

BEFORE THE  
POSTAL REGULATORY COMMISSION  
WASHINGTON, D.C. 20268-0001

MAIL PROCESSING NETWORK RATIONALIZATION  
SERVICE CHANGES, 2011

Docket No. N2012-1

**RESPONSES OF THE UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO QUESTIONS 17, 18(a), 19-20  
OF PRESIDING OFFICER'S INFORMATION REQUEST NO. 1**

The United States Postal Service hereby files the responses of witness Elmore-Yalch to questions 17,<sup>1</sup> 18(a), and 19-20 submitted as part of Presiding Officer's Information Request No. 1, dated December 29, 2011. The response to question 18(b) was previously answered by witness Whiteman.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

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<sup>1</sup> Commission staff are invited to contact counsel should additional clarification be helpful to understanding this response.

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

- #17:** Please refer to library reference USPS-LR-N2012-1/NP1 folder "OCR".
- a. Please provide a data dictionary that links the variables provided in "First-Class Mail\_LargeCommercial\_Final\_DataFile\_USPS-LR-N2012-1\_NP1.sav" with the survey questions provided in USPS-T-11 at 89, Appendix F, Part 1.
  - b. Please provide a data dictionary that links the variables provided in "First-Class Mail\_SmallHome\_Final DataFile\_USPS-LR-N2012-1\_NP1.sav" with the survey questions provided in USPS-T-11 at 139, Appendix F, Part 2.
  - c. Please provide a data dictionary that links the variable provided in "First-Class Mail\_Consumers\_Final DataFile\_USPS-LR-N2012-1\_NP1.sav" with the survey questions provided in USPS-T-11 at 148, Appendix F, Part 3.

**RESPONSE:**

The processing steps between exporting the raw survey results from the CATI / Web completed interviews and computing the final variables that are used to estimate changes in volume are complex. This response accordingly explains the processing steps that, as necessary, can also be applied to verify the results. In short, however, the raw results exported from the CATI / Web surveys could not be used as is. They needed to go through a series of documented processing steps. Once that was completed, respondent specific results could be aggregated across respondents, applications, and postal products as documented in the data files provided.

The initial data files exported the CATI- / Web-programmed survey questionnaires were quite complex and not in the format required for the final required analysis. A series of steps were needed to convert the raw data from its initial format to the variables necessary to compute the estimates required to meet the research objectives. The final data files in Library Reference NP1 include the final volume variables developed from these steps rather than the raw data exported from the original CATI / Web-programmed data files. The following describes the steps taken to convert raw data

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

from the survey questionnaires as they were programmed for CATI / Web administration and data entry into the form that appears in the data sets provided.

(a) Large Commercial Accounts Data

Each respondent was asked, for each application she controlled:

(1) How many total pieces of mail did she send for that application?

Respondents provided this information in terms of a number and a corresponding denomination—example illustrated below:

|                                  | Number of Pieces <u>MAILED</u><br>in Past 12 Months<br>(Digits)<br>(Q1A) | Number of Pieces <u>MAILED</u><br>in Past 12 Months<br>(Denomination)<br>(Q1A_unit)     |
|----------------------------------|--|---|
| A. Bills, invoices or statements | _____<br>(RECORD NUMBER<br>UP TO 3 DIGITS)                               | 01 99 or Less<br>02 Hundred<br>03 Thousand<br>04 Million<br>05 Billion<br>98 DON'T KNOW |

A variable was computed to convert the two data entry values to a single volume number for the application. Syntax for computation of volume for the billing application follows.

```
IF (Q1A_UNIT=1) Q1A_RC=Q1A.
IF (Q1A_UNIT=4) Q1A_RC=Q1A * 1000000.
IF (Q1A_UNIT=3) Q1A_RC=Q1A * 1000.
IF ((Q1A < 100) AND Q1A_UNIT=2) Q1A_RC=Q1A * 100.
IF ((Q1A >= 100) AND Q1A_UNIT=2) Q1A_RC=Q1A.
IF (Q1A=0) Q1A_RC=0.
EXECUTE.
```

(i)

The same process is followed for each application—which for National Accounts means

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

eight applications. This process was also followed for each condition—2011 volumes (Q1), 2012 estimated volumes with current First-Class Mail service standards (Q1\_2012), and 2012 estimated volumes with the proposed First-Class Mail service standards (Q5A, Q6A, Q7A, Q8A, Q8C, Q9A, Q10A, Q11A). The notation (\_RC) in the new variable name indicates that the original data file variables were modified—in this case, by combining the volume number and denomination into a single variable.

