HARDWARE and SOFTWARE UPGRADES

FOR ENHANCED CASH MANAGEMENT IN

CHECK HANDLING PROCEDURES

Report by the
Office of City Controller

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To the Honorables: Mayor William Peduto and
Members of Pittsburgh City Council

The Office of City Controller is pleased to present this Audit of ***Upgrades for Enhanced Cash Management in Check Handling Procedures*** conducted pursuant to the Controller's powers under Section 404© of the Pittsburgh Home Rule Charter.

EXECUTIVE SUMMARY

As the volume of checks received by the City of Pittsburgh in the normal course of business has increased, so too has the number of returned checks. Over the past six years, check payments deposited into the City's General Fund that were returned by the bank have ranged from an annual low of $30,391.79 in 2009 to $91,619.47 in 2011. Actual checks returned in the six-year period examined, 2008 to 2013, totaled $380,772.05, averaging over $63,000 per year.

Numerous locations throughout the City accept payments in the form of checks, yet none have any means of validating these payments. Hardware and software that is currently readily available and relatively inexpensive can enable each payment-accepting location throughout the City to validate checks real-time, effectively eliminating the risk and nuisance of accepting bad checks. Once validated, the paper check payment is converted into an ACH (Automated Clearing House) to facilitate remote depositing through a web based Remote Deposit Capture application.

As a result, potential opportunities for fraud and misappropriation are markedly reduced by minimizing human intervention in the deposit process. In addition, funds are available faster with less time and manpower required overall, thereby reducing total processing costs.

Such hardware upgrades are no longer cost-prohibitive even on a city-wide scale and can readily vary in magnitude based on the specific operational needs of each location. Furthermore, software upgrades can generate enhanced reporting capabilities currently not in place that can significantly improve the security and efficiency of the City's cash management processes.

Sincerely,

Michael E. Lamb
City Controller

INTRODUCTION

This review of returned checks and potential subsequent hardware/software upgrades as a means of attaining enhanced cash management efficiency and security was conducted pursuant to Section 404(c) of the Pittsburgh Home Rule Charter.

SCOPE AND METHODOLOGY

This review examined check payments received by the City of Pittsburgh that were returned by banks as 'unable to deposit' for the period January 1, 2008 through December 31, 2013.

Bank statements were examined to confirm individual checks returned along with return totals by year. Bank Account Analyses for all bank accounts maintained by the City were examined to compile bank fee totals involving returned checks. Copies of each check returned in 2013 was examined and documented. In addition, records detailing the departmental composite of each year's total for 2012 and 2010-2008 were utilized.

Meetings with personnel from BBI were conducted along with discussions with Parks & Recreation staff to gain an understanding of their operations and obtain information specific to their payments handling procedures.

Specific consideration was given to the findings and issues identified in reviews of the City's cash management practices, conducted by the Controller's Office and Gleason & Associates in December, 2013,[1] to ensure that concerns raised therein were included as applicable in this review.

Research was conducted on check conversion/validation services and on equipment cost and availability involving check verification, remote depositing, and automatic report generation capabilities.

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[1] Six department-specific reviews were conducted by the Controller's Office and Gleason & Assocs. to assess the City's cash management practices for the following departments: Parks & Recreation, Bureau of Building Inspection (BBI), City Planning, Public Works, Finance and Animal Care and Control.

OBJECTIVES

1. To examine the checks intended for deposit to the City's General Fund that were returned by the bank during fiscal years 2008 through 2013 and note departmental sources and trends over the six years timespan;

2. To review current check-acceptance processes and identify resulting risks;

3. To introduce currently available check-handling equipment and services to mitigate risks identified;

4. To make recommendations for enhanced cash management as it relates to check handling practices.

OVERVIEW and FINDINGS

In recent years as overall volumes of check receipts for the City of Pittsburgh have increased, the number of checks returned by the bank has increased as well.[2] The extent of administrative processing of these returned/bounced checks has primarily defaulted to year-end write offs. Over the past six years, total annual write-offs of returned checks have ranged from $91,619.47 (2011) to $30,391.79 (2009); this averages to $63.5k/year over the six-year timespan reviewed (2008 – 2013). In addition, bank fees averaging nearly $9.5k/year for returned and recleared checks were incurred during 2012 and 2013. [3]

Table 1: Total Sum of Returned Checks by Year
(Totals do not include returned and recleared fees.)

