January 6, 2011
VINCENT H. DEVITO, JR.
VICE PRESIDENT, CONTROLLER
JOSEPH MOELLER
MANAGER, REGULATORY REPORTING \& COST ANALYSIS
SUBJECT: Audit Report - Postage in the Hands of the Public Liability Estimate (Report Number FT-AR-11-006)

This report presents the results of our audit of the Postage in the Hands of the Public (PIHOP) liability estimate (Project Number 10BM002FT001). The report responds to a request from the U.S. Postal Service's Board of Governors Audit and Finance Committee to review the PIHOP estimate as a result of significant changes in the PIHOP liability at the end of fiscal year (FY) 2009. The objectives of this audit were to review the model used to calculate the PIHOP estimate to determine if opportunities exist for improving the model and the financial reporting and predictability of the estimate. This audit addresses financial risk. See Appendix A for additional information about this audit.

The Postal Service developed a process (model) to estimate the deferred revenue ${ }^{1}$ for prepaid postage (PIHOP) at the end of a reporting period. The PIHOP estimate represents postage sold to but not yet used by customers. The model includes separate calculations for Forever Stamps $®,{ }^{2}$ denominated stamps, ${ }^{3}$ meters and pre-cancelled stamps, ${ }^{4}$ and mail-in-transit (MIT) ${ }^{5}$ that, together, comprise the PIHOP estimate. The Postal Service tracks postage sold using sales records and postage used from statistical samples. ${ }^{6}$ At the end of FY 2009, the PIHOP liability was $\$ 2.445$ billion.

[^0]
## Conclusion

Changes in consumer purchase and usage behaviors associated with the introduction of the Forever Stamp explained, for the most part, recent significant fluctuations in the PIHOP liability. Further, the Postal Service's mandated quarterly financial reporting highlighted the changes to the PIHOP estimate. However, we identified opportunities that could improve the predictability and financial transparency of the PIHOP estimate. Specifically:

- Management needs to clearly and singularly document the procedures used, the assumptions made, the analyses conducted, and the rationale for methods used to estimate the PIHOP liability.
- Management should enhance the separate calculations for the components used to estimate the PIHOP liability.


## PIHOP Documentation

Management did not follow its white paper documenting the methodology to be used for calculating the Forever Stamp component of the FY 2009 PIHOP estimate. This white paper was provided to the independent public accounting firm contracted to opine on the Postal Service's financial statements to support the PIHOP liability estimate for the FY 2009 financial statements. Instead, management used a separate document and the method outlined in that one conflicted with the method in the white paper. Also, management did not document their analysis for choosing the method for the Forever Stamp calculation ${ }^{7}$ or rationale for three assumptions used to calculate the PIHOP estimate. To illustrate, management did not document their support for the assumption that 90 percent of denominated stamps are used within 1 year of purchase. The liability is very sensitive to this percentage of usage - for example, a 1 percent decrease in the 90 percent usage assumption would increase the liability estimate by approximately $\$ 52$ million. Thus, it is critical to ensure that management conducts sufficient analysis and documents it for this and other critical assumptions.

Internal control standards ${ }^{8}$ require management to develop a standardized format of documentation of the policies and procedures for all significant activities related to financial reporting. These conditions occurred because changes in the PIHOP estimate methodology were not always updated in the document supporting the PIHOP liability for the financial statements or communicated and shared among personnel responsible for developing, calculating, and reporting the PIHOP liability estimate. As a result, there was an increased risk that the PIHOP liability estimate process would not be consistent or transparent. See Appendix B for our detailed analysis of this topic.

[^1]We recommend the vice president, controller:

1. Develop a clear, single document of the procedures used, the assumptions made, the analyses conducted, and the rationale for methods used to estimate the Postage In the Hands Of the Public liability.
2. Implement a formal communication and information sharing process among personnel responsible for developing the liability estimate.

## Management's Comments

Management agreed with recommendation 1 but neither agreed nor disagreed with recommendation 2. For both issues, management asserted that they have already accomplished these recommendations by the process documentation prepared during FY 2010 for Sarbanes-Oxley (SOX) compliance. ${ }^{9}$ Management noted the U.S. Postal Service Office of Inspector General's (OIG) assertion that the Postal Service did not follow its own white paper is incorrect because the OIG misinterpreted documentation provided during the audit. However, they agreed the documentation could have been clearer. Regarding communication, management stated that white papers are not comprehensive process or policy documents but issue-specific updates to accounting estimates or calculations. Significant changes to any PIHOP component calculation are formally documented via a white paper until management completes a formal SOX documentation update. Management also advised that they discussed the calculation of the liability and all assumptions in detail with the controller, chief financial officer (CFO), and external auditors. See Appendix D for management's comments in their entirety.

## Evaluation of Management Comments

The OIG considers management's comments responsive to recommendation 1. During our audit, three separate documents existed that explained the PIHOP liability calculation. However, late in FY 2010, management finalized a comprehensive document for SOX compliance that describes the PIHOP liability estimate. We believe the formal SOX documentation should resolve the documentation issue identified.

The OIG considers management's comments not responsive to recommendation 2. The purpose of the recommendation was to enhance communication among key personnel during the calculation of the estimate, not communication of the resulting liability estimate or process to others. Management's comments address documentation of the formal liability-estimate process but do not address communication or information sharing among the various personnel responsible for developing the estimate during the

[^2]process itself. However, because management stated they discussed the liability assumptions with the controller, CFO, and external auditors and has documented the process for SOX compliance purposes, we will not pursue the issue further at this time. We encourage management to incorporate regular communication between Corporate Finance and Statistical Programs Office personnel into their process to ensure the accuracy and reliability of the estimate, especially since management makes two separate PIHOP estimates.