(2) Respondents were then asked to estimate what percent of that volume was sent by respective Postal Service products.

Variables were computed to reflect the volume of mail for each application that was sent via each product, using the syntax shown below (this example is for the application Bills in the Base (2011) year).

IF (not missing (Q1A\_RC) ) BILL\_FCM\_Base = Q1A\_RC \* (Q2A\_02 / 100).

IF (not missing (Q1A\_RC) ) BILL\_PSFCM\_Base = Q1A\_RC \* (Q2A\_03 / 100).

IF (not missing (Q1A\_RC) ) BILL\_PRI\_Base = Q1A\_RC \* (Q2A\_06 / 100).

IF (not missing (Q1A\_RC) ) BILL\_EXP\_Base = Q1A\_RC \* (Q2A\_07 / 100).

EXECUTE.

(ii)

(3) The same process was followed to compute distribution of volume for each of the applicable Postal Service products for each application for the 2012 estimates.

IF (Q1A\_2012\_RC ~= -1 and not missing (Q1A\_2012\_RC) ) BILL\_FCM\_Base\_2012 = Q1A\_2012\_RC \* (Q2A\_2012\_02 / 100).

IF (Q1A\_2012\_RC ~= -1 and not missing (Q1A\_2012\_RC) ) BILL\_PSFCM\_Base\_2012 = Q1A\_2012\_RC \* (Q2A\_2012\_03 / 100).

IF (Q1A\_2012\_RC ~= -1 and not missing (Q1A\_2012\_RC) ) BILL\_PRI\_Base\_2012 = Q1A\_2012\_RC \* (Q2A\_2012\_06 / 100).

IF (Q1A\_2012\_RC ~= -1 and not missing (Q1A\_2012\_RC) ) BILL\_EXP\_Base\_2012 = Q1A\_2012\_RC \* (Q2A\_2012\_07 / 100).

EXECUTE.

(iii)

N-2012-1

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

(4) We then computed the "maximum likelihood" that a respondent would change the volume of mail she would send as follows:

```
COMPUTE LIKELY_CHANGE=0.  
IF (MAX(Q3, Q4) <= 10) Likely_Change = MAX(Q3, Q4)/10.  
EXECUTE. (iv)
```

(5) The volume estimates provided for 2012 with the proposed changes to First-Class Mail standards (Q5A\_RC, Q6A\_RC, Q7A\_RC, Q8A\_RC, Q8C\_RC, Q9A\_RC, Q10A\_RC, Q11A\_RC) were adjusted in accordance with the discussion in section 6.4 of my testimony regarding application of the Juster scale as well as the extent to which any reported changes (increases or decreases) in volume were solely attributable to studied changes in service standards. This syntax follows:

```
COMPUTE Q5A_RC_ADJUSTED = (Q5A_RC - Q1A_2012_RC) * (Q12BILLS / 100) *  
LIKELY_CHANGE + Q1A_2012_RC.  
COMPUTE Q6A_RC_ADJUSTED = (Q6A_RC - Q1B_2012_RC) * (Q12PAYMENTS /  
100) * LIKELY_CHANGE + Q1B_2012_RC.  
COMPUTE Q7A_RC_ADJUSTED = (Q7A_RC - Q1C_2012_RC) * (Q12ADVERTISING /  
100) * LIKELY_CHANGE + Q1C_2012_RC.  
COMPUTE Q8A_RC_ADJUSTED = (Q8A_RC - Q1D_2012_RC) *  
(Q12COMMUNICATION / 100) * LIKELY_CHANGE + Q1D_2012_RC.  
COMPUTE Q8C_RC_ADJUSTED = (Q8C_RC - Q1DD_2012_RC) * (Q12DOCUMENTS  
/ 100) * LIKELY_CHANGE + Q1DD_2012_RC.  
COMPUTE Q9A_RC_ADJUSTED = (Q9A_RC - Q1E_2012_RC) * (Q12MAGAZINES /  
100) * LIKELY_CHANGE + Q1E_2012_RC.  
COMPUTE Q10A_RC_ADJUSTED = (Q10A_RC - Q1F_2012_RC) *  
(Q12NEWSPAPERS / 100) * LIKELY_CHANGE + Q1F_2012_RC.  
COMPUTE Q11A_RC_ADJUSTED = (Q11A_RC - Q1G_2012_RC) *  
(Q12NEWSLETTERS / 100) * LIKELY_CHANGE + Q1G_2012_RC.  
EXECUTE. (v)
```

