

**DOCKET NO. R2001-1**

**USPS-LR-J-136**

**SPECIAL SERVICES AFTER-RATES VOLUME  
ADJUSTMENTS**

1    **1.    Purpose of Library Reference**

2           The purpose of this library reference, sponsored by witness Nieto (USPS-  
3 T-26), is to present the calculation of the Special Services test year after-rates  
4 volume adjustments used by witness Mayo in support of proposed Special  
5 Service fees. Specifically, adjustments are made to certified mail, return  
6 receipts, Delivery Confirmation, and Signature Confirmation volumes. These  
7 adjustments are also provided to witness Tolley (USPS-T-8) for inclusion in the  
8 final test-year after rates (TYAR) volumes.

9           This analysis relies upon volume forecasts presented by witness Tolley in  
10 USPS-LR-J-125, volumes and methodology presented by witness Mayo (USPS-  
11 T-36), and market research results presented by witness Rothschild in USPS-LR-  
12 J-121.

13           In addition to the written description of the calculations presented in this  
14 Word document, detailed supporting spreadsheets are also included in this  
15 library reference.

1     **2.                   Certified Mail and Return Receipt Volume Adjustments**

2     2.1                Overview

3                The purpose of the calculations presented in this library reference is to  
4     incorporate into the test year the volume effects arising from: the enhancement  
5     to Certified Mail; the introduction of an electronic Return Receipt; the  
6     enhancement to Return Receipt After Mailing; and the extension of Delivery  
7     Confirmation and Signature Confirmation to parcels in the First-Class Mail Letters  
8     and Sealed Parcels subclass. Specifically, subclasses adjusted for incremental  
9     volume differing from those produced in the TYAR volume forecast are Certified  
10    Mail, Return Receipt (purchased at time of mailing), and Return Receipt After  
11    Mailing. New volume is estimated for electronic Return Receipts.

12            The adjustments made to the TYAR volume forecasts rely on the market  
13    research presented by witness Rothschild in USPS-LR-J-121. The market  
14    research presents estimates of annual volume usage for certified mail, certified  
15    mail with return receipt (purchased at the time of mailing), certified mail with  
16    return receipt (purchased after mailing), and certified mail with electronic return  
17    receipt. I adjust the market research volumes to account for market penetration,  
18    First-Class Mail parcel volume migration, and the actual price proposed for  
19    certified mail. Each of these adjustments is described in detail in the following  
20    sections.

## 1 2.2 Adjustments for Penetration

### 2 2.2.1 Description of Adjustment

3 This adjustment reflects the five-year period over which the market  
4 research results presented in Tables 12 and 13 of LR-J-121 are expected to be  
5 achieved, for each of two different pricing scenarios.<sup>1</sup>

### 6 2.2.2 Rationale

7 Since market research relies upon survey respondents who, as part of the  
8 survey, become fully informed about the product/service being studied, the  
9 research creates instantaneous awareness and understanding of product  
10 features, prices, and benefits. In addition, product descriptions, while as  
11 accurate and comprehensive as possible, are still subject to some degree of  
12 interpretation on behalf of the potential user. Thus, to achieve a more realistic  
13 product awareness and adoption timeframe, the market research results need to  
14 be adjusted.

### 15 2.2.3 Methodology

16 First, I calculated the incremental volume above the FY2000 volume under  
17 each pricing scenario by subtracting the total market research volumes from LR-  
18 J-121, Tables 12 and 13 from the FY2000 volumes. The results are presented in  
19 Table 1.

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<sup>1</sup> Pricing Scenario 1 presented the following price points to survey respondents: Certified Mail = \$2.25, Return Receipt (Green Card) = \$1.50, Return Receipt After Mailing = \$3.50, eReturn Receipt = \$1.50. Pricing Scenario 2 presented the Certified Mail fee equal to \$3.00, with the other fees remaining the same.

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Table 1 –Incremental Volumes After Full Penetration

<b>Product</b>	<b>Pricing Scenario 1</b>	<b>Pricing Scenario 2</b>
Certified Mail	125,758,353	(56,698,840)
Return Receipt (Green Card)	(85,952,063)	(128,312,001)
Return Receipt After Mailing	20,014,732	6,685,341
eReturn Receipt	100,145,119	40,778,488

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3 I assumed that the resulting incremental volumes require five years to  
4 achieve. The percentage of volume achieved in year 5 is equal to 100 percent of  
5 the incremental volumes shown above. In the first year (which is also the test  
6 year), therefore, only a small portion of the incremental volumes can be  
7 achieved. For Certified Mail and Return Receipt After Mailing, the percentage of  
8 incremental volume assumed to be achieved in the test year was 25 percent.  
9 For eReturn Receipt, the percentage of incremental volume assumed to be  
10 achieved in the test year was 10 percent. The same percentage was assumed  
11 under both pricing scenarios. For Return Receipt (Green Card), the percentage  
12 of incremental volume assumed to be achieved in the test year was 10 percent  
13 under Pricing Scenario 1, and 40 percent under Pricing Scenario 2.

14 The difference in penetration rates for Return Receipt (Green Card) between  
15 Pricing Scenario 1 and Pricing Scenario 2 is due to the increased price in the  
16 combination of Certified Mail and Return Receipt under Scenario 2 that is  
17 assumed to result in a greater decrease in the usage of Return Receipt (Green  
18 Card). The resulting incremental volumes for Year 1 are presented in Table 2  
19 below.

