

July 2, 2010

JOSEPH D. MOELLER MANAGER, REGULATORY REPORTING AND COST ANALYSIS

**VIRGINIA J. MAYES** MANAGER, SPECIAL STUDIES

SUBJECT: Audit Report – First-Class and Standard Mail Workshare Discounts (Report Number MS-AR-10-003)

This report presents the results of our self-initiated audit of First-Class and Standard Mail Workshare Discounts (Project Number 09RG019MS000). Our objective was to determine whether the U.S. Postal Service bases First-Class Mail® (FCM) and Standard Mail® workshare discounts for presort letters on current cost inputs. This audit was limited to examining the inputs to the letter cost models. We have a separate ongoing review (Project Number 10RG015MS000) of workshare discounts exceeding avoided costs. This audit addresses financial risk. See Appendix A for additional information about this audit.

The Postal Accountability and Enhancement Act (the Postal Act) defines workshare discounts as rate discounts provided to mailers for presorting, prebarcoding, handling, or transporting mail-that is, discounts for performing work the Postal Service would otherwise have to perform. Cost inputs are data that Postal Service cost models use to estimate the cost of certain mail processing activities. When mailers perform workshare activities, the Postal Service avoids certain costs it would otherwise incur. The Postal Service uses cost models to develop workshare cost-avoidance estimates.<sup>1</sup> According to the Postal Act, workshare discounts may not exceed costs the Postal Service avoids as a result of workshare activities except under specific circumstances. FCM and Standard Mail workshare discounts accounted for \$4.2 billion and \$8.3 billion respectively, or over 83 percent of the \$15.0 billion total workshare discounts in fiscal year (FY) 2008.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> This report concerns the First-Class Letters and Standard Regular Letters cost models. See Appendix C for a list of cost models. <sup>2</sup> Economic Analysis of the Postal Service's Workshare Discounts, NGI Solutions LLC, October 14, 2009.

#### **Conclusion**

The Postal Service generally bases workshare discounts for FCM and Standard Mail presort letters on current cost inputs—either annually updated data (such as that obtained from the Management Operating Data System (MODS)<sup>3</sup> and Web End of Run<sup>4</sup> databases) or data the Postal Service's Special Studies group collected during fieldwork conducted in FY 2008. However, the Postal Service has not updated some of the inputs since FY 1995, and they may not be representative of current operating conditions.

The Postal Service should prioritize updating inputs in the FCM and Standard Mail Letter cost models. Cost models evolve as operations, equipment, and products change and updating the inputs could help the Postal Service develop more accurate worksharing cost-avoidance estimates, which would aid in setting workshare discounts.

#### **Workshare Discounts**

The presort letter cost models for FCM and Standard Mail contain inputs that may not be representative of current operating conditions. Of the 288 inputs the models use, 13 were last updated prior to FY 2008. Six of those 13 have not been updated since FY 1995, five more were last updated in FY 2000, and the other two were updated in FY 2005. See Appendix D.

To the extent the inputs are not representative of current operating conditions, costavoidance estimates derived from cost models may be inaccurate.<sup>5</sup> To demonstrate how changes to the inputs can affect cost-avoidance estimates, we performed a sensitivity analysis on each of the 13 inputs last updated prior to FY 2008. We varied each input by 5 percent and estimated that the effect on avoided costs ranged from no effect for certain inputs to approximately \$2.1 million for the Post Office Box Destination input. This 5 percent change in one input, holding all other inputs equal, can affect costavoidance estimates by \$4.2 million over a 2-year period. See Appendix E for details on this estimate. This potential cost mis-estimation could affect the soundness of Postal Service cost and workshare estimates.

Postal Service officials stated they have not updated some inputs because there have been no significant operational changes to either equipment or processes that would necessitate an update. Officials also stated that neither mailer behavior nor mail characteristics for FCM and Standard Mail have shifted significantly enough to indicate

<sup>&</sup>lt;sup>3</sup> MODS reports data on workload, workhours, and machine utilization. The data is used for planning mail processing activities, projecting workhours and mail volumes, and measuring productivity.