(6) Step 5 provides an estimate of respondent-specific total mail volumes for each application. We then computed the volume for each product using the same process as we did for the Base (2011) and Base\_2012 estimates. By way of example,

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

the syntax for computing volume across products for the Bills application is shown below:

```
IF ( not missing (Q5A_RC_ADJUSTED ) ) BILL_FCM_Condl = Q5A_RC_ADJUSTED *  
(Q5B_02 / 100).  
IF ( not missing (Q5A_RC_ADJUSTED ) ) BILL_PSFCM_Condl = Q5A_RC_ADJUSTED  
* (Q5B_03 / 100).  
IF ( not missing (Q5A_RC_ADJUSTED ) ) BILL_PRI_Condl = Q5A_RC_ADJUSTED *  
(Q5B_06 / 100).  
IF ( not missing (Q5A_RC_ADJUSTED ) ) BILL_EXP_Condl = Q5A_RC_ADJUSTED *  
(Q5B_07 / 100).  
EXECUTE. (vi)
```

(7) To ensure that the bases were the same for all three volume estimates, we used the following to eliminate those instances where we had missing values listwise (that is, for each case, a missing value exists in at least one of the three estimates). The syntax to accomplish this is shown for a single application—Bills):

```
DO IF (not (missing (Q1A_RC ) or missing (Q1A_2012_RC ) or missing  
(Q5A_RC_ADJUSTED ))).  
    COMPUTE BILL_FCM_Base_Final = BILL_FCM_Base.  
    COMPUTE BILL_PSFCM_Base_Final = BILL_PSFCM_Base.  
    COMPUTE BILL_PRI_Base_Final = BILL_PRI_Base.  
    COMPUTE BILL_EXP_Base_Final = BILL_EXP_Base.  
  
    COMPUTE BILL_FCM_Base_2012_Final = BILL_FCM_Base_2012.  
    COMPUTE BILL_PSFCM_Base_2012_Final = BILL_PSFCM_Base_2012.  
    COMPUTE BILL_PRI_Base_2012_Final = BILL_PRI_Base_2012.  
    COMPUTE BILL_EXP_Base_2012_Final = BILL_EXP_Base_2012.  
  
    COMPUTE BILL_FCM_Condl_Final = BILL_FCM_Condl.  
    COMPUTE BILL_PSFCM_Condl_Final = BILL_PSFCM_Condl.  
    COMPUTE BILL_PRI_Condl_Final = BILL_PRI_Condl.  
    COMPUTE BILL_EXP_Condl_Final = BILL_EXP_Condl.  
END IF.  
EXECUTE. (vii)
```