## Separate Component Calculations

Management should enhance the separate calculations for each of the components of the PIHOP liability. For example:

- Management did not include revenue from international Forever Stamp usage in calculating the Forever Stamp component of the PIHOP estimate.
- Management relied on a stamp usage assumption for calculating the denominated stamps component of the PIHOP estimate because they did not have actual stamp usage data by denomination.
- For the MIT component of the PIHOP estimate, management:
- Did not include all classes of mail in the "weighted average days in transit" variable. Some classes of mail are available but not in a format that can be used. In other instances, the data is not available. ${ }^{10}$
- Added half a day to the "weighted average days in transit" variable for mail "from the carrier's case to delivery," even though mail from the carrier's case to delivery is included in the average days in transit calculation. ${ }^{11}$
- Management included eBay®/PayPal ${ }^{12}$ revenue in the meters component calculation of the PIHOP estimate when it was already appropriately recorded in the MIT calculation component.

Internal control standards recognize the importance of using complete and reliable data for accounting estimates. This generally occurred because the data sources management used (for example, RPW sampling-related information and NMATS revenue information for eBay/PayPal) were not always available or did not always

[^3]separate out the information necessary to calculate the PIHOP estimate. As a result, the precision of the PIHOP estimate was reduced.

As a result of our audit, in Q3, FY 2010 management included international Forever Stamp revenue in the PIHOP calculation, recognizing revenue of nearly $\$ 37$ million. They also excluded eBay/PayPal revenue of $\$ 58$ million from the meter component calculation, resulting in about $\$ 20$ million in recognized revenue. Accordingly, we are not making any recommendations on those issues at this time. See Appendix B for our detailed analysis of this topic and Appendix $C$ for our calculation of monetary impact.

We recommend the manager, Regulatory Reporting \& Cost Analysis:
3. Evaluate and consider expanding, as appropriate, Revenue, Pieces, and Weight data collection to include stamp usage by denomination and all classes of mail for the mail-in-transit component of the calculation.

## Management's Comments

Management disagreed with recommendation 3, indicating it was not practical. Although they agreed that they could improve the precision of the denominated stamp portion of the liability if detailed information on stamp usage by denomination was available, they noted that, because the Postal Service is quickly transitioning from denominated stamps to Forever Stamps, it would not be prudent to implement RPW data collection changes for this short time period. Management also advised that they currently include all classes of mail where there is sufficient delivery data to calculate the days to delivery piece of the MIT portion of the PIHOP calculation. In addition, they expect the Intelligent Mail Barcode to provide data regarding days to delivery for Standard Mail and Periodicals. When management has that data, they will consider changing the MIT calculation to incorporate it.

Management also disagreed with our calculation of monetary impact related to Forever Stamp international mail and eBay/PayPal revenues. Management stated that it merely represents a timing difference as to when revenue is recognized, so there was no financial risk or loss associated with the omission of international mail usage and eBay/PayPal revenue from the calculation of the PIHOP estimate.

## Evaluation of Management's Comments

The OIG considers management's comments responsive to the recommendation. The purpose of the recommendation was to improve the precision of the denominated stamp portion of the PIHOP liability. While we continue to believe that expanding RPW data collection would improve precision, we acknowledge the cost/benefit issue and the future expected data collection benefits from the Intelligent Mail Barcode. Accordingly, we will not pursue this issue further.

Further, it is OIG policy is to consider the amount the Postal Service is (or was) entitled to receive but which it did not realize, as recoverable revenue loss. We do not dispute that the funds were already collected; however, had the change not been made as a result of our audit, the revenue would not have been recognized to offset operational expenses during FY 2010. Therefore, we continue to believe the monetary impact is appropriate.

We recommend the vice president, controller:
4. Eliminate the assumption to add half a day to the weighted average days in transit portion of the mail-in-transit component calculation.

## Management's Comments

Management disagreed with recommendation 4, stating the OIG assumed all mail received at a delivery unit is delivered the same day. Management acknowledged this is true for First Class Mail, but it is not true for all mail at delivery units. In many cases Standard Mail arrives at a delivery unit with instructions for the postmaster to deliver the mail within a range of dates. Since Standard Mail represents more than 50 percent of the mail volume, adding the half day to the weighted average days in transit portion of the mail-in-transit component calculation is reasonable.

## Evaluation of Management's Comments

Management's comments are not responsive to the recommendation. We agree that a portion of Standard Mail may not be delivered the same day; however, management only includes three classes of mail (First-Class, Priority, and Packaging Services) in the average days in transit portion of the MIT calculation and we found that all of those classes of mail were delivered the same day the mail was received at the delivery unit. Therefore, unless management expands the average days in transit portion of the MIT calculation to include all classes of mail, ${ }^{13}$ the fact that Standard Mail represents more than 50 percent of the mail volume and a portion may not get delivered the same day is not relevant here, and the half day addition assumption is not necessary. As a result, we do not believe management's assumption accurately measures mail "from the carrier's case to delivery" because First Class Mail represents the majority of mail revenue ${ }^{14}$ and is already included in the average days in transit measurement. However, because the purpose of the recommendation was to increase the precision and the difference is not material, we will not pursue the issue further at this time. We encourage management to re-evaluate the reasonableness of their assumption to improve the precision of the PIHOP estimate.