<sup>&</sup>lt;sup>4</sup> Web End of Run collects data from all the automated mail processing equipment and generates a set of standard reports which informs operating decisions. It indicates which machines were running, what sort plans those machines were running, how many pieces they handled on that sort run, and what bins the mailpieces were dropped into as a result of the sortation.

<sup>&</sup>lt;sup>5</sup> Cost-avoidance estimates are calculated by subtracting the unit processing cost of any given mail product from the unit processing cost of a specified mail product with similar characteristics that is not workshared or is workshared to a lesser extent.

that changes would be significant, except as noted below. In addition, management stated that updating some inputs would require costly and disruptive field visits not warranted by the marginal data change that might result. Finally, officials noted that the small volume associated with some of the inputs, such as non-machinable presort mail that is bundled, would make meaningful measurements difficult. See Appendix B for our detailed analysis of this topic.

## **Letters Processed as Flats**

Shape-based pricing for FCM went into effect in 2007, accompanied by an increase in postage rates for flats.<sup>6</sup> Some mailers, in order to obtain the more favorable letter rates, reconfigured their flats into so-called slim-jims that would fit within the size limits for letters.<sup>7</sup>

Postal Service officials recognize that some slim-jims may not be handled cleanly in the letter processing stream; therefore, they are processed as flats. This means that mailers sometimes pay letter rates for pieces processed as flats. Although officials are aware of the problem, the cost models do not account for it. Furthermore, officials have not estimated either the volume of slim-jims or the percentage being processed as flats. Further study is required to determine how slim-jims affect processing costs and cost-avoidance estimates.<sup>8</sup>

We recommend the manager, Regulatory Reporting and Cost Analysis, direct the manager, Special Studies, to:

- 1. Determine the feasibility of updating the 13 First-Class Mail and Standard Mail cost inputs last updated prior to FY 2008 and create a prioritized list for completing the updates.
- 2. Undertake a study to identify needed changes to the letter cost models due to the volume of slim-jims and the percentage processed as flats.

<sup>&</sup>lt;sup>6</sup> Under shape-based pricing, both the weight and shape of a mailpiece affect its price. Shape-based pricing recognizes that each shape of mailpiece has substantially different handling costs. This pricing approach encourages efficiency in that customers can reduce their postage by using a shape that is less costly for the Postal Service to handle.

<sup>&</sup>lt;sup>7</sup> Slim-jims are catalogs or similar material that previously would have entered the mailstream as flats, but now are cropped on two sides so that they fit within the size limits for letters. They are often booklet-type pieces, usually stapled in the center instead of bound, because the binding process would make them too thick to meet the maximum thickness for a letter. Slim-jims are usually tabbed or otherwise required to have all four edges closed so they do not flip open during processing.
<sup>8</sup> Processing costs are estimated by means of the cost models and rely on various data inputs, including volume by

<sup>&</sup>lt;sup>8</sup> Processing costs are estimated by means of the cost models and rely on various data inputs, including volume by product. Any change to an input—such as volume that should have been included in one product, but was instead included in another—will have an effect on the models' output. Since the Postal Service does not know the volume of slim-jims being processed as flats when mailers paid letter prices, the letter processing costs estimated in the FCM and Standard Mail models may be inaccurate.

## **Management's Comments**

Management agreed with our finding that the Postal Service generally bases workshare discounts for FCM and Standard Mail presort letters on current cost inputs. However, management noted that there are 13 inputs they have not updated since 2008, not 14 as initially stated in the report. Management also agreed with our assessment that cost models change as operating environments change, and that, to the extent the inputs are not representative of current operating conditions, cost-avoidance estimates derived from cost models may be inaccurate.

Management agreed with recommendation 1 to determine the feasibility of updating the cost inputs in question and create a prioritized list for completing the updates. However, management noted that the reported \$2.1 million effect on cost-avoidance estimates we determined by varying the inputs by 5 percent represents 0.05 percent of the total value of workshare cost-avoidance from FCM that we reported. Management stated that such a degree of accuracy would be remarkable in most estimation contexts. Management also reiterated that the Postal Service is awaiting guidance from the Postal Regulatory Commission (PRC) on prioritizing study and data updates. Therefore, it may not be appropriate for the Postal Service to act unilaterally in the matter.

