

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

ANNUAL COMPLIANCE REPORT, 2009

Docket No. ACR2009

RESPONSES OF THE UNITED STATES POSTAL SERVICE TO
QUESTIONS 1-5 OF CHAIRMAN'S INFORMATION REQUEST NO. 8
(March 8, 2010)

Chairman's Information Request No. 5 was issued on March 3, 2010.

Responses were requested by March 8, 2010. Attached are the Postal Service's responses to Questions 1-5. Each request is stated verbatim, and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.
Chief Counsel, Pricing & Product Support

Eric P. Koetting

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-2992, FAX: -5402
March 8, 2010

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

1. The Docket No. R2009-3 Summer Sale Data Collection Report at page 2 states "The Postal Service estimates that the Summer Sale had a net impact of \$24.1 million in contribution," and lead to "increased attributable costs of \$48.4 million." Please provide the spreadsheet showing the calculation for both of these figures, with calculations linked to the file "Summer Sale – PRC Report v 1.xls" tab "Rebate data".

RESPONSE:

Please see the zip file (ChIR.8.Q.1t2.Attach.zip) attached to this response set electronically. The files included in that zip file link "Summer Sale – PRC Report v 1.xls" tab "Rebate data" (called "PRC Report v 1.xls") to the financial analysis document for the Summer Sale program titled "(2010-03-05) Summer Sale Financials_as of Round 4.xls".

Based on the data in "Summer Sale – PRC Report v 1.xls," attributable costs yield a slightly different value using these data (\$48.2MM instead of \$48.4MM), as there were nine cases where data were temporarily omitted from "Summer Sale– PRC Report v 1.xls" due to minor data discrepancies needing resolution, as discussed in Docket No. R2009-3, Summer Sale Data Collection Report.

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

2. The Docket No. R2009-3 Summer Sale Data Collection Report states at page 2:

The Postal Service estimates that about 61.8 percent of the incentive-eligible volume from the Summer Sale was new growth. This estimate is based on an analysis of the distribution of customer growth rates compared to the overall average using recent historical data for time periods not impacted by the sale program. This analysis revealed relatively widely dispersed growth rates around the mean, which leads the Postal Service to conclude that a sizeable proportion of the mail that earned rebates would have been sent even in the absence of the sale program.

Please provide a copy of this analysis.

RESPONSE:

Within the zip file (ChIR.8.Q.1t2.Attach.zip) attached to this response set electronically, please see the Excel file "(2010_03_04) Volume Attributable to SummerSale.xls".

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

3. Please provide the file "Summer Sale – PRC Report v 1.xls" tab "Rebate data" linked to the mailer data in files "Summer Sale PRC – Workbook 1.xls" and "Summer Sale PRC – Workbook 2.xls".

RESPONSE:

The source data for both of these submissions are consistent. However, the data format which the Commission requested is not conducive to linking the two files.

Because such a large amount of data is at issue, we employed numerous automated scripts, including SQL, SAS and Oracle, which allowed us to put the data in the format requested by the Commission. Because of the nature of these scripts, they allowed us to output final numbers into the Excel sheet, but they do not allow us to populate formulas – especially formulas that link multiple sheets together. As a result, going back to link these sheets manually using Excel formulas would require a large number of hours for the program office, creating significant amounts of redundant effort and placing burdens on the program. Such an exercise was not possible in the limited time by which responses to this set of questions were requested.

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

4. In response to Docket No. R2009-3, CHIR No. 2, the Postal Service stated "To ensure that the application of short-run attributable costs was appropriate, the Postal Service will verify that these three assumptions were valid for the period in which the summer discounts were active." Please provide a copy of this analysis.

RESPONSE:

The three assumptions utilized in calculating short-run attributable costs referred to in the question are:

- (1) The Postal Service will have excess capacity in buildings, equipment, and vehicles in the summer of 2009.
- (2) The delivery networks for both city and rural delivery will also have excess capacity in the summer of 2009.
- (3) The postmaster network will have excess capacity in the summer of 2009.

As explained in the Postal Service response to CHIR No. 1, Question 3 of Docket No. R2009-3, excess capacity can arise, despite the best efforts of management, if volume is falling faster than capacity due to either seasonal and/or cyclical volume declines. Therefore, verification of the three assumptions requires comparing the change in volume during the 2009 Summer Sale period with the changes in capacity. If the volume declines exceed the capacity declines, then the assumptions were valid. Postal Service volumes for the Summer Sale period, July to September, 2009, reflected both cyclical and seasonal volume declines. The cyclical decline is shown by the year-over-year total mail volume declines of 12.7 percent in FY2009 and 4.5 percent in FY 2008. Together they yield a total volume decline of nearly 17 percent. The seasonal volume decline is reflected by the fact that the July-to-September 2009 average

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

volumes per month were 6 percent lower than the overall FY 2009 average volumes per month.