[^4]
## Financial Reporting

The level of evidence and transparency for deferred revenue at the Postal Service was equal to or higher than levels for the two benchmarking partners we evaluated. Nevertheless, considering management's overall estimate and assumptions surrounding this significant account ${ }^{15}$ and the frequency and magnitude of accounting adjustments in FYs 2008, 2009, and 2010, the Postal Service should provide additional detail in the financial statements regarding estimate development. This additional detail should include any limitations of the data used to calculate the estimate. In response to our audit, management intends to provide a more expansive disclosure regarding the PIHOP liability estimate in the FY 2010 Form 10-K Report that includes information on the PIHOP components that comprise the estimate and noted changes in the stamp component calculation in FY 2009 and FY 2010. Because of the corrective action taken and the fact that the Postal Service's transparency equals or exceeds that of others we evaluated, we are not making any recommendations at this time.

## Forecasting

Management could strengthen the model and better inform stakeholders by using existing sales trends, costs, projected revenue, mailpieces, and economic data to develop a forecast model to predict future PIHOP liability estimates. For those instances where several years of data are likely available (for example, NMATS ${ }^{16}$ and RPW), the Postal Service could develop long-term mail volume trends, economic variables (such as output, employment, and inflation), seasonal factors, and mail costs. As more historical data regarding Forever Stamp purchase and usage becomes available, the Postal Service could couple it with the already well-developed data histories for the other PIHOP components to develop a forecast model that may help produce more reliable PIHOP estimates.

[^5]We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Lorie Nelson, director, Financial Reporting, or me at 703-248-2100.


John E. Cihota
Deputy Assistant Inspector General for Financial Accountability

## Attachments

cc: Joseph Corbett
Julie S. Moore
Stephen J. Nickerson
J. Ronald Poland

Corporate Audit and Response Management

## APPENDIX A: ADDITIONAL INFORMATION

## BACKGROUND

The Postal Service initially records revenue from stamps and meter postage upon sale, in advance of service performance. Because the Postal Service does not recognize revenue until the service has been provided, ${ }^{17}$ it has developed a process (model) to calculate an estimate for the unused portion of stamps, meters, pre-cancelled stamps, and mail that is in transit at the end of a period. ${ }^{18}$

In FYs 2008 and 2009, the Postal Service modified its model because of changes in consumer purchase and usage behaviors resulting from introduction of the Forever Stamp in April 2007. ${ }^{19}$ As Table 1 illustrates, the PIHOP liability estimate fluctuates each quarter because sales and usage patterns fluctuate.

Table 1: PIHOP Liability Estimates - Q4, FY 2008-Q3, FY 2010

| Fiscal <br> Quarter | Reported PIHOP <br> Liability Estimate <br> (in millions) | Quarterly <br> Fluctuation <br> (in millions) |
| :---: | :---: | :---: |
| Q4, 2008 | $\$(1,689.1)$ |  |
| Q1, 2009 | $\$(1,650.6)$ | $\$ 38.5$ |
| Q2, 2009 | $\$(1,731.5)$ | $\$(80.9)$ |
| Q3, 2009 | $\$(1,942.8)$ | $\$(211.3)$ |
| Q4, 2009 | $\$(2,445.2)$ | $\$(502.4)$ |
| Q1, 2010 | $\$(2,229.8)$ | $\$ 215.4$ |
| Q2, 2010 | $\$(2,329.4)$ | $\$(99.6)$ |
| Q3, 2010 | $\$(2,399.2)$ | $\$(69.8)$ |

Source: Accounting Data Mart ${ }^{20}$

[^6]The Postal Service determined the calculations for the separate components that make up the PIHOP estimate at the end of FY 2009 as follows:

- Forever Stamps: Management implemented a stand-alone "sales less usage" calculation for these stamps, using actual sales and estimated usage measurements based on RPW data. Management also subtracted an estimate of stamps sold that will never be used, referred to as "breakage." The amount calculated at the end of FY 2009 was $\$ 1.176$ billion, which represented 48 percent of the total estimated PIHOP liability.
- Denominated Stamps: Management assumed that 90 percent of denominated stamps are used within 1 year of purchase based on analysis that revealed almost immediate customer usage upon purchase and increased usage prior to price increases. Accordingly, management calculated the denominated stamp component equal to 10 percent of the preceding 12 months of recorded sales, less a breakage factor for stamps sold that will never be used. The amount calculated at the end of FY 2009 was $\$ 517$ million, which represented 21 percent of the total estimated PIHOP liability.
- Meters and Pre-Cancelled Stamps: The Postal Service recognizes postage meter revenue when postage is set on the meter. Management calculated a national deferral percentage ${ }^{21}$ and applied it to the recorded meter revenue for the month to calculate the estimated meter postage deferral. Because management viewed the sales and usage behavior of pre-cancelled stamps to be similar to meters, they used the same method to calculate the estimate for precancelled stamps. The amount calculated at the end of FY 2009 was $\$ 493$ million, which represented 20 percent of the total estimated PIHOP liability.
- MIT: Management used RPW data for revenue and mail volume for the MIT component of the PIHOP estimate at the end of each quarter. The amount calculated at the end of FY 2009 was $\$ 259$ million, which represented 11 percent of the total estimated PIHOP liability.


## OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to review the model used to calculate the PIHOP estimate, including the overall assumptions and inputs, to determine if opportunities exist for improving the model and the financial reporting and predictability of the estimate. To accomplish our objectives, we interviewed Postal Service managers responsible for developing and reporting the PIHOP estimate and reviewed available documentation. We contracted with IHS Global Insight, a consulting firm specializing in financial modeling, to evaluate the model assumptions and inputs and to benchmark best

[^7]practices. In addition, we also independently benchmarked a Fortune 500 company to determine their practices regarding MIT.

We conducted this performance audit from December 2009 through January 2011 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. 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 objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We discussed our observations and conclusions with management officials on November 5, 2010, and included their comments where appropriate.

We relied on computer-generated data used to develop the PIHOP estimate. To assess the reliability, we reviewed existing documentation and independently performed PIHOP calculations based on model methodologies. We also interviewed Postal Service personnel knowledgeable about the data and traced source data to the general ledger, including sales data from the Accounting Data Mart. As such, we determined the data to be sufficiently reliable.

## PRIOR AUDIT COVERAGE

| Report Title | Report <br> Number | Final <br> Report <br> Date | Report Results |
| :--- | :--- | :--- | :--- |
| Statistical Tests for <br> Fiscal Year 2010 | FF-AR-10-222 | $9 / 14 / 10$ | The Postal Service did not, <br> in 10 districts, (1) follow <br> procedures to determine the <br> appropriate random start <br> and mailpiece and/or <br> container skip intervals in <br> three districts, (2) verify <br> information keyed into the <br> Computerized On-Site Data <br> Entry System laptop in two <br> districts, and (3) follow <br> procedures for protecting <br> data collection equipment in <br> four districts. Management <br> agreed with the findings. |


| Statistical Tests for <br> Fiscal Year 2009 - <br> Cost and Revenue <br> Analysis | FF-AR-10-015 | $11 / 20 / 09$ | The Postal Service did not <br> comply with prescribed <br> policies and procedures <br> from conditions previously <br> reported in our FY 2008, <br> 2007, and 2006 reports. <br> Management agreed with <br> the findings. |
| :--- | :--- | :--- | :--- |
| Statistical Tests for <br> Fiscal Year 2008 - <br> Cost and Revenue <br> Analysis | FF-AR-09-024 | $11 / 24 / 08$ | Data collectors did not <br> follow proper procedures. <br> Management agreed with <br> the findings. |

## APPENDIX B: DETAILED ANALYSIS

## PIHOP Documentation

Management did not follow its white paper documenting the methodology for calculating the Forever Stamp component of the FY 2009 PIHOP estimate. Also, management did not document their analyses or rationale for choosing their method for the Forever Stamp calculation or for three assumptions used to calculate the PIHOP estimate. Management prepared a white paper describing how the Postal Service calculated the FY 2009 year-end estimate for the Forever Stamp component that included developments from an October 2009 analysis ${ }^{22}$ further documenting the calculation. Neither of these documents outlined the actual method used to calculate the Forever Stamp component of the PIHOP liability estimate. Rather, management used a spreadsheet titled USPS Model Forever Stamps Only (Stamp PIHOP Spreadsheet), prepared by Corporate Financial Reporting, for the calculation. ${ }^{23}$ In addition, the methods illustrated in these documents conflicted with each other. For example:

- The white paper stated the methodology included an application of a leveling factor ${ }^{24}$ for the calculation, but the October 2009 analysis and the Stamp PIHOP Spreadsheet did not. For the actual calculation, a leveling factor was not used. If a 1.6 percent leveling factor was used, Forever Stamp usage would have decreased by $\$ 116$ million, increasing the PIHOP estimate for the Forever Stamp component.
- The white paper and the October 2009 analysis depicted a "probability of usage" ${ }^{25}$ method for calculating Forever Stamp revenue and deferred revenue. However, management actually used an "intuitive estimate" ${ }^{26}$ for the Forever Stamp component and made additional undocumented changes which resulted in lowering usage by $\$ 23$ million and increasing the PIHOP estimate.

Management did not provide information on its process for reviewing and analyzing these methods or their rationale for choosing the method ultimately used to derive the PIHOP liability estimate. As shown in Table 2, variations in outcomes result when management applies the different methods for calculating the Forever Stamp component as depicted in the documents.

[^8]Table 2. Forever Stamp Methodologies for the September 30, 2009 Estimate

|  | Forever Stamp <br> Ftamp <br> Balance <br> Balance Used in <br> (in millions) | Liability Shown in <br> General Ledger <br> (in millions) | Difference <br> (in millions) |
| :--- | :---: | :---: | :---: |
| Stamp PIHOP <br> Spreadsheet | $\$ 1,176$ | $\$ 1,176$ | 0 |
| White Paper | $\$ 1,242$ | $\$ 1,176$ | $\$ 66$ |
| October 2009 Forever <br> Stamp Study | $\$ 1,501$ | $\$ 1,176$ | $\$ 325$ |
| Revised October 2009 <br> Forever Stamp Study <br> (Revised February 2010) | $\$ 1,123$ | $\$ 1,176$ | $\$(53)$ |

Source: Accounting Data Mart
Also, management did not document their analysis or rationale for three assumptions used to calculate the PIHOP estimate:

- For the denominated stamps calculation, management assumed that 90 percent of stamps are used within 1 year of purchase. See Table 3 for the impact of a 1 percent change in the assumption.