Management did not agree with recommendation 2 to undertake a study to identify needed changes to the letter cost models due to the volume of slim-jims and the percentage of those processed as flats. Management noted the difficulty of counting slim-jims in the absence of a standard definition that mutually excludes them from letters and flats and a rate element requiring separate volume reporting. However, management stated it would continue to work with other analysts and functional areas in clarifying the slim-jim issue.

Management also disagreed somewhat with the representation that mail processing cost models do not account for the fact that slim-jim mailers sometimes pay letter rates for pieces processed as flats. Management stated they include the costs, but what is not present in the cost models is an explicit mapping of letters into flat-sorting operations and a quantification of the pieces processed as flats but for which mailers paid letter rates. That information would be necessary to populate such a mapping.

Management also disagreed that the \$4.2 million impact we reported is a misallocation of costs (as we initially stated in the report) since the letter cost models do not classify costs as volume-variable, product-specific, or institutional. Management stated that the impact is more accurately described as a potential mis-estimation of the cost avoidance. We agree with management's view and have removed the references to cost misallocation.

Management also stated that the \$2.1 million effect on cost-avoidance estimates that resulted from varying the inputs by 5 percent does not arise primarily from the 0.01 cent

change in the difference between unit costs for 3-digit and 5-digit letters, but from applying the unit cost difference to 21 billion pieces.

## **Evaluation of Management's Comments**

The U.S. Postal Service Office of Inspector General (OIG) considers management's comments responsive to the recommendations and management's corrective actions should resolve the issues identified in the report.

Concerning our sensitivity analysis, management correctly notes that our \$2.1 million effect on cost-avoidance estimates is small in the context of \$4.1 billion of total avoided costs. The small impact results from our assuming a small (5 percent) change in the size of the inputs. Our point was not to assert that the models were significantly inaccurate, but to note that small changes can affect the results by millions of dollars.

Management disagreed with recommendation 2, citing the difficulty of conducting the study that we recommended. We believe such a study would be beneficial because management does not have a full understanding of the volume of slim-jims nor their full impact on the cost models. Although management disagreed with recommendation 2, they are aware of the issue and are pursuing acceptable alternate solutions.

The OIG considers all the recommendations significant, and therefore requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. These recommendations should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation the recommendations can be closed.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information please contact Robert Mitchell, director, Sales and Service, or me at 703-248-2100.

E-Signed by Darrell E. Benjamin, Jr 🕐 VERIFY authenticity with Approvelt

Darrell E. Benjamin, Jr. Deputy Assistant Inspector General for Revenue and Systems

Attachments

cc: Joseph Corbett Sally K. Haring

## **APPENDIX A: ADDITIONAL INFORMATION**

#### BACKGROUND

Worksharing is a partnership between the Postal Service and the mailing community whereby mailers who reduce Postal Service costs by presorting, barcoding, and transporting mail obtain discounted postage rates. According to the Postal Service and the PRC, worksharing benefits the Postal Service, mailers, the mailing industry, and the nation. The Postal Service credits workshare discounts with stimulating mail volume growth, enabling it to streamline its workforce and infrastructure, reducing mailing costs, and improving service.

Worksharing involves 80 percent of current mail volume, allowing the Postal Service to avoid \$14.8 billion in costs and provide \$15 billion in discounts to mailers (see Table 1). Combined, workshared Standard Mail and FCM saved the Postal Service \$12 billion (with \$7.9 billion and \$4.1 billion, respectively) and account for 81 percent of the total cost avoided by worksharing.<sup>9</sup>

	Cost	
Class of Mail	Avoidance	Discount
Standard Mail	\$7.9	\$8.3
FCM	4.1	4.2
Periodicals	2.0	1.7
Package Services	0.8	0.8
Total	\$14.8	\$15.0

# Table 1. FY 2008 Worksharing Cost Avoidances and Discounts(In billions)

Source: NGI Solutions LLC

The Postal Service uses the term "cost avoidance" to mean the difference in cost resulting only from the worksharing activity performed by mailers or their representatives. Suppose, for example, that processing costs for two pieces of mail are similar in all respects, but that one is presorted one level deeper than the other (e.g., one is presorted to the 3-digit level and the other to the 5-digit level). With all characteristics the same except for the presort level, the avoided cost of the more deeply workshared piece is the cost difference between the two pieces.<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Economic Analysis of the Postal Service's Workshare Discounts, NGI Solutions LLC, October 14, 2009.