The capacity declines were all much smaller than these volume declines. Regarding plant, equipment and vehicles, the Postal Service made some downward adjustments, but no where near the magnitude of the volume declines. See the Postal Service's Annual Reports for FY 2009 (at page 38) and FY 2008 (at page 27) for the change in numbers of facilities and vehicles. As shown in comparing Docket No. ACR2009, USPS-FY09-8, FCILTY09.xls, sheet "EQUIPMENT" with its Docket No. ACR 2008 counterpart, there was little change in equipment deployed. That there was little change in facilities, equipment and vehicles is expected, because such adjustments are not readily made.

Similarly, in the case of postmasters and post offices, this network has not changed much over the last two years. See the Postal Service's Annual Report, FY 2009, at pages 80 and 81 to observe the declines in the number of post offices and postmasters. These declines are small compared to the volume declines.

As mentioned in Docket No. R2009-3, the sharp cyclical declines in volume has placed severe pressure on Postal Service operations to downsize the delivery network. The downsizing process is ongoing and was not complete when the summer sale was put into place. When this fact is combined with the seasonal excess capacity caused by relative low summer volumes, it is clear that some excess capacity existed in the deliver networks when the sale was in place. This is indicated by the roughly 5 percent decline in total city and rural delivery hours between Quarter 4 of FY 2008 and Quarter 4 of FY 2009, as compared to the volume decline of over 12 percent between the two periods.

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

FY 2009 and FY 2008 Carrier Work Hours for July-Sept.(in 000s)				
	FY 2009, Q4	FY 2008, Q4	Change	Percentage. Change
City Carriers	103,876	109,945	- 6,069	- 5.5%
Rural Carriers	44,748	47,008	- 2,260	- 4.8%
Total	148,624	156,953	- 8,329	- 5.3%

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

5. Please refer to the demand analyses filed on January 20, 2010.
- a. Please confirm that the econometric demand equations for market dominant products do not include discount elasticities, cross-price elasticities, or share equations describing the division of workshared mail products into constituent categories.
 - b. Is the model specification choice trail available that led to the decision to omit the terms described in question 5? If so, please provide it.
 - c. Does the omission of the discount and cross-price elasticities require a re-interpretation of the price effects now represented by the "own-price" elasticities in the econometric demand equations? For example, do the "own price" elasticities still reflect the specific effects of changes in each product's own price with other postal rates and discounts held fixed?
 - d. Does the absence of cross-price and discount elasticities reduce the accuracy of forecasts of discount-category volumes?
 - e. Should the Commission regard the omission of cross-price and discount elasticities from an econometric demand equation as evidence that these elasticities are approximately zero? If so, is there economic theory and non-econometric evidence that was relied on to support an assumption that the cross-price and discount elasticities are zero?
 - f. Do the own-price elasticities now reflect anything more than the demand effects of changes in the general level of real postal prices? If so, what else do they reflect?

RESPONSE:

- a. Confirmed that the market dominant econometric demand equations filed with the Postal Regulatory Commission on January 20, 2010, do not include any discount or cross-price variables as explanatory variables. Share equations are still used, however, to forecast presort and automation categories of First-Class and Standard Mail volumes.

- b. A significant amount of work was undertaken over the spring and summer of 2009 which looked intensively at several fundamental issues associated with virtually all of the Postal Service's econometric demand equations. Issues associated with cross-price relationships between mail categories were considered as parts of several of these investigations.

RESPONSE OF THE UNITED STATES POSTAL SERVICE TO CHAIRMAN'S INFORMATION REQUEST NO. 8

The decision of whether or not to include a particular cross-price relationship in a particular econometric demand equation was made on a case-by-case basis. In all cases, the overriding goal of all of the Postal Service's econometric work was to produce the most accurate volume forecasts possible. As a general rule, the most accurate volume forecasts are obtained from econometric demand equations which best model the historical demand for mail volume. So, while it ended up being the case that, in fact, there were no cross-price or discount variables included in any of the econometric demand equations filed on January 20, 2010, this was not the result of a general decision to exclude all such variables from the Postal Service's equation, but was, instead, the result of a series of careful analyses of each of the Postal Service's individual demand equations.

The most significant work in the area of cross-category price relationships was with respect to the effect of First-Class worksharing discounts on First-Class single-piece and workshared mail volumes. This work is summarized in a document electronically attached to this response as ChIR.8.Q.5b.Attach.pdf.

In addition to the investigation of the impact of worksharing discounts on First-Class Mail volume, several other potential cross-category price relationships were investigated over the course of the past year. Possible price-based substitution between Standard Regular mail and First-Class workshared letters and cards were both investigated at various times. In both cases, the price-based relationship between First-Class workshared mail and Standard Regular letters was found to be highly insignificant with the signs of coefficients on these variables frequently changing sign based on relatively minor changes to other aspects of these equations (e.g., adding one additional quarter

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

of data). Hence, these cross-price variables were removed from the First-Class workshared mail and Standard Regular equations.