Table 3. Denominated Stamps Component Comparison
$\left.\begin{array}{|l|c|c|c|}\hline & & & \begin{array}{c}\text { Estimated } \\ \text { Denominated } \\ \text { Stamps }\end{array} \\ \text { Percentage } \\ \text { Assumed } \\ \text { Unused } \\ \text { (in millions) }\end{array} \quad \begin{array}{c}\text { Component } \\ \text { (in millions) }\end{array}\right]$

Source: Accounting Data Mart

- For the MIT calculation, management assumed that 50 percent of the MIT was processed at any given point in time. See Table 4 for the impact of changing the assumed percentage of mail processed at a given time. ${ }^{27}$

[^9]Table 4. MIT Unearned Mail Percentage Comparison

|  | Mail in the <br> Mailstream <br> (in millions) | Percent <br> Assumed <br> Unearned Mail | MIT Component <br> (in millions) |
| :--- | :---: | :---: | :---: |
| Assumption Used in <br> September 30, 2009 <br> PIHOP Liability Calculation | $\$ 518.5$ | $50 \%$ | $\$ 259.2$ |
| Change in Unearned Mail <br> Percentage | $\$ 518.5$ | $67 \%$ | $\$ 347.3$ |
| Difference |  |  | $\$ 88.1$ |

Source: 2009 White Paper - PIHOP Meters, Mail-in-Transit \& Pre-cancelled Stamps, dated October 26, 2009

- For the MIT calculation, management added 1 day $^{28}$ to the "weighted average days in transit" calculation to compute the mail revenue in process at period end. See Table 5 for the impact of not including one-half day to the "weighted average days in transit" calculation.

Table 5. MIT Comparison With and Without Half a Day Addition

|  | Total MIT <br> Revenue <br> (in millions) | Percentage <br> Earned | Deferred MIT <br> (in millions) |
| :--- | :---: | :---: | :---: |
| With Half a Day Addition | $\$ 518$ | $50 \%$ | $\$ 259$ |
| Without Half a Day Addition ${ }^{29}$ | $\$ 430$ | $50 \%$ | $\$ 215$ |
| Difference |  |  | $\$ 44$ |

Source: 2009 White Paper - PIHOP Meters, Mail-in-Transit \& Pre-cancelled Stamps, dated October 26, 2009
As shown in Tables 3, 4, and 5, minor changes in these assumptions can significantly impact the PIHOP liability estimate.

These conditions occurred because changes in the PIHOP estimate methodology were not always updated in the document supporting the PIHOP liability for the financial statements, or communicated and shared among personnel responsible for developing, calculating, and reporting the PIHOP liability estimate. As a result, there was an increased risk that the PIHOP liability estimate process would not be consistent or transparent.

[^10]
## Component Calculations

## Forever Stamp International Mail Revenue

Management did not include revenue from international Forever Stamp usage in calculating the Forever Stamp component of the PIHOP estimate. ${ }^{30}$ We presented the issue to management on July 19, 2010, and, as a result, they incorporated this data into the estimate, which reduced the PIHOP liability and increased revenue by $\$ 36.9$ million in Q3, FY 2010.

## Denominated Stamps

Management could improve the denominated stamps component calculation by obtaining stamp usage data by denomination. Management used an assumption that 90 percent of denominated stamps (representing 57 percent of stamp sales in FY 2009) were used within 1 year. Internal control standards ${ }^{31}$ require identification and capture of pertinent information used for accounting estimates. This occurred because RPW sampling information did not include the amount of each denominated stamp on a mailpiece and, unlike the Forever Stamp, there were no historical data available to recreate the starting point for calculating the PIHOP liability estimate. As a result, the precision of the PIHOP liability estimate is reduced.

## MIT

Management did not include all classes of mail in the "weighted average days in transit" portion of the MIT component of the PIHOP liability calculation. Some classes of mail are available but not in a format that can be used. In other instances, the data is not available. The "weighted average days in transit" factor is used to calculate, by class, the dollar value of mail in transit at period end. Specifically, management used three classes of mail (First-Class, Priority, and Packaging Services) to estimate the total volume of pieces in the mail system. These classes represented 65 percent of the mail revenue. Therefore, all additional classes of mail (for example, standard mail and Periodicals) - representing 35 percent of the mail revenue - were not represented in the MIT calculation. As a result, approximately $\$ 182$ million of the actual MIT estimated at the end of FY 2009 was not represented in the calculation. ${ }^{32}$ Assigning an additional day in transit for the unrepresented classes of mail in this calculation would increase the MIT component of the PIHOP liability estimate by approximately $\$ 31$ million.

[^11]Internal control standards ${ }^{33}$ recognize that complete and reliable data is critical to providing accurate information in financial reports. This occurred because the RPW data, currently used to compute the MIT component of the PIHOP liability estimate, did not include all the information necessary to support the PIHOP calculation. However, other sources of data could provide necessary information for reliable "weighted average days in transit" measurements. ${ }^{34}$

Also regarding MIT, management inappropriately added half a day to the "weighted average days in transit" portion of the MIT component of the PIHOP liability calculation. Specifically, management added half a day to the calculation for mail "from the carrier's case to delivery." However, RPW data used for the calculation included the full day of delivery, in essence adding an extra half a day to the calculation. Postal Service personnel did not know why they added the half a day, as it had always been part of the calculation. Postal Service policy defined the transit time as the time between a mailpiece coming into the Postal Service's possession and the time of delivery to the addressee. ${ }^{35}$ As a result, the September 30, 2009, MIT component of the PIHOP liability calculation was increased by $\$ 44$ million.