<sup>&</sup>lt;sup>10</sup> Mail delivery costs include sorting, barcoding, and transporting.

The Postal Act requires the PRC to ensure that workshare discounts do not exceed the cost the Postal Service avoids as a result of workshare activity.<sup>11</sup> However, the PRC found that 30 discounts exceeded avoided costs in FY 2009. Seventeen of those discounts were justified by exceptions allowed under the Postal Act, but 13 were not and must be realigned in the next general market dominant price adjustment filing.<sup>12</sup> We plan to review this issue in a future audit.

The Postal Service uses cost models to develop workshare cost-avoidance estimates that help determine workshare discounts. See Appendix C for a list of cost models. These cost models have evolved over time and, depending on their complexity, can have hundreds of recurring and non-recurring data inputs. The Postal Service updates recurring data inputs annually; examples include cost data from accounting records, wage rates, mail processing costs by shape, piggyback factors,<sup>13</sup> and MODS data.<sup>14</sup> While recurring data inputs are updated annually, the non-recurring data inputs are generally updated when there are operational or productivity changes that affect the models. Updating non-recurring data inputs generally requires additional fieldwork or analysis.

## **OBJECTIVE, SCOPE, AND METHODOLOGY**

Our objective was to determine whether the Postal Service bases FCM and Standard Mail workshare discounts for presort letters on current cost inputs. To accomplish our objective we:

- Reviewed laws, regulations, policies, and procedures related to workshare discounts for First-Class Presort and Standard Mail.
- Interviewed Postal Service officials to understand the history, rationale, and methodology (especially cost inputs) behind First-Class presort and Standard Mail workshare discounts.

<sup>&</sup>lt;sup>11</sup> 39 USC 3622(e)(2) requires that the PRC "shall ensure that [workshare] discounts do not exceed the cost that the Postal Service avoids as a result of workshare activity," unless (1) the discount is associated with a new postal service and necessary to induce mailer behavior that furthers the economically efficient operation of the Postal Service, (2) the amount of the discount above costs avoided is necessary to mitigate rate shock and will be phased out over time, (3) the discount is provided in connection with subclasses of mail consisting exclusively of mail matter of educational, cultural, scientific, or informational value, or (4) reduction or elimination of the discount would impede the efficient operation of the Postal Service.

<sup>&</sup>lt;sup>12</sup> PRC, Annual Compliance Determination of U.S. Postal Service Performance, March 29, 2010.

<sup>&</sup>lt;sup>13</sup> Piggyback factors are employed in cost studies to augment labor cost estimates and add costs associated with supervisors, administration, the facility, and equipment.

<sup>&</sup>lt;sup>14</sup> To address concerns raised in the 2008 Annual Compliance Determination, the Postal Service proposed to replace a MODS productivity that is no longer available with throughput data available from Carrier Sequence Bar Code Sorter machine utilization reports. The new productivity would be calculated as the product of the throughput rate (pieces per hour) multiplied by the machine runtime as a share of total work time. This modification addresses concerns raised in the 2008 Annual Compliance Determination about the reliability of the MODS productivity data for that operation, which had been used as an input to the letter worksharing cost avoidance models for First-Class and Standard Mail. The PRC approved this methodology change.

#### First-Class and Standard Mail Presort Letter Workshare Discounts

- Determined how the Postal Service has historically determined the cost basis for and the amount of workshare discounts.
- Performed sensitivity testing (5 percent) on selected cost inputs to determine their effect on mail processing costs.