Cross-price relationships between Bound Printed Matter and several other categories of mail, including Media Mail, Standard Regular mail, and Standard ECR mail, were also investigated over the course of several months. Some of the results with respect to the impact of pound-rated Standard Commercial rates on Bound Printed Matter volume were intriguing. Ultimately, however, simple updates to other aspects of the Bound Printed Matter equation led to contradictory results. Based on the extreme sensitivity of the estimated cross-price elasticities in the Bound Printed Matter demand equation, it was decided that it would be best to simply exclude all of these cross-price variables from the Bound Printed Matter demand equation going forward.

c. Elasticity estimates measure the impact of a change in mail volume attributable to the factor of interest (own-price, in this case) holding all other factors constant. From a strict mathematical perspective, an elasticity measures the impact of a change in mail volume holding all other factors included in the equation constant. If the true impact of an omitted variable on mail volume is zero, however, then these two statements are functionally equivalent.

As explained in the response to d. below, the exclusion of cross-price and discount variables in the demand equations filed with the Postal Regulatory Commission on January 20, 2010, is because of a belief that the relevant cross-price and discount elasticities are equal to zero in these cases.

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

It should also be noted, however, that there may be some ambiguity in this question, since it inquires if “the omission of the discount and cross-price elasticities require a re-interpretation of the price effects now represented by the “own-price” elasticities in the econometric demand equations” (emphasis added). Specifically, the answer to this question depends on what might be viewed as the previous baseline for interpretation of the elasticities. The demand equations filed by the Postal Service in January 2009, for example, included a worksharing discount variable in the First-Class Mail equations. The presence of this type of variable requires careful assessment of the interpretation of the respective own-price elasticity estimates. The complications presented by such variables were discussed in some detail most recently in the Direct Testimony of Thomas E. Thress, Docket No. R2006-1, USPS-T-7, at pages 38-40. (A similar discussion also appeared in his testimony, USPS-T-7, in Docket No. R2005-1, at pages 67-70.) If the question is intended to probe whether the removal of these complications (because of the removal of the discount variable) requires a “re-intrepretation” of the own-price variables, relative to the interpretation applicable in Docket No. R2005-1 through the January 2009 equations, the answer would be yes.

The omission of the discount variable allows a reversion to a standard conventional interpretation of the own price variable, which was not the case earlier, when the inclusion of the discount variable introduced an added layer of complexity to the interpretation of these numbers.

d. No, the absence of cross-price and discount elasticities does not reduce the accuracy of forecasts of discount-category volumes. On the contrary, in fact, the

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

econometric demand equations filed with the Postal Regulatory Commission on January 20, 2010, were chosen first and foremost because it was the Postal Service's belief that these equations best described the demand for mail products and that these equations would therefore produce the most accurate volume forecasts for the Postal Service. At the subclass / demand equation level, as described in section b. above, the exclusion of cross-price and discount variables from the Postal Service's econometric demand equations are the result of rigorous econometric investigation and reflect a belief on the part of the Postal Service that the best estimate of the impact of a change in average cross-price or discount levels on mail volumes is zero.

This is not, however, to say that mailers may not at times shift from one mail subclass to another in response to a change in Postal rates. In fact, however, such changes tend to overwhelmingly be responses to specific and unusual changes in relative rate structures associated with a specific rate change. Rather than attempting to model such changes through a blunt one-size-fits-all instrument such as an aggregate price index or an average discount level, the effect of such changes is, instead, better modeled through the inclusion of either simple dummy variables or non-linear Intervention analysis. Examples of such case-specific mailer shifts between mail subclasses include the impact of R97-1 and R2006-1 on Standard Regular and ECR mail volumes, the impact of MC96-1 on Standard Nonprofit and Nonprofit ECR mail volumes, and the impact of the introduction of Delivery Confirmation on the volumes of single-piece Parcel Post and Certified Mail.

Additionally, as stated in the response to a. above, discount-category volumes are still forecasted based, in part, on share equations which incorporate potential shifts

**RESPONSE OF THE UNITED STATES POSTAL SERVICE TO
CHAIRMAN'S INFORMATION REQUEST NO. 8**

between presort and automation categories in response to changes in category-level discount rates.

e. Yes, the omission of cross-price and discount elasticities from an econometric demand equation is evidence that the Postal Service believes these elasticities are not significantly different from zero. As explained in the response to d. above, this is not to say that mailers do not at times choose between mail subclasses on the basis of price, but only that aggregate price and discount indices are not the best measure of such relationships.

The exact functional form of the cross-price relationship between two mail categories is an empirical question. As such, it is best evaluated based on econometric investigation. See the response to b. above for the evidence upon which these judgments were made.

f. See the response to part c. above. The own-price elasticities in the demand equations presented to the Postal Regulatory Commission on January 20, 2010 have the same interpretation as any elasticity, the same basic interpretation that they customarily have. That is, the own-price elasticity of a subclass of mail measures the expected percentage change in subclass mail volume attributable to a one percent change in the average price of that particular subclass.

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document in accordance with Section 12 of the Rules of Practice and Procedure.

Eric P. Koetting

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-2992, FAX: -5402
March 8, 2010