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

(8) Finally, the total volume of mail for each product for each condition (2011, 2012 estimates with current service standards, and 2012 with proposed service standards) were computed:

```
COMPUTE BASE_FCM_2011 = SUM( BILL_FCM_BASE_FINAL ,
PMT_FCM_BASE_FINAL , ADM_FCM_BASE_FINAL , COMM_FCM_BASE_FINAL ,
DOC_FCM_BASE_FINAL , NWSL_FCM_BASE_FINAL).

COMPUTE BASE_PSFCM_2011 = SUM( BILL_PSFCM_BASE_FINAL ,
PMT_PSFCM_BASE_FINAL , ADM_PSFCM_BASE_FINAL ,
COMM_PSFCM_BASE_FINAL , DOC_PSFCM_BASE_FINAL ,
NWSL_PSFCM_Base_Final ).

COMPUTE BASE_PRI_2011 = SUM( BILL_PRI_BASE_FINAL , PMT_PRI_BASE_FINAL
, COMM_PRI_BASE_FINAL , DOC_PRI_BASE_FINAL ).

COMPUTE BASE_EXP_2011 = SUM( BILL_EXP_BASE_FINAL ,
PMT_EXP_BASE_FINAL , COMM_EXP_BASE_FINAL , DOC_EXP_BASE_FINAL).

COMPUTE BASE_RPM_2011 = SUM( MAG_RPM_BASE_FINAL ,
NWSP_RPM_BASE_FINAL , NWSL_RPM_BASE_FINAL).

COMPUTE BASE_NPPM_2011 = SUM( MAG_NPPM_BASE_FINAL ,
NWSP_NPPM_BASE_FINAL , NWSL_NPPM_BASE_FINAL).

COMPUTE BASE_RBM_2011 = SUM( MAG_RBM_BASE_FINAL ,
NWSP_RBM_BASE_FINAL , ADM_RBM_BASE_FINAL , NWSL_RBM_BASE_FINAL).

COMPUTE BASE_NPBM_2011 = SUM( MAG_NPBM_BASE_FINAL ,
NWSP_NPBM_BASE_FINAL , ADM_NPBM_BASE_FINAL ,
NWSL_NPBM_BASE_FINAL).

COMPUTE TOTAL_MAIL_VOLUME_2011 = SUM( BASE_FCM_2011 ,
BASE_PSFCM_2011 , BASE_PRI_2011 , BASE_EXP_2011 , BASE_RPM_2011 ,
BASE_NPPM_2011 , BASE_RBM_2011 ,
BASE_NPBM_2011).

COMPUTE BASE_FCM_2012 = SUM( BILL_FCM_BASE_2012_FINAL ,
PMT_FCM_BASE_2012_FINAL , ADM_FCM_BASE_2012_FINAL ,
COMM_FCM_BASE_2012_FINAL , DOC_FCM_BASE_2012_FINAL ,
NWSL_FCM_BASE_2012_FINAL).

COMPUTE BASE_PSFCM_2012 = SUM( BILL_PSFCM_BASE_2012_FINAL ,
PMT_PSFCM_BASE_2012_FINAL , ADM_PSFCM_BASE_2012_FINAL ,
COMM_PSFCM_BASE_2012_FINAL , DOC_PSFCM_BASE_2012_FINAL ,
NWSL_PSFCM_Base_2012_Final).

COMPUTE BASE_PRI_2012 = SUM( BILL_PRI_BASE_2012_FINAL ,
PMT_PRI_BASE_2012_FINAL , COMM_PRI_BASE_2012_FINAL ,
DOC_PRI_BASE_2012_FINAL ).

COMPUTE BASE_EXP_2012 = SUM( BILL_EXP_BASE_2012_FINAL ,
PMT_EXP_BASE_2012_FINAL , COMM_EXP_BASE_2012_FINAL ,
DOC_EXP_BASE_2012_FINAL).
```

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

COMPUTE BASE\_RPM\_2012 = SUM(MAG\_RPM\_BASE\_2012\_FINAL ,  
NWSP\_RPM\_BASE\_2012\_FINAL , NWSL\_RPM\_BASE\_2012\_FINAL).

COMPUTE BASE\_NPPM\_2012 = SUM(MAG\_NPPM\_BASE\_2012\_FINAL ,  
NWSP\_NPPM\_BASE\_2012\_FINAL , NWSL\_NPPM\_BASE\_2012\_FINAL).

