

# Herkimer-Fulton-Hamilton- Otsego BOCES

## Online Banking

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**MAY 2021**

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

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# Report Highlights

## Herkimer-Fulton-Hamilton-Otsego BOCES

### Audit Objective

Determine whether Herkimer-Fulton-Hamilton-Otsego Board of Cooperative Educational Services (BOCES) officials established controls to ensure online banking transactions were appropriate and secure.

### Key Findings

BOCES officials did not establish adequate controls to ensure online banking transactions were appropriate and secure.

- Online banking transactions are not compared to supporting documentation.
- Bank agreements lack important components such as identifying who is authorized to process online banking transactions or requiring the bank to provide confirmations of online transactions.
- A dedicated computer is not used for online banking.

### Key Recommendations

- Ensure that online transactions are reviewed and reconciled to supporting information.
- Update bank agreements.
- Use a dedicated computer for online banking.

BOCES officials agreed with our recommendations and indicated they have initiated or planned to initiate corrective action.

### Background

BOCES is composed of 10 component school districts, and is governed by a 10-member Board of Education (Board), with a member elected by each of the component districts.

The Board is responsible for the general management and oversight of BOCES' financial and educational affairs.

The District Superintendent (Superintendent) is the chief executive officer and is responsible, along with other administrative staff, for the day-to-day management under the Board's direction.

The Treasurer, Deputy Treasurer, and payroll clerk are responsible for online banking transactions.

#### Quick Facts

##### Online Banking Transactions

July 1, 2019 – October 1, 2020

Processed	196
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Amount	\$14.7 million
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2019-20 Appropriations	\$35.5 million
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### Audit Period

July 1, 2019 - October 1, 2020

# Online Banking

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Online banking provides a way to directly access funds in BOCES bank accounts. Users can review current account balances and information, including recent transactions, and transfer money between BOCES accounts or to external accounts.

## **How Should Officials Safeguard Online Banking Transactions?**

The Board should adopt a comprehensive written online banking policy and periodically review and update it. The policy should at a minimum:

- Clearly describe the online activities BOCES officials may perform,
- Specify which employees are authorized to process transactions,
- Establish a process to verify the accuracy and legitimacy of online transactions, and
- Require the review and reconciliation of online transactions.

Officials should segregate the duties of employees granted access to online banking. Employees authorized to perform online banking transactions should be assigned unique usernames and passwords that are not shared with anyone, and advanced authentication techniques (i.e., two-factor authentication with a password and security question or personal identification number) should be used to log into the online banking platform. Bank accounts should be monitored at least every two or three days and regular, independent reviews of bank statements and supporting documentation should be performed to help detect any unauthorized or suspicious activity.

Banking agreements should prescribe the manner in which transactions can be made. These agreements should identify individuals authorized to make online transactions and which bank accounts can be used for online transactions. They should also include security procedures designed to ensure payment orders are legitimate and that can detect transmission or content errors. The bank should be required to provide written confirmation when funds are transmitted.

Officials should also limit the number of users and computers authorized to conduct online banking. To minimize exposure to malicious software, authorized users should access bank accounts only from a dedicated computer— one that is not used for email or Internet browsing. An acceptable use policy should inform users about appropriate and safe computer use and employees with online banking access should receive Internet security awareness training to educate them on safe computing practices.

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## Officials Should Improve Controls Over Online Banking Transactions

We reviewed 44 online banking transactions, totaling about \$2.5 million, processed during the audit period and found they were all for appropriate purposes. While we also found that advanced authentication techniques are required to conduct online banking, the Board should adopt an online banking policy and BOCES officials should improve their process for monitoring online bank accounts and update their bank agreements.

Monitoring of Transactions – The Treasurer told us she reviews online bank account activity daily for suspicious activity. In addition, a Business Office employee who is not involved in online banking performs monthly bank reconciliations. However, no one compares online banking transactions to supporting documentation to help ensure the transactions are appropriate.