We conducted this performance audit from May 2009 through July 2010 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 believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We relied on data contained in the FCM and Standard Mail presort letter cost models. We did not audit the data. However, we interviewed Postal Service officials knowledgeable about the data, and determined it was sufficiently reliable for addressing the audit objectives and supporting our findings and conclusions. We discussed our observations and conclusions with management officials on April 28, 2010, and included their comments where appropriate.

# PRIOR AUDIT COVERAGE

	Report	Final Report	
Report Title	Number	Date	Report Results
Bound Printed Matter Workshare Discounts	CRR-AR-08-005	5/9/2008	The Postal Service established Bound Printed Matter (BPM) workshare discounts in accordance with postal legislation and internal policies and procedures. At six large BPM acceptance facilities, controls were in place to ensure mailers prepared BPM to workshare standards. However, some of the supporting documentation that management used to develop the BPM discounts was old, which could have affected the reliability of the BPM workshare discount rates. Updating this data would help establish more accurate information for management to use to implement rate changes and prepare annual reports for the PRC on the impact of workshare discounts. Management generally agreed with the findings and recommendations, but did not agree that the data supporting workshare discounts did not reflect the current operating environment.
Management of Special Studies	CRR-AR-10-002	3/19/2010	Controls over special studies are generally adequate to comply with applicable regulations. Management updates the studies with recurring financial and operational information and coordinates changes to the studies with the PRC. However, improvements are needed to ensure the studies are updated with non-recurring financial and operational data. Additionally, we found that 24 data inputs into the Periodicals Destination Entry Cost-Avoidance Model were developed in the 1990s and may not represent current operating conditions. The Postal Service should prioritize updating the non-recurring data inputs considering, among other things, the impact the data has on the special study results and the cost of updating the data. Management agreed with the findings and recommendations, but stated that the presentation of data in a table listing cost model special studies could incorrectly lead readers to believe the models have not been updated since they were first introduced.

## APPENDIX B: DETAILED ANALYSIS

#### **Workshare Discounts**

The presort letter cost models for FCM and Standard Mail contain inputs that may not be representative of current operating conditions. Of the 288 inputs the models use, 13 were last updated prior to FY 2008. Six of the 13 have not been updated since 1995, five more were last updated in 2000, and the other two were updated in 2005. The Postal Service first developed the FCM and Standard Mail models in 1976 and 1984, respectively, and has adjusted them over the years to account for changes in automation and processes. However, the 13 inputs mentioned above were first developed in field studies conducted in FYs 1995, 2000, or 2005 and have not been routinely updated.

Of the six inputs not updated since 1995, four are manual incoming secondary productivity values, one represents Post Office Box mail volumes and one relates to the number of operations for non-automation presort bundle sorting. Of the five inputs last updated in 2000, three are related to mail flow densities, one describes nonmachinable accept rates, and one is the percentage of mail sorted at the plant to at least the carrier route. The two inputs not updated since 2005 relate to the ability to sort mail by reading barcodes. See Appendix D for a list of the 13 inputs.

To estimate how changes in the cost models for FCM and Standard Mail can affect cost-avoidance estimates, we performed a sensitivity analysis on each of the 13 inputs last updated prior to 2008. We varied each input by 5 percent and estimated that the effect on processing costs ranged from no effect to an effect of approximately \$2.1 million. In addition to the impact on cost-avoidance estimates, inaccurate data inputs could also impact workshare discounts. See Appendix E for details of the sensitivity analysis.

More accurate estimates for the data inputs would have to come from updated field studies. In determining whether to update or conduct a study, the Postal Service should consider whether updated data would significantly change the model and costavoidance estimates. Also, the cost in terms of dollars and resources spent collecting data should be considered to determine whether it is beneficial to update the study.

Identifying data inputs that may not represent current operations in each cost model and collaborating with the PRC to prioritize updating them will help the Postal Service more accurately determine cost-avoidance and workshare discount estimates.