COMPUTE BASE\_RBM\_2012 = SUM(MAG\_RBM\_BASE\_2012\_FINAL ,  
NWSP\_RBM\_BASE\_2012\_FINAL , ADM\_RBM\_BASE\_2012\_FINAL ,  
NWSL\_RBM\_BASE\_2012\_FINAL).

COMPUTE BASE\_NPBM\_2012 = SUM(MAG\_NPBM\_BASE\_2012\_FINAL ,  
NWSP\_NPBM\_BASE\_2012\_FINAL , ADM\_NPBM\_BASE\_2012\_FINAL ,  
NWSL\_NPBM\_BASE\_2012\_FINAL).

COMPUTE TOTAL\_MAIL\_VOLUME\_2012\_BEFORE = SUM(BASE\_FCM\_2012 ,  
BASE\_PSFCM\_2012, BASE\_PRI\_2012, BASE\_EXP\_2012, BASE\_RPM\_2012,  
BASE\_NPPM\_2012, BASE\_RBM\_2012 , BASE\_NPBM\_2012).

COMPUTE CONDL\_FCM\_2012 = SUM(BILL\_FCM\_CONDL\_FINAL ,  
PMT\_FCM\_CONDL\_FINAL , ADM\_FCM\_CONDL\_FINAL ,  
COMM\_FCM\_CONDL\_FINAL , DOC\_FCM\_CONDL\_FINAL ,  
NWSL\_FCM\_CONDL\_FINAL).

COMPUTE CONDL\_PSFCM\_2012 = SUM(BILL\_PSFCM\_CONDL\_FINAL ,  
PMT\_PSFCM\_CONDL\_FINAL , ADM\_PSFCM\_CONDL\_FINAL ,  
COMM\_PSFCM\_CONDL\_FINAL , DOC\_PSFCM\_CONDL\_FINAL ,  
NWSL\_PSFCM\_Concl\_Final).

COMPUTE CONDL\_PRI\_2012 = SUM( BILL\_PRI\_CONDL\_FINAL ,  
PMT\_PRI\_CONDL\_FINAL , COMM\_PRI\_CONDL\_FINAL , DOC\_PRI\_CONDL\_FINAL ).

COMPUTE CONDL\_EXP\_2012 = SUM(BILL\_EXP\_CONDL\_FINAL ,  
PMT\_EXP\_CONDL\_FINAL , COMM\_EXP\_CONDL\_FINAL ,  
DOC\_EXP\_CONDL\_FINAL).

COMPUTE CONDL\_RPM\_2012 = SUM(MAG\_RPM\_CONDL\_FINAL ,  
NWSP\_RPM\_CONDL\_FINAL , NWSL\_RPM\_CONDL\_FINAL).

COMPUTE CONDL\_NPPM\_2012 = SUM(MAG\_NPPM\_CONDL\_FINAL ,  
NWSP\_NPPM\_CONDL\_FINAL , NWSL\_NPPM\_CONDL\_FINAL).

COMPUTE CONDL\_RBM\_2012 = SUM(MAG\_RBM\_CONDL\_FINAL ,  
NWSP\_RBM\_CONDL\_FINAL , ADM\_RBM\_CONDL\_FINAL ,  
NWSL\_RBM\_CONDL\_FINAL).

COMPUTE CONDL\_NPBM\_2012 = SUM(MAG\_NPBM\_CONDL\_FINAL ,  
NWSP\_NPBM\_CONDL\_FINAL , ADM\_NPBM\_CONDL\_FINAL ,  
NWSL\_NPBM\_CONDL\_FINAL).

COMPUTE TOTAL\_MAIL\_VOLUME\_2012\_AFTER = SUM(CONDL\_FCM\_2012 ,  
CONDL\_PSFCM\_2012 , CONDL\_PRI\_2012, CONDL\_EXP\_2012, CONDL\_RPM\_2012 ,  
CONDL\_NPPM\_2012 , CONDL\_RBM\_2012, CONDL\_NPBM\_2012).

EXECUTE.