Bank Agreements – BOCES entered into a written agreement with the bank for each bank account with online transaction capabilities to define the online banking terms and conditions. We reviewed these agreements and spoke to bank representatives to gain an understanding of the controls that exist in the online banking platform.

The only external online transactions that the online banking platform permits are automated clearing house (ACH) payments. The platform allows the Treasurer, Deputy Treasurer and payroll clerk to process these payments and allows the extra-curricular treasurer view-only access to the bank accounts she handles. However, the banking agreement only lists the Treasurer and Deputy Treasurer as authorized individuals to conduct the ACH electronic fund transfers. Also, the bank agreements do not require the bank to provide confirmations for electronic transactions. When an ACH payment is processed, the Treasurer is notified. However, if the Treasurer processes a payment, no other individual receives a notification to ensure the transaction is appropriate and necessary.

Online Banking Policy – The Board did not adopt an online banking policy that outlines the current online banking procedures for authorizing, processing and monitoring online banking transactions. Without an online banking policy that explicitly conveys practices to safeguard BOCES assets during online banking transactions, officials cannot ensure that employees will understand their roles and responsibilities when performing and monitoring online banking transactions. BOCES officials told us they were not aware that they should have an online banking policy.

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## Officials Did Not Dedicate a Computer for Online Banking

BOCES officials did not have a computer dedicated for online banking transactions. The Treasurer, Deputy Treasurer, payroll clerk and extra-curricular treasurer all accessed the online banking platform with their assigned BOCES computers which they used for all other work related activities, including email and connecting to the Internet.

We reviewed the website browsing history on the computers of each of these employees to determine whether they had visited websites other than those necessary to conduct online banking. We found that each computer had been used to access various websites, some of which represented personal use.

Although BOCES has provided these employees with Internet security awareness training and the BOCES acceptable use policy specifies that access to the Internet must be for educational and/or work related purposes, these employee's accessed websites for personal shopping, travel, entertainment, and real estate.

Using the same computer for online banking and non- banking activities and allowing the personal use of computers increases the risk that users could unintentionally expose the online bank accounts to threats from malicious software and place BOCES cash assets at risk. Whenever possible, online banking transactions should be limited to a dedicated computer, as this practice can help minimize a system compromise.

## What Do We Recommend?

The Board should:

1. Adopt an online banking policy, which clearly describes the procedures for authorizing, processing, and reviewing online banking transactions.

BOCES officials should:

2. Ensure that all online and external transactions are reviewed and reconciled to supporting documentation.
3. Amend the bank agreements to identify all individuals authorized to perform online banking transactions and require the bank to provide written confirmations to someone who is not involved in processing the transactions.
4. Dedicate a computer to be used for online banking transactions.
5. Monitor computer use to ensure compliance with the acceptable use policy.

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Using the same computer for online banking and non-banking activities... increases the risk that users could unintentionally expose the online bank accounts to threats...

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# Appendix A: Response From BOCES Officials

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Herkimer ■ Fulton ■ Hamilton ■ Otsego BOCES  
[www.herkimer-boces.org](http://www.herkimer-boces.org)

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April 9, 2021

Ms. Rebecca Wilcox, Chief Examiner  
NYS Comptroller's Office  
State Office Building, Room 409  
333 E. Washington Street  
Syracuse, NY 13202-1428

Dear Ms. Wilcox,

This letter serves as Herkimer-Fulton-Hamilton-Otsego BOCES' official response to the NYS Comptroller's audit for the period of July 1, 2019 – October 1, 2020 for the purpose of examining the BOCES' controls over online banking transactions.

After a review of 44 of the 196 online banking transactions that occurred during this review period, your office found that all transactions were for appropriate purposes. However, you made several recommendations that will strengthen our protocols and security. We are developing a corrective action plan that will be submitted soon as many of the steps have already been put in place.

We appreciate the thorough review by your team as well as the professionalism that all the auditors showed throughout the process. We are committed to improving our practices and safeguarding the component districts' funds that pay for BOCES services. We will continue to review our practices and implement improved security measures. Thank you for providing your insight to assist us with this.