	2013	2012	2011	2010	2009	2008	Total
Total Yearly Returned Checks	$73,361.32	$49,903.01	$91,619.47	$66,848.08	$30,391.79	$68,648.38	$380,772.05

Collectively, there are dozens of locations throughout the City that accept payments for services rendered. Each of these locations accepts payment in the form of checks, yet has no means of validating it. Equipment is presently readily available to businesses and enterprises of all sizes that would vastly enhance the City's cash management processes by creating capabilities to validate, record, and even deposit payments.

Implementation of Electronic Check Conversion Systems would enable each location to validate checks real-time, thereby eliminating the risk and nuisance of receiving bad checks. The system converts a payer's paper check payment to an electronic check payment that is processed as an ACH. The process entails scanning and validating the check, all in the presence of the payer. If the transaction is denied, the check can be returned on the spot to the payer and an alternative payment means requested prior to issuance of whatever is being purchased, be it a police report, trade license, building permit, benefits coverage payment, pet license, pool tag, etc. Any contact point with the public where payments are received, regardless of the magnitude, could be included.

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[2] Based on three-year rolling averages of returned check totals, 2008 through 2013.
Examples of causes for returned checks include NSF, frozen and/or blocked accounts, and accounts no longer in existence.

[3] Recleared check charges are incurred when the bank undertakes its second attempt to process a check which initially did not clear and was returned.

Once a payment is validated, these same systems also facilitate remote depositing of checks through a web based Remote Deposit Capture application. This effectively eliminates the need for and risk involved in transporting checks to the bank or Finance for deposit. The component of human intervention in the deposit process is minimized, thereby precluding potential opportunities for fraud and misappropriation. In addition, the funds are available faster and processing costs are significantly reduced with much less time and manpower required in the overall process.

Numerous vendors are currently in the market for such applications. Physical hardware requirements could begin as minimally as a single, small-footprint scanner device for each location receiving payments from the public. More comprehensive tooling that facilitates better cash management would include cash registers with check scanning capabilities that could also facilitate future upgrades such as accepting payments via credit cards. [4]

In addition to hardware upgrades, software changes can also greatly enhance security and efficiency of cash management and reconciliation processes. Automatically generated reports can be customized to fit the operational specifics of each location, thereby assisting each division to mitigate risks inherent to their operations. These risks stem from a variety of variables common throughout the city's operations, such as physical setup, staffing constraints and fluctuating business volumes. Daily reports that summarize the day's activity in terms of transaction counts and total funds received, along with a breakdown by type (cash/check/credit card) could be systematically generated and emailed to designated supervisory personnel in addition to off-site operation directors and to Finance. This in turn eliminates the need for manually logging transactions and more importantly, helps minimize the opportunity for error and conscious revision of the data resulting from human compilation and the inherent risk of potential errors.

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[4] Examples of strong recommendations to implement acceptance of credit card payments were cited throughout the earlier mentioned reviews conducted by Gleason & Associates (Dec 2013) of the City's cash management practices for the Department of City Planning.

RECOMMENDATIONS

Identify and assess locations accepting payments

Each payment-accepting location throughout the City of Pittsburgh should be identified and assessed in terms of payment receipt volumes and the associated risk factors inherent in each location's operation. Analysis elements should include type, frequency, and volume of payments received, in addition to personnel factors such as the number and caliber of staff involved in payment handling operations.

Evaluate hardware upgrades to match operational needs

Physical constraints of each location should next be noted, including the presence/adequacy or even the absence of secured areas for storing payments awaiting deposit. Such locations should be equipped with hardware upgrades that enable remote depositing.[5] This is particularly applicable to divisions for whom checks constitute a significant portion of payment receipts. At an absolute minimum, this should include Municipal Courts, Parks & Recreation and BBI.

Check validation scanners should be seriously considered for every division accepting check payments. Based on the minimal investment required to equip potentially each location accepting check payments of material volume, the benefits gained from the ability to screen invalid checks far outweigh the cost involved. Divisions in which this ability is most valuable includes, at a minimum, BBI, Zoning, Personnel, and Finance.

Reporting enhancements

Currently in some divisions, documentation that constitutes a primary record of daily activity regarding receipts and subsequent deposits is being manually compiled.

Software upgrades could markedly enhance reporting capabilities by generating reports that are systematically generated and emailed to multiple pre-selected recipients. Thus, on-site supervisors in addition to off-site division directors as well as Finance can be included in receiving transaction and deposit reports on pre-established frequencies. In addition, opportunities for error and intentional revisions stemming from manual compilations are significantly reduced.

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[5] Numerous examples involving delays in making deposits and lack of secured locations as funds await deposit were cited throughout the reviews conducted by Gleason & Associates (Dec 2013) of the City's cash management practices; specific reports include the Dept. of Parks & Recreation and the Dept. of City Planning reviews.