(viii)



RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

(b) The same process described above was also executed for the Small and Home-Based Businesses data file. The only material difference was fewer (only 6) applications—bills, payments, advertising mail, communications, documents, and newsletters.

(c) The same process described above was also executed for the Consumer data file with only 3 applications—payments, correspondence, and documents.

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

18. Please refer to library reference USPS-LR-N2012-1/NP1.
  - a. Please explain how missing responses are handled in datasets "First-Class Mail\_LargeCommercial\_Final\_DataFile\_USPS-LR-N2012-1\_NP1.sav", "First-Class Mail\_SmallHome\_Final DataFile\_USPS-LR-N2012-1\_NP1.sav", and "First-Class Mail\_Consumers\_Final DataFile\_USPS-LR-N2012-1\_NP1.sav" in calculating the statistic "Average Annual Pieces per Customer" found in "Network Rationalization Volume Revenue Contribution Loss-Final2.xls".
  - b. (Redirected to witness Whiteman)

**RESPONSE:**

The forecasts provided to the Postal Service for average number of pieces sent for each product only included those cases where data were provided for both the before and after measures. Data were not used (declared missing) on a listwise basis for the two time periods—that is, a respondent needed to provide data for both time periods (2012 current standards and 2012 new standards) for their responses to be used.

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

**19.** Please refer to USPS-T-11 at 49, figure 41. The calculation of volume forecasts due to the change in service standards is adjusted by the “% of Increase/Decrease in Volume Solely Attributable to Changes to FCM Standards”. *Id.* column 3. This adjustment factor is determined from the answer to the following survey question.

You indicated that based on the First-Class Mail service standards I described the total number of PAYMENTS you would mail using the U.S. Postal Service in 2012 would [DECREASE/INCREASE] by [RESTORE DIFFERENCE\_BILLS] piece(s). What percentage of this [DECREASE/INCREASE] is solely because of the First Class Mail service standards that I described?

USPS-T-11 at 144, Appendix F, Part 3.

- a. Please provide a detailed explanation of the purpose of this survey question.
- b. Please provide the mean response to this question.
- c. Please discuss the Postal Service's understanding of why respondents' answers to this question would be anything less than 100 percent.

**RESPONSE:**

(a) At the time of the survey, there was considerable media coverage of financial issues facing the Postal Service. This coverage encompassed issues beyond the proposed changes to First-Class Mail service standards. The statement regarding proposed changes presented in the qualitative research included a description of changes far beyond those related solely to changes to First-Class Mail service standards. It was clear in the qualitative research that participants considered many, if not all, of what they had heard about the Postal Service, such as the large deficit experienced by the Postal Service, the potential for defaulting on its payments, the implementation of Five Day Delivery in their response to the impact of changes to First-Class Mail service standards.

The purpose of including this question was to ensure that any impact on respondents' estimates for volume changes or how mail was sent was attributable exclusively to the

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

proposed changes in First-Class Mail service standards while excluding any impacts resulting from collateral postal matters that gained significant media coverage at the time of the study.

(b) This adjustment was applied at the application level. The following tables provide the mean responses for these individual questions by segment. In addition, these questions were asked of only a subset of respondents—those who indicated that the volume of mail they send under the new standards for a specific application would increase or decrease. We have included the number and percent of respondents who were asked this question for each application.

**Large Commercial Accounts:**

|                  | <i>Bills</i>          | <i>Payments</i>   | <i>Advertising Mail</i> |
|------------------|-----------------------|-------------------|-------------------------|
| # of Respondents | 73                    | 53                | 51                      |
| % of Respondents | 9%                    | 6%                | 6%                      |
| Mean             | 53.0%                 | 58.6%             | 53.8%                   |
|                  | <i>Communications</i> | <i>Documents</i>  |                         |
| # of Respondents | 52                    | 59                |                         |
| % of Respondents | 6%                    | 7%                |                         |
| Mean             | 55.9%                 | 64.2%             |                         |
|                  | <i>Magazines</i>      | <i>Newspapers</i> | <i>Newsletters</i>      |
| # of Respondents | 15                    | 11                | 30                      |
| % of Respondents | 2%                    | 1%                | 4%                      |
| Mean             | 77.0%                 | 43.6%             | 52.4%                   |