## **APPENDIX C: LIST OF COST MODELS**

Table 2 lists the cost models and the rate or classification case when the models were first filed. The Postal Service uses cost models to develop workshare cost-avoidance estimates. Cost models are generally not one-time studies, but rather models that have evolved over time. The current cost models may not bear any resemblance to the cost models that were originally introduced. For example, the FCM letters cost model dates back as far as Docket R76-1; however, the model was reworked in the 1990s.

#### Table 2. Cost Models

Models	Docket First Filed <sup>15</sup>
First-Class Letters Cost Model	R76-1
Standard Regular Letters Cost Model	R84-1
First-Class Presort Flats Cost Model	R94-1
Standard Regular Flats Cost Model	R94-1
Periodicals Outside County Flats Cost Model	R94-1
Standard Mail Hybrid/Parcel Cost Study	R2006-1
Periodicals Destination Entry Cost Avoidance Model	R84-1
Standard Letters Destination Entry Cost Avoidance Model	R90-1
Standard Flats Destination Entry Cost Avoidance Model	R90-1
Bound Printed Matter Mail Processing Cost Model	R76-1
Media Mail: Mail Processing Cost Model	R76-1
Bound Printed Matter Transportation Cost Model	R97-1
Bulk Parcel Return Service Cost Study	R97-1
Enhanced Carrier Route Mail Processing Unit Costs	R2001-1
Qualified Business Reply Mail and Business Reply Mail Costs	R2001-1
Bound Printed Matter Mail Processing Costs	R2001-1
Special Services (Public Portion) <sup>16</sup>	R2006-1
Delinked FCM Workshare Estimates	R2006-1

<sup>&</sup>lt;sup>15</sup> Refers to the years the models were introduced, not necessarily when they were last updated. For example, R76-1 was filed in 1976. <sup>16</sup> Special Services includes cost models for a variety of services, such as Delivery Confirmation, Signature

Confirmation, and Restricted Delivery.

#### **APPENDIX D: FCM AND STANDARD MAIL PRESORT** LETTER COST MODEL INPUTS

Table 3 lists the inputs into the FCM and Standard Mail presort letter cost models last updated prior to FY 2008. The source is the PRC docket where the data input was introduced.

	Input	Source <sup>17</sup>
	Productivities	
1	Manual Incoming Secondary Non-MODS Sites	Docket No. MC95-1
2	Post Office (P.O.) Box Sort DPS	Docket No. MC95-1
3	P.O. Box Sort Other	Docket No. MC95-1
4	Tray Opening Unit Bundle Sorting	Docket No. MC95-1
	Miscellaneous Factors	
5	Remote Bar Code System leakage rate	FY 05 RBCS Data
6	Remote Computer Read finalization rate	FY 05 RBCS Data
7	Finalized at least to carrier route at plant	Docket No. R2000-1
8	Post Office Box destination	Docket No. MC95-1
9	Nonmachinable single-piece letters % accept <sup>18</sup>	Docket No. R2000-1
	Mail Flow Densities	
10	Out Prim Man	Docket No. R2000-1
11	Out Sec Man	Docket No. R2000-1
12	Inc Area Distribution Center Man	Docket No. R2000-1
	Bundle Sorting Costs	
13	No. of Operations <sup>19</sup>	Docket No. MC95-1

#### Table 3. List of Model Inputs and Sources

 <sup>&</sup>lt;sup>17</sup> The docket number refers to the year the docket was opened. For example, Docket No. MC95-1 was opened in 1995. "FY 05 RBCS Data" refers to a field study conducted in 1995.
 <sup>18</sup> This acceptance rate is not based on data. It is the result of an agreement to accept a figure that was presented, by

assumption, by the Office of the Consumer Advocate. <sup>19</sup> Although included in the letter cost models, Number of Operations does not affect any cost-avoidance figure.

## APPENDIX E: SENSITIVITY ANALYSIS OF FCM AND STANDARD MAIL COST MODEL INPUTS

To demonstrate how changes to the inputs can affect cost-avoidance estimates, we performed a sensitivity analysis on each of the 13 inputs the Postal Service last updated prior to FY 2008. We varied each input by 5 percent and calculated the effect each change had on the avoided cost for each successive presort level. The impact ranged from no effect for certain inputs to approximately \$2.1 million for the Post Office Box Destination input. Because it was unlikely that the 13 data inputs would uniformly increase or decrease by 5 percent, we did not calculate a total impact.