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Table 2 – Year 1 Incremental Volume

<b>Product</b>	<b>Pricing Scenario 1</b>	<b>Pricing Scenario 2</b>
Certified Mail	31,439,588	(14,174,710)
Return Receipt (Green Card)	(8,578,016)	(50,811,552)
Return Receipt After Mailing	4,996,278	1,671,355
eReturn Receipt	10,014,512	4,077,849

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Table 3 –Year 1 Total Volumes

<b>Product</b>	<b>Pricing Scenario 1</b>	<b>Pricing Scenario 2</b>
Certified Mail	288,609,823	242,995,554
Return Receipt (Green Card)	204,788,533	162,572,207
Return Receipt After Mailing	6,277,724	2,952,781
eReturn Receipt	10,014,512	4,077,849

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## 1 2.3 Adjustments for Volume Migration

### 2 2.3.1 Description of Adjustment

3 The Postal Service is proposing to extend Delivery Confirmation and Signature  
4 Confirmation to parcels in the First-Class Mail Letters and Sealed Parcels  
5 subclass. My second adjustment reflects the switch from certified mail to Delivery  
6 Confirmation and Signature Confirmation for these parcels.

### 7 2.3.2 Rationale

8 Currently the only means of receiving delivery or signature information on First-  
9 Class Mail Letters and Sealed Parcels is by purchasing certified mail with a  
10 return receipt (either at the time of mailing or after mailing). A lower-priced  
11 alternative is now proposed for parcels in the subclass. Thus, it is assumed that  
12 a percentage of Certified Mail volume on parcels in the First-Class Mail Letters  
13 and Sealed Parcels will migrate to either Delivery Confirmation or Signature  
14 Confirmation once the proposal is implemented.

### 15 2.3.3 Methodology

16 The market research results provide the estimated percentage of First-Class Mail  
17 parcels sent as certified mail, for households and non-households. These results  
18 are presented in Attachment G of USPS-LR-J-121. I applied these percentages  
19 to the adjusted volumes presented in Table 3 to obtain the total potential  
20 migrating volume, as shown in Table 4.

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Table 4 – Total Potential Migrating Volumes

<b>Mailer Type</b>	<b>Pricing Scenario 1</b>	<b>Pricing Scenario 2</b>
Household	35,137,583	10,081,634
Non-Household	6,520,212	3,656,584

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3 I then estimated household and non-household percentages for migration  
4 in the test year to account for limited awareness, eligibility, and user  
5 requirements that may not be met with Delivery Confirmation or Signature  
6 Confirmation. The percentages used were 10% for households and 25% for non-  
7 households. These percentages were then applied to the total potential migrating  
8 volume in Table 4 to obtain estimated migration volumes, as presented in Table  
9 5.

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Table 5 – Estimated Certified Mail Migrated Volumes

<b>Mailer Type</b>	<b>Pricing Scenario 1</b>	<b>Pricing Scenario 2</b>
Household	3,513,758	1,008,163
Non-Household	1,630,053	914,146
Total	5,143,811	1,922,310

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13 The resulting total volumes were then subtracted from the adjusted  
14 Certified Mail volumes presented in Table 3. Return Receipt volumes were also  
15 adjusted downward while maintaining the relative percentages implicit in Table 3.  
16 The resulting migration adjusted volumes are presented in Table 6.

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Table 6 – Year 1 Volumes After Migration

<b>Product</b>	<b>Pricing Scenario 1</b>	<b>Pricing Scenario 2</b>
Certified Mail	283,466,041	241,073,244
Return Receipt (Green Card)	201,155,549	161,286,117
Return Receipt After Mailing	6,165,837	2,929,422
eReturn Receipt	9,836,026	4,045,589

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1 2.4 Adjustments for Proposed Certified Mail Pricing

2 2.4.1 Description of Adjustment

3 The proposed Certified Mail price of \$2.30 is between the two Certified  
 4 Mail price points tested in witness Rothschild's research. The third adjustment  
 5 estimates the volume at the proposed Certified Mail price point of \$2.30 based on  
 6 the volume data provided at the \$2.25 and \$3.00 pricing scenarios. The return  
 7 receipt volumes were also interpolated along with those of certified mail to reflect  
 8 the certified mail pricing.

9 2.4.2 Methodology

10 Straight-line interpolation between the volumes presented in Table 6 was  
 11 used to estimate the volume at the proposed Certified Mail price. The  
 12 interpolated volumes are below.

13  
 14 Table 7 - Interpolated Volumes

Product	CM Price @\$2.30
Certified Mail	280,639,855
Return Receipt (Green Card)	198,497,586
Return Receipt After Mailing	5,950,076
eReturn Receipt	9,449,997

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 16 The FY2000 volumes were then subtracted from the above volumes to  
 17 obtain the final adjusted incremental volumes. These incremental volumes were  
 18 then applied to the TYAR Certified Mail volume forecast (USPS-LR-J-125, Table

2) and TYAR volume splits for return receipts (Worksheet V-9) to obtain the total adjusted volumes for the Test Year. These results are shown below.

Table 8 - Final Test Year After-Rates Adjusted Volumes

<b>Product</b>	<b>Final (000s)</b>
Certified Mail	302,882
Return Receipt (Green Card)	200,757
Return Receipt After Mailing	5,887
eReturn Receipt	9,450

I also used straight-line interpolation between the total estimated migrated volumes presented in Table 5 to provide witness Mayo with adjustments for additional Delivery Confirmation and Signature Confirmation volumes. Test Year Before Rates proportions of total Delivery Confirmation and Signature Confirmation volumes were applied to the total migrated volume in order to split the volume between Delivery Confirmation and Signature Confirmation. These volumes are presented in Table 9.

Table 9 – Migrated Volumes to Delivery Confirmation and Signature Confirmation

	<b>Final (000s)</b>
Total Estimated Volume Migrating to Delivery/Signature Confirmation from Certified Mail	4,929
Delivery Confirmation	4,898
Signature Confirmation	31

# **USPS-LR-J-136**

## **SUPPORTING SPREADSHEETS**