire Department (Department) personnel had active user accounts and access to the Department network.
- Village officials do not provide IT security awareness training to personnel who use IT resources.

Key Recommendations

- Adopt policies and procedures to address user access rights, disaster recovery and password security management.
- Ensure that users who have left Village employment have their access rights removed.
- Provide IT security awareness training.

Village officials generally agreed with our findings and indicated they planned to initiate corrective action.

Background

The Village of Fayetteville (Village) is located in the Town of Manlius in Onondaga County. The Village is governed by an elected Board of Trustees (Board) composed of four Trustees and a Mayor. The Board is responsible for the general oversight of Village operations, including adopting policies and procedures to safeguard Village IT assets.

The Village provides residents with various services, including fire protection, ambulance, street maintenance, snow plowing and general government support. The Village uses a variety of electronic data and computer resources to provide these services.

Quick Facts

Employees	47
Village Population	4,400
2016-17 Budgeted General Appropriations	\$5.9 million

Audit Period

June 1, 2015 — December 31, 2016. The audit period was extended to January 24, 2017 to review users on the Village network.

Information Technology Policies

The Village has two primary networks that allow individuals to share and access electronic data and computer resources: one connecting the IT resources at the Village Hall, and one connecting the IT resources at the Department. The Village contracts with an IT consultant who manages and maintains both networks. The consultant adds and removes users from the Village Hall network as directed by Village officials. Department personnel are typically added or removed from the Department network by the Fire Captain.

What IT Security Policies and Procedures Should the Board Adopt to Safeguard Village Data?

The Board should adopt policies and procedures for granting, revoking, modifying and monitoring individual access rights. Guidelines should establish the access rights that users should be granted and establish a process to monitor and review access rights once they have been granted.

The Board should adopt a disaster recovery plan to describe how Village officials will deal with potential disasters. Disasters may include any sudden, unplanned catastrophic event (e.g., fire, computer virus or inadvertent employee action) that compromises the availability or integrity of the IT system and data. Typically, a disaster recovery plan involves an analysis of business processes and continuity needs, a focus on disaster prevention, the roles of key individuals and the precautions to maintain or quickly resume operations.

The Board should also adopt policies and procedures for password security management to define how passwords should be controlled to ensure the highest level of security over Village data. All IT policies and procedures should be periodically reviewed and updated to reflect changes in technology and the Village's computing environment.

The Board Did Not Adopt IT Security Policies and Procedures

The Board did not adopt policies and procedures for granting, revoking, modifying and monitoring individual access rights to the networks. In addition, the Board has not adopted a comprehensive disaster recovery plan or policies and procedures for password security management. We compared a list of all individuals who have access to the networks to the payrolls and volunteer rosters to determine whether users are currently employed or affiliated¹ with the Village and should have access. We found that eight individuals who were no longer affiliated with the Department still had active user accounts and could access the Department network.

¹ The Department is composed of paid and volunteer firefighters.

If the Board had adopted policies and procedures for revoking access rights, the eight individuals who have left from the Department would not have access to information that they should not have access to. In addition, there is an increased risk that the Village could lose important financial data and suffer a serious interruption in operations and that unauthorized individuals could access computerized data to copy, manipulate or delete sensitive information.

Why Should the Board Provide Security Awareness Training?

Computer users need to be aware of security risks and be trained in practices that reduce internal and external threats to IT systems and data. While IT policies tell computer users what to do, cybersecurity training helps them understand their roles and responsibilities and provides them with the skills to do it. IT security training explains the rules for using IT systems and data. Training programs should be directed at the specific audience (e.g., system users or administrators) and include everything that attendees need to perform their jobs. IT security awareness should reinforce IT policies and can focus on security in general or some narrow aspect of security (e.g., the dangers of opening an unknown email or attachment or how to maintain laptop security while traveling).

The Board Did Not Provide Security Awareness Training

Although the Board has adopted an acceptable use policy for the use of Village-owned computers, email and the Internet, the Board did not provide users with security awareness training to help ensure they understand security measures to protect the Village networks. As a result, the Village's IT assets are more vulnerable to loss and misuse.

What Do We Recommend?

The Board should:

1. Adopt written IT policies and procedures to address individual access rights, disaster recovery and password security management.
2. Periodically review and update all IT policies and procedures to reflect changes in technology and the Village's computing environment.
3. Provide IT security awareness training to personnel who use Village IT resources.

Village officials should:

4. Ensure that the eight network users who have left the Village and all future users who leave Village employment have their access rights removed.