When we decreased the P.O. Box Destination input by 5 percent, the avoided cost between automation 3-digit and automation 5-digit changed from 2.348 cents to 2.358 cents for First-Class letters. We obtained cost-per-piece estimates from the FY 2009 FCM letter cost model.

	Processing Cost Estimate for Automation 3-digit Letters (cents)	Processing Cost Estimate for Automation 5-digit Letters (cents)	Avoided Cost (cents)
Before Varying	6.675	4.327	2.348
After 5 Percent Decrease	6.679	4.321	2.358
Difference in Avoided Cost			0.010

To estimate the potential impact on cost avoidance estimates, we multiplied the difference in avoided cost between automation 3-digit and automation 5-digit letters by the FY 2009 FCM automation 5-digit letter volume. We obtained letter volume from the FY 2009 FCM letter cost model.

#### Table 5. Impact on Cost-Avoidance Estimates

Difference in Avoided Cost (dollars)	Volume	Total Avoided Cost (dollars)
0.0001	21,118,188,509	2,111,818.85

Of the 13 inputs, the Post Office Box Destination input has the greatest impact on costavoidance estimates. Over a 2-year period the potential impact on cost avoidance estimates is \$4.2 million.

#### **APPENDIX F: MANAGEMENT'S COMMENTS**

FINANCE



June 24, 2010

LUCINE M. WILLIS DIRECTOR, AUDIT OPERATIONS

SUBJECT: Transmittal of Draft Audit Report—First-Class and Standard Mail Workshare Discounts (Report Number MS-AR-10-DRAFT)

This provides management's response to the subject audit report. We appreciate the opportunity to review and provide comments.

The Postal Service agrees with the audit team's findings that "[t]he Postal Service generally bases workshare discounts for FCM and Standard Mail presort letter on current cost inputs – either annually updated data...or data the Postal Service's Special Studies group collected during fieldwork..." The Postal Service also agrees with the audit team's findings that "[c]ost models evolve as operations, equipment, and products change..." and that the "non-recurring data inputs are generally updated when there are operational or productivity changes that affect the models." As the audit team acknowledged, "[t]he current cost models may not bear any resemblance to the cost models that were originally introduced." The models are changed as operating environments or data availability changes, so the Postal Service is not in disagreement with the audit team's general view that "[t]o the extent the inputs are not representative of current operating conditions, cost-avoidance estimates derived from cost models may be inaccurate."

The Postal Service also appreciates that the audit team accurately and fully reflected, at pages 2 and 3, management's explanations of why some non-recurring cost inputs were not routinely updated. To wit, there have been no significant operational changes to either equipment or processes; neither mailer behavior nor mail characteristics have shifted significantly; updating some inputs would require costly and disruptive field visits not warranted by the marginal data change that might result; and that the small volume associated with some of the inputs would make meaningful measurements difficult.

The audit team recommended the manager, Regulatory Reporting and Cost Analysis, direct the manager, Special Studies, to:

#### Recommendation #1

Determine the feasibility of updating the 14 First-Class Mail and Standard Mail cost inputs last updated prior to FY 2008 and create a prioritized list for completing the updates.

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#### Response

I will direct the manager, Special Studies, to determine the feasibility of updating the cost inputs in question and to create a prioritized list for completing, or not completing, the updates in accordance with the following. In the audit team's report at page 8, the team recommends that, "[i]n determining whether to update or conduct a study, the Postal Service should consider whether updated data would significantly change the model and cost-avoidance estimates. Also, the cost in terms of dollars and resources spent collecting data should be considered to determine whether it is beneficial to update the study." As the audit team's findings indicate, the effect on the volume-weighted cost-avoidance estimates of altering each of the 14 cost inputs in question by 5 percent ranges from no effect at all to \$2.1 million per year. In the context of what the audit team reports to be the totality of \$4.1 billion in workshare cost avoidance from First-Class Mail, \$2.1 million represents a difference of 0.05 percent. Such a degree of accuracy would be remarkable in most estimation contexts.

