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Before the

UNITED STATES POSTAL RATE COMMISSION

In the Matter of: POSTAL RATE AND FEE CHANGE

Docket No. R2000-1

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BEFORE THE
POSTAL RATE COMMISSION

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In the Matter of: :
POSTAL RATE AND FEE CHANGE : Docket No. R2000-1
- - - - - - - - - - - - - - - - - - - -X

Third Floor Hearing Room
Postal Rate Commission
1333 H Street, N.W.
Washington, D.C 20268

Volume IV
Wednesday, April 12, 2000

The above-entitled matter came on for hearing conference, pursuant to notice, at 9:35 a.m.

BEFORE:
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HON. W.H. "TREY" LeBLANC, COMMISSIONER
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C O N T E N T S

WITNESS	DIRECT	CROSS	REDIRECT	RECROSS
MARK F. RAMAGE	1099	1141		
SHARON DANIEL	1146	1368		

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E X H I B I T S

EXHIBITS AND/OR TESTIMONY	IDENTIFIED	RECEIVED
Direct Testimony and Exhibits of Mark F. Ramage, USPS-T-2	1100	1100
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Direct Testimony of Sharon Daniel, USPS T-28	1147	1147
Library References Numbered LRI-91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, and 173	1148	1148
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P R O C E E D I N G S

[9:35 a.m.]

CHAIRMAN GLEIMAN: Good morning. Today we continue our hearings to receive testimony from Postal Service witnesses in support of Docket R2001. I have a few brief procedural matters to discuss before we begin to take testimony this morning.

Today's schedule will vary from our normal one because the Commission will be visited by a delegation from the German government. The German regulators are coming to visit us, and my expectation is that we will, if we are still in the hearing room, break for lunch at 1:00 p.m. today or thereabouts rather than at Noon or thereabouts, and if we must return to the hearing room, we will probably not return until 2:30.

Yesterday we had a full day that ended with a hearing conducted in camera. As you are certainly aware, there has been a significant amount of discovery-related motion practice leading to sensitive business information being provided under protective conditions.

Yesterday United Parcel Service conducted a portion of its cross examination of Witness Hunter, that portion that related to materials provided under protective conditions, in an in-camera session late last night, as those of you who were around know.

Earlier in the day we received into evidence certain materials sponsored by Witness Hunter that were also subject to protective conditions. As a result, yesterday's transcript is going to include a gap. The transcript will be numbered sequentially and the pages of material subject to protective conditions that were entered into the record will be missing from the publicly available transcript. The missing pages will be available in the separate transcript that is subject to protective conditions. Participants filing the appropriate certifications with the Dockets Section will be allowed access to the transcript in the same way that they can obtain access to the discovery responses filed under protective conditions.

In the same way, the portion of yesterday's hearing that was conducted in-camera was transcribed. That portion of the transcript will not be distributed to parties who have an arrangement with the reporting company. Again those pages will be provided to the Commission under seal and participants seeking access to the transcript will have to undertake to comply with the applicable protective conditions.

Are there questions about this procedure?

[No response.]

CHAIRMAN GLEIMAN: Does any participant have a procedural matter that he or she wishes to raise at this

point? If there are none, then we will proceed with today's witnesses. There are two witnesses scheduled for today, Witness Ramage and Witness Daniel. Mr. Hollies, if you would please introduce your first witness.

MR. HOLLIES: The Postal Service calls Mark F. Ramage to the stand.

CHAIRMAN GLEIMAN: Mr. Ramage, if you would please stand and raise your right hand.

Whereupon,

MARK F. RAMAGE,

a witness, was called for examination by counsel for the United States Postal Service and, having