## eBay/PayPal Revenue

Management included revenue from the eBay/PayPal portion of PC Postage $®^{36}$ in the meters component calculation of the PIHOP liability estimate when it is already appropriately recorded in the MIT component calculation. This occurred because management did not believe it could separate eBay/PayPal revenue from meter revenue. However, we found that eBay/PayPal revenue was segregated in Postal Service journal vouchers ${ }^{37}$ and, therefore, could be excluded from the meters component calculation. Excluding this revenue from the PIHOP liability estimate was consistent with two foreign posts with whom we benchmarked. Neither of those posts defers their equivalent of eBay/PayPal revenue. As a result of our audit, in Q3, FY 2010, management excluded eBay/PayPal revenue of $\$ 58$ million from the meter component calculation, resulting in about $\$ 20$ million in recognized revenue.

[^12]
## APPENDIX C: MONETARY IMPACT

We calculated revenue related to international Forever Stamp usage and eBay/PayPal as follows:

Recoverable Revenue Loss ${ }^{38}$

| Finding Title | Revenue Calculation | Amount |
| :--- | :--- | :---: |
| Forever Stamp <br> International Mail <br> Revenues | Cumulative International Forever <br> Stamp usage from April 2007 through <br> June 2010 not previously included in <br> PIHOP liability estimate calculation. |  |
| eBay/PayPal <br> Revenue | eBay/PayPal revenue for June 2010: <br> (\$58,052,614 x 34\% PIHOP liability <br> estimate percentage for June 2010). |  |
|  |  | $\$ 19,828,101$ |
|  | TOTAL |  |
|  |  | $\$ 56,565,989$ |

[^13]
## APPENDIX D: MANAGEMENT'S COMMENTS

Vincent DeVito
Vice President, Control iex

UNITED STATES
POSTAL SERVICE
December 20, 2010

LUCINE WILLIS
SUBJECT: Postage in the Hands of the Public Liability Estimate (Report Number FT-AR-11-DRAFT)

Attached please find the management response to the draft audit report cited above. The audit report and management's response do not contain information that may be exempt from disclosure under FOIA


Attachment
cc: Joseph Corbett
Julie S. Moore
Stephen J. Nickerson
J. Ronald Poland

Corporate Audit \& Response Management

## -2 -

Postage-in-the-hands-of-the-public (PIHOP) is an estimate of stamped and metered postage that has been sold but not yet used. By definition, there is no financial risk associated with PIHOP since the U.S. Postal Service has already collected the cash in advance. The liability on the books represents the U.S. Postal Service's obligation to deliver that service at some point in the future.

Management disagrees with the Office of Inspector General's (OIG) calculation of $\$ 56,565,990$ of monetary impact. In fact, the monetary impact of the OIG's findings is zero. The $\$ 56,565,990$ calculated by the OIG merely represents a timing difference as to when the revenue is recognized on the U.S. Postal Service income statement. The PIHOP liability estimate represents funds that the U.S. Postal Service has already collected, thus there was absolutely no financial risk or loss associated with the omission of international mail usage and eBay/PayPal revenue from the calculation of the PIHOP estimate.

Recommendation 1
Develop a clear, single document of the procedures used, the assumptions made, the analyses conducted, and the rationale for methods used to estimate the PIHOP liability.

## Management Response

Management agrees with the recommendation and further asserts that this has already been accomplished by the process documentation that was prepared during 2010 for SOX compliance purposes. White papers that are written annually are not intended to be comprehensive process or policy documents. Rather, they are issue-specific updates on management's judgments or changes to particular accounting estimates or calculations.

The assertion that management did not follow its own white paper in calculating the September 30, 2009, PIHOP liability is incorrect and based on a misinterpretation of the documentation provided to the OIG during the course of their audit. The Q3, fiscal year (FY) 2008 white paper to which the OIG refers documented the methodology used to calculate PIHOP from Q3, 2008 thorough Q3, 2009. The discussion of that methodology in the Q4, 2009 white paper, dated November 8, 2009, was written to explain the need to make changes to that methodology because new evidence had come to light indicating that the result it produced was not appropriate. The spreadsheet used to calculate the Forever Stamp portion of the PIHOP liability, which OIG interpreted as a separate, unrelated document, was in fact attached to the November 8, 2009, white paper and an integral part thereof. Accordingly, this spreadsheet serves as an integral part of the documentation of the methodology to calculate the September 30,2009, liability. Admittedly, this point could have been more clearly made in the paper; however, the calculation of the liability and all assumptions were discussed in detail with the Controller, CFO, and external auditors, and concurrence was received by all.

It is important to understand that management makes two separate PIHOP estimates. The second probability-based estimate is used primarily to calculate the breakage factor, and secondarily as a reasonableness check on the primary liability estimate calculation. Further, the assertion that management "intuitively" estimated the revenue per piece for each Forever Stamp used is incorrect. Prior to the development of the existing probability-based model used to estimate breakage, management did indeed estimate the per piece Forever Stamp revenue. This estimate was superseded in FY2009 by the probability-based model, which when back tested against the initial assumptions was only $\$ 4$ million different. The $\$ 23$ million of "undocumented changes" to which the OIG refers was the result of the refinement of the probability model that was completed in February 2010. This had zero impact on the September 30, 2010, liability because it pertained only to the model used as a reasonableness check.