With regard to the prioritization of updating non-recurring cost inputs, I would also refer the audit team to my response to Report Number CRR-AR-10, Management of Special Studies, where I reminded the Office of Inspector General that "the Postal Service is awaiting guidance from the PRC on prioritizing study and data updates." Therefore, "while the Postal Service does have, in general, its own prioritization of resource use regarding the updates of inputs as is recommended below, the upcoming collaboration with the PRC regarding this area suggests that it may not be appropriate for the Postal Service to unilaterally 'prioritize updating the non-recurring data inputs in the special studies' as was recommended by the audit team."

However, I would amend the report to state that there are 13, not 14, cost inputs that were not updated since 2008. As we informed the audit team, Table 3, line 10 indicates that the mailflow density for Incoming Managed Mail Program for Automation letters was last updated in Docket No. R2000-1, when, in fact, that figure was updated in 2008. In Table 3, Line 14, the Number of Operations in the Bundle Sorting Costs, is not actually used as an input to any part of the model. It is a residual data element that does not feed any cost avoidance figure, and actually could be deleted from the model entirely. I will instruct the manager, Special Studies, to have that residual element deleted from the model.

#### Recommendation #2

Undertake a study to identify needed changes to the letter cost models due to the volume of slim-jims and the percentage processed as flats.

#### Response

With regard to this recommendation, I will direct the manager, Special Studies, to continue to work with other analysts and functional areas in defining the scope of the slim-jim issue, but I will not, at this time, direct that a study be undertaken. Postal management discussed with the audit team the difficulty associated with actually defining, finding and counting the slim-jims and similar pieces. Without a rate element that requires reporting volumes of these pieces separately, and without a standard definition that distinguishes these mailpieces in a mutually exclusive manner from letters and flats, we would have to establish a standardized description of these pieces and count these pieces by means of field studies. We disagree somewhat with the representation on page 3 and in footnote 11 that the mail processing cost models do not

- 3 -

account for the fact that slim-jims sometimes pay letter rates for pieces processed as flats. The slim-jims in question may not be unique in being pieces paid for at letter rates but processed as flats. In fact, the letter cost models include, at tab "CRA – PRESORT LETTERS" non-zero values for the unit costs in MODS cost pool 11 for the flat-sorting operations "FSM 100" and "FSM/1000". These non-zero values indicate that data collectors are identifying costs for pieces in the flat-sorting operation which have either markings or piece characteristics that identify the pieces as letters (i.e., they were paid at letter prices). So the costs are included. What is not present in the cost models is an explicit mapping of letters into the flat-sorting operations, and a quantification of the pieces that paid letter rates but were processed as flats would be necessary to populate such a mapping.

Incidentally, I note that Footnote 8 on page 2 and the sentence to which it refers are not correct. While it is true that a "misallocation of costs can occur when Postal Service costs are misclassified as volume variable, product specific, or institutional costs", that is not the case here; the \$4.2 million is not a misallocation of costs. The letter cost models do not classify costs as volume variable, product specific or institutional. The letter cost models the to the volume variable unit cost by shape which was determined in the estimation programs used to develop the Cost and Revenue Analysis (CRA) report. It is within the CRA development that costs are allocated to volume variable, product specific or institutional; not within the letter models. The \$4.2 million is, therefore, more accurately described as a potential mis-estimation of the cost avoidance in the example, not a misallocation of costs.

I would also note that the magnitude of the total avoided cost impact in Table 5 (\$2.1 million) is not primarily due to the change in the difference between the unit costs for 3-digit and 5-digit letters, which is only 0.01 cents, but is because that unit cost difference is applied to a very large volume (21 billion pieces). Again, this points out the small magnitude of the potential miscalculation relative to the size of First-Class Mail Presort Letter revenue and cost.

This report does not contain information that may be exempt from disclosure under the Freedom of Information Act.

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16