**Small Businesses**

|                  | <i>Bills</i>          | <i>Payments</i>  | <i>Advertising Mail</i> |
|------------------|-----------------------|------------------|-------------------------|
| # of Respondents | 83                    | 80               | 39                      |
| % of Respondents | 15%                   | 15%              | 7%                      |
| Mean             | 71.3%                 | 72.6%            | 70.0%                   |
|                  | <i>Communications</i> | <i>Documents</i> | <i>Newsletters</i>      |

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RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

|                  |       |       |       |
|------------------|-------|-------|-------|
| # of Respondents | 61    | 75    | 15    |
| % of Respondents | 11%   | 14%   | 3%    |
| Mean             | 70.9% | 68.5% | 63.0% |

**Home-Based Businesses**

|                  | <i>Bills</i> | <i>Payments</i> | <i>Advertising Mail</i> |
|------------------|--------------|-----------------|-------------------------|
| # of Respondents | 60           | 49              | 33                      |
| % of Respondents | 9%           | 8%              | 5%                      |
| Mean             | 67.3%        | 69.9%           | 58.5%                   |

|                  | <i>Communications</i> | <i>Documents</i> | <i>Newsletters</i> |
|------------------|-----------------------|------------------|--------------------|
| # of Respondents | 37                    | 45               | 14                 |
| % of Respondents | 10%                   | 12%              | 4%                 |
| Mean             | 72.2%                 | 66.6%            | 60.2%              |

**Consumers:**

|                  | <i>Payments</i> | <i>Correspondence</i> | <i>Documents</i> |
|------------------|-----------------|-----------------------|------------------|
| # of Respondents | 57              | 49                    | 25               |
| % of Respondents | 6%              | 5%                    | 3%               |
| Mean             | 48.3%           | 530%                  | 48.5%            |

(c) As stated in response to part (a), it was clear from the qualitative research that respondents' answers could be influenced by other information about changes to service. During the time of the study there was considerable media coverage of the financial issues the Postal Service faces. We used this question as a last check to ensure that responses to questions related to volume changes or methods used to send mail were attributable solely to the proposed changes to First-Class Mail service standards as opposed to other extraneous sources.

RESPONSE OF UNITED STATES POSTAL SERVICE  
WITNESS ELMORE-YALCH TO  
PRESIDING OFFICER'S INFORMATION REQUEST NO. 1

20. On page 44 of her testimony, witness Elmore-Yalch (USPS-T-11) states that the use of the Juster Purchase Probability Scale is "widely used and is supported by extensive research." The academic literature the Commission has reviewed supports the application of the Juster Scale for predicting consumer behavior when introducing a new product. Please provide justification (including supporting citations to literature) for use of the Juster Purchase Probability Scale to forecast a decrease in purchasing behavior for a product currently offered.

**RESPONSE:**

The Juster scale is a relevant metric to use when forecasting changes in usage of existing products and services. The accuracy of purchase intention/ probability scales (e.g., the Juster scale) for existing products has been documented for example in Clawson (1971),<sup>1</sup> for existing and frequently purchased services (savings, investments, recreation, and travel) by Dawes (2001),<sup>2</sup> for existing bill payment methods in Australia (e.g., payment at Post Office, payment by telephone, payment by mail), for existing branded products and packaged goods in Kalwani and Silk (1982)<sup>3</sup>, and for existing durable products in Juster (1966)<sup>4</sup>. As such, it is standard in the literature to employ the Juster scale in forecasts for usage of existing products and services.

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<sup>1</sup> Clawson, C. Joseph (1971), "How Useful Are 90-Day Purchase Probabilities?" Journal of Marketing Vol. 35, No. 4 (Oct., 1971), pp. 43-47.

<sup>2</sup> Dawes J (2002). Further evidence on the predictive accuracy of the verbal probability scale: The case of household bill payments in Australia. Journal of Financial Services Marketing, 6, 3, 281-289.

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