Respectfully,

Sandra R. Sherwood  
District Superintendent

Thomas N. Shypski  
President, Board of Education

C: S. Coupe, Business Manager  
Board of Education

Central Valley ■ Dolgeville ■ Frankfort-Schuyler ■ Herkimer ■ Little Falls  
Mount Markham ■ Owen D. Young ■ Poland ■ Richfield Springs ■ West Canada Valley  
Creating Opportunities for Growth

## Appendix B: Audit Methodology and Standards

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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, our audit procedures included the following:

- We interviewed BOCES officials to obtain an understanding of online banking practices and determine whether the Board adopted an online banking policy.
- We reviewed BOCES policies relating to acceptable Internet use and determined whether online banking users received Internet security training.
- We reviewed the written agreements with the bank and reviewed documentation regarding capabilities for electronic transactions.
- We observed online banking user access from logon to logoff for the Treasurer, Deputy Treasurer, payroll clerk, and extra-curricular Treasurer.
- We examined the computers used to access online banking and reviewed their website browsing history.
- We identified 196 online banking transactions totaling \$14,682,828 during our audit period and examined 44 transactions totaling \$2,462,166 (17 percent). The 44 transactions were from a randomly selected two months of ACH transactions totaling \$1,954,064 and 23 intra-bank transfers totaling \$508,102. We determined if all intra-bank transfers were between District bank accounts and reviewed supporting documentation for ACH payments to determine if the transactions were appropriate.

We conducted this performance audit in accordance with generally accepted government auditing standards (GAGAS). 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.

Unless otherwise indicated in this report, samples for testing were selected based on professional judgment, as it was not the intent to project the results onto the entire population. Where applicable, information is presented concerning the value and/or size of the relevant population and the sample selected for examination.

The Board has the responsibility to initiate corrective action. A written corrective action plan (CAP) that addresses the findings and recommendations in this report must be prepared and provided to our office within 90 days, pursuant to Section 35 of General Municipal Law, Section 2116-a(3)(c) of New York State Education Law and Section 170.12 of the Regulations of the Commissioner of Education. To the extent practicable, implementation of the CAP must begin by the end of the

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next fiscal year. 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. The CAP should be posted to BOCES' website for public review.

## Appendix C: Resources and Services

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### **Regional Office Directory**

[www.osc.state.ny.us/sites/default/files/local-government/documents/pdf/2018-12/regional\\_directory.pdf](http://www.osc.state.ny.us/sites/default/files/local-government/documents/pdf/2018-12/regional_directory.pdf)

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

[www.osc.state.ny.us/local-government/publications?title=&body\\_value=&field\\_topics\\_target\\_id=263196&issued=All](http://www.osc.state.ny.us/local-government/publications?title=&body_value=&field_topics_target_id=263196&issued=All)

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

[www.osc.state.ny.us/local-government/fiscal-monitoring](http://www.osc.state.ny.us/local-government/fiscal-monitoring)

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

[www.osc.state.ny.us/local-government/publications?title=&body\\_value=&field\\_topics\\_target\\_id=263206&issued=All](http://www.osc.state.ny.us/local-government/publications?title=&body_value=&field_topics_target_id=263206&issued=All)

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

[www.osc.state.ny.us/local-government/resources/planning-resources](http://www.osc.state.ny.us/local-government/resources/planning-resources)

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

[www.osc.state.ny.us/sites/default/files/local-government/documents/pdf/2020-05/cyber-security-guide.pdf](http://www.osc.state.ny.us/sites/default/files/local-government/documents/pdf/2020-05/cyber-security-guide.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/local-government/required-reporting](http://www.osc.state.ny.us/local-government/required-reporting)

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

[www.osc.state.ny.us/local-government/publications?title=&body\\_value=&field\\_topics\\_target\\_id=263211&issued=All](http://www.osc.state.ny.us/local-government/publications?title=&body_value=&field_topics_target_id=263211&issued=All)

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

[www.osc.state.ny.us/local-government/academy](http://www.osc.state.ny.us/local-government/academy)

## Contact

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