Target Implementation Date
As noted above, documentation has already been completed as part of SOX compliance efforts

Responsible Official
Manager, Corporate Accounting
Recommendation 2
Implement a formal communication and information sharing process among personnel responsible for developing the liability estimate.

Management Response
This recommendation is already being performed by management. The process documentation that was prepared during 2010 for SOX compliance purposes serves as the formal documentation of the liability estimation process. Changes to any of the significant components of the PIHOP model calculations are formally documented via a white paper in the quarter the change is implemented. These white papers serve to supplement and update the formal SOX documentation until a formal SOX documentation update is completed.

## Target Implementation Date

As noted above, documentation has already been completed as part of SOX compliance efforts
Responsible Official
Manager, Corporate Accounting
Recommendation 3
Evaluate and consider expanding, as appropriate, Revenue, Pieces, and Weight (RPW) data collection to include stamp usage by denomination and all classes of mail for the mail-in-transit component of the calculation.

## Management Response

We disagree with the recommendation to evaluate collecting stamp usage by denomination in RPW. Although the precision of the denominated stamp portion of the liability could be improved if detailed information on stamp usage by denomination were available, the recommendation is not practical. RPW data collection is designed to record revenue by product, not to measure every possible stamp denomination. RPW data collection involves many data recording elements for an average of several hundred sampled mail pieces per test. Requiring entry of many denomination values would make RPW data recording too time consuming for the available time window and potentially introduce recording errors for characteristics important to measuring revenue and volume by product; it's intended purpose.

In addition, the U.S. Postal Service is quickly transitioning from denominated stamps to Forever Stamps. Forever Stamps currently account for approximately 41 percent of stamp sales and this percentage is expected to increase dramatically in FY2011 with the introduction of new Forever Stamps. Implementing RPW data collection changes with limited utility for this short time period would not be prudent.

Regarding the mail-in-transit calculation recommendation, management currently includes all classes of mail where there is sufficient delivery data to calculate the days to delivery piece of the mail in transit component of PIHOP. In the future, the intelligent mail bar code is expected to provide more data regarding the days to delivery for Standard Mail and Periodicals. At that time, management will consider changing the calculation of the mail in transit estimate to incorporate this data.

Recommendation 4
Eliminate the assumption to add half a day to the weighted average days in transit portion of the mail-in-transit component calculation.


#### Abstract

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Management Response We do not agree with this recommendation. The OIG is assuming that all mail received at a delivery unit is delivered the same day. While this is true of First-Class Mail, it is not be true of all mail at the delivery unit. In many cases, Standard Mail arrives at the delivery unit with instructions for the postmaster to deliver the mail within a range of dates. Since Standard Mail accounts for more than 50 percent of our total volume we feel the half day added to mail-in-transit is a reasonable assumption.


[^0]:    ${ }^{1}$ Income received by a business but not yet reported as earned. The Postal Service recognizes revenue when services are rendered. Because payment is received in advance of services being performed, revenue is deferred until the services are performed. This is classified as a liability, Deferred Revenue-Prepaid Postage, on the balance sheet in the financial statements.
    ${ }^{2}$ Customers can use Forever Stamps to mail a 1-ounce letter regardless of when purchased and no matter how prices change in the future.
    ${ }^{3}$ Postage money values (for example, 44\$) appear on denominated stamps.
    ${ }^{4}$ The pre-cancelled stamps deferral for FY 2009 was $\$ 12$ million. Because this was an immaterial portion of the PIHOP estimate, we did not separately evaluate it.
    ${ }^{5}$ Mail in the system at the end of each quarter.
    ${ }^{6}$ For stamp usage, management used statistical sampling recorded in the Origin-Destination Information System Revenue, Pieces, and Weight (RPW), the key data inputs for the stamp and mail-in-transit components of the PIHOP estimate calculation. RPW is the primary sampling system used for estimating revenue, volume flow, weight, and for performance measurements. For meter postage usage, management used the National Meter Accounting and Tracking System (NMATS) which tracks all meter transactions.

[^1]:    ${ }^{7}$ The Postal Service had three documents that described the Forever Stamp component calculation. None of the documents discussed why the method was chosen.
    ${ }^{8}$ Committee of Sponsoring Organizations' (COSO), Internal Control Over Financial Reporting - Guidance for Smaller Companies, Volume II, Section II, Risk Assessment, Principle 13, page 62. June 2006.

[^2]:    ${ }^{9}$ The U.S. Congress enacted SOX legislation in calendar year (CY) 2002 to strengthen public confidence in the accuracy and reliability of financial reporting. Section 404 of SOX requires management to state its responsibility for establishing and maintaining an adequate internal control structure and make an assertion on the effectiveness of the internal control structure over financial reporting. The Postal Service is required to follow Section 404 of SOX.

[^3]:    ${ }^{10}$ The "weighted average days in transit" are an estimate of the number of days mail is in transit at period end, by class of mail, determined in a formula based in the RPW. Management used only three classes of mail (First Class, Priority, and Package Services) to determine a weighted average of days in transit.
    ${ }^{11}$ Transit time measured by RPW is "the time between when a mailpiece comes into possession of the Postal Service until the time that mailpiece is delivered to the addressee."
    ${ }^{12}$ eBay/PayPal is a software program that enables the user to print postage from their personal computer to be used with a variety of postal services with postage being paid from a credit or debit card.

[^4]:    ${ }^{13}$ See recommendation 3 where we recommend the vice president, controller, expand data collection to include all classes of mail for the mail-in-transit component of the calculation.
    ${ }^{14}$ Both volume and revenue are used to develop the MIT portion of the liability estimate.