Appendix A: Response From Village Officials

VILLAGE OF FAYETTEVILLE



May 15, 2017

Office of the State Comptroller
Rebecca Wilcox, Chief Examiner
State Office Building, Room 409
333 E. Washington Street
Syracuse, New York 13202-1428

Dear Chief Examiner Wilcox:

On behalf of the Village of Fayetteville, I am writing to you to acknowledge receipt of the Office of the State Comptroller's Draft Report of Examination of Information Technology Policies for the Village of Fayetteville for the period from June 1, 2015 through December 31, 2016 and further extended to January 24, 2017. The following constitutes the Village's response, including our formal Corrective Action Plan, as required.

CORRECTIVE ACTION PLAN

For each recommendation included in our audit report, the following is our corrective action(s) taken or proposed:

1. *Adopt written IT policies and procedures to address individual access rights, disaster recovery and password security management.*

The Village of Fayetteville is working with CNYRIC, the Village's IT Consultants, to draft written IT Policies and Procedures that will be formally adopted by a Board of Trustees resolution addressing individual access rights, disaster recovery and password security management and enforce compliance with the policy which was adopted by the Board of Trustees on February 25, 2008 and appears in the Employee Handbook under "Computer Systems and Internet/E-mail Service" covering Authority and Usage.

2. *Periodically review and update all IT policies and procedures to reflect changes in technology and the Village's computing environment*

The Village of Fayetteville will annually review and update all IT policies and procedures and make changes accordingly as it relates to changes in technology and the Village's computing environment.

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3. *Provide IT security awareness training to personnel who use Village IT resources*

The Village of Fayetteville's IT Consultants, CNYRIC, provided the village with a Security Training Slide Show that was presented during a staff meeting and will be continued each year as annual training. Newly hired employees will be required to complete the Security Training Presentation prior to being given individual access rights. The security training will be reviewed and updated annually, as needed, to reflect changes in technology and the Village's computing environment.

The Village of Fayetteville would like to thank you and your staff for your recommendations. Our goal in local government is to efficiently manage operations and provide transparency while ensuring our residents continue to receive excellent services at the lowest possible cost and still maintain their quality of life.

Sincerely,

Mark A. Olson
Mayor

Appendix B: Audit Methodology and Standards

We conducted this audit pursuant to Article V, Section 1 of the State Constitution and the State Comptroller's authority as set forth in Article 3 of the New York State General Municipal Law. To achieve the audit objective and obtain valid audit evidence, we performed the following audit procedures:

- We obtained and reviewed Village policies and procedures related to IT.
- We interviewed Village officials and the IT consultant to gain an understanding of the IT environment and internal controls.
- We compared system users to payrolls and volunteer rosters to determine whether users were employed or affiliated with the Village.

Our audit also examined the adequacy of certain IT controls. Because of the sensitivity of some of this information, we did not discuss the results in this report, but instead communicated them confidentially to Village officials.

We conducted this performance audit in accordance with GAGAS, (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.

A written corrective action plan (CAP) that addresses the findings and recommendations in this report should be prepared and provided to our office within 90 days, pursuant to Section 35 of General Municipal Law. For more information on preparing and filing your CAP, please refer to our brochure, Responding to an OSC Audit Report, which you received with the draft audit report. We encourage the Board to make the CAP available for public review in the Clerk's office.

Appendix C: Resources and Services

Regional Office Directory

www.osc.state.ny.us/localgov/regional_directory.pdf

Cost-Saving Ideas – Resources, advice and assistance on cost-saving ideas

www.osc.state.ny.us/localgov/costsavings/index.htm

Fiscal Stress Monitoring – Resources for local government officials experiencing fiscal problems

www.osc.state.ny.us/localgov/fiscalmonitoring/index.htm

Local Government Management Guides – Series of publications that include technical information and suggested practices for local government management

www.osc.state.ny.us/localgov/pubs/listacctg.htm#lmgm

Planning and Budgeting Guides – Resources for developing multiyear financial, capital, strategic and other plans

www.osc.state.ny.us/localgov/planbudget/index.htm

Protecting Sensitive Data and Other Local Government Assets – A non-technical cybersecurity guide for local government leaders

www.osc.state.ny.us/localgov/lgli/pdf/cybersecurityguide.pdf

Required Reporting – Information and resources for reports and forms that are filed with the Office of the State Comptroller

www.osc.state.ny.us/localgov/finreporting/index.htm

Research Reports / Publications – Reports on major policy issues facing local governments and State policy-makers

www.osc.state.ny.us/localgov/researchpubs/index.htm

Training – Resources for local government officials on in-person and online training opportunities on a wide range of topics

www.osc.state.ny.us/localgov/academy/index.htm

Contact

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