[^5]:    ${ }^{15}$ Public Company Accounting Oversight Board, Auditing Standard No. 5, An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements, as of November 9, 2007, Appendix A Definitions, describes significant accounts and disclosures as having "a reasonable possibility of containing misstatements that would cause the financial statements to be materially misstated."
    ${ }^{16}$ NMATS tracks all meter transactions, including applying postage to meters (meter settings).

[^6]:    ${ }^{17}$ The Postal Service recognizes revenue when services are rendered (completed the delivery of the service). Because payment is received in advance of services being performed, the Postal Service defers revenue until the services are performed. This is classified as a liability, Deferred Revenue-Prepaid Postage, on the balance sheet in the financial statements.
    ${ }^{18}$ The end of a fiscal quarter and year are the period ends. The Postal Service's fiscal year ends September 30, while the ends of fiscal quarters are December 31, March 31, and June 30.
    ${ }^{19}$ Prior to FY 2008, the Postal Service calculated the estimate for the stamp component similar to the meters component. For FY 2008, the Postal Service refined the calculation to isolate applied sales and usage data for the stamp component. For FY 2009, the Postal Service further refined the stamp calculation by applying newly available Forever Stamp usage data to calculate a stand-alone PIHOP estimate for Forever Stamps.
    ${ }^{20}$ The Accounting Data Mart is the repository for all accounting- and finance-related data for the Postal Service and is a part of the Enterprise Data Warehouse.

[^7]:    ${ }^{21}$ Using current period meter register settings data from the NMATS, management calculated the average daily usage to project daily usage through the end of the sample period. They compiled the data from all of the meters to arrive at the national deferral percentage.

[^8]:    ${ }^{22}$ Forever Stamp Unused Postage Study, dated October 29, 2009. Management stated this document was the new Forever Stamp model.
    ${ }^{23}$ This spreadsheet depicts the methodology in the Postal Service's Governance, Risk, and Compliance flowchart process.
    ${ }^{24}$ Management implemented an estimation methodology in Q3, FY 2008, based on sales and usage data for all stamps. The methodology included a new "leveling factor" calculation for stamped mail only, applied to stamp usage. The leveling factor assumes that over a period of time (judgmentally selected as 3 years) sales and usage of stamps should equalize.
    ${ }^{25}$ Determination of the dollar value of stamps used, based on the probability percentage of retained Forever Stamps available for usage.
    ${ }^{26}$ An estimate of the dollar value of the stamps used, based on the changes in sales price from 41 cents to 42 cents to 44 cents as determined by the Revenue and Volume Reporting group. The intuitive estimate was used to determine the dollar value of the stamps used in both the October 2009 analysis and the Stamp PIHOP Spreadsheet.

[^9]:    ${ }^{27}$ The auditor estimate of 67 percent was based on a 3-day work cycle. At any given point in time, two-thirds of the mail in transit has not been earned. Specifically, the estimate is based on a 2-day delivery time frame and the additional day for mail on the "front end" (processing) and "back end" (delivery).

[^10]:    ${ }^{28}$ The 1 day is comprised of half a day for mail awaiting pick up (front end mail) and half a day for mail out for delivery (back end mail).
    ${ }_{29}$ Management adds half a day to the weighted days in transit for "mail from carrier's case to delivery." However, the average days in transit measurement already includes the day of delivery so there is no need to add that half a day. Handbook F-75, Data Collection User's Guide for Revenue, Volume, and Performance Measurement System, defines the transit time as the time between a mailpiece coming into the possession of the Postal Service and the time of delivery to the addressee.

[^11]:    ${ }^{30}$ The Revenue Throughput Report (also known as the "ORPW Sample Stamped Mail Summary w/o BRAF") includes Forever Stamp usage data, but does not include international Forever Stamp usage data.
    ${ }^{31}$ COSO Internal Control Over Financial Reporting - Guidance for Smaller Companies, Volume II, Section IV, Information and Communication, Principle 15, page 76, June 2006.
    ${ }^{32}$ Using Q4, FY 2009, Quarterly Statistics Reports, we estimated 35 percent of the mail revenue was not included in the "weighted average days in transit" portion from RPW. We applied this percentage to the $\$ 518.5$ million estimated "Total Mail in Process Revenue" for September 2009 to derive the $\$ 182$ million.

[^12]:    ${ }^{33}$ COSO Internal Control Over Financial Reporting - Guidance for Smaller Companies, Volume II, Section IV, Information and Communication, Principle 15, page 76, June 2006.
    ${ }^{34}$ Headquarters' Demand Forecasting and Analysis group projects revenue and pieces information and provides estimates to Corporate Financial Reporting on a quarterly basis.
    ${ }^{35}$ Handbook F-75, Data Collection User's Guide for Revenue, Volume, and Performance Measurement System, Glossary, page GL-22.
    ${ }^{36}$ PC Postage products and services allow customers to purchase and print postage using a personal computer connected to the Internet and a printer.
    ${ }^{37}$ A journal voucher is a document that authorizes a business transaction to be entered in the book of accounts.

[^13]:    ${ }^{38}$ The amount the Postal Service is (or was) entitled to receive but which was underpaid or not realized because policies, procedures, agreements, requirements or good business practices were lacking or not followed.
    ${ }^{39}$ Management calculated meter deferral percentage for June 2010 based on the NMATS poll of all the meter settings and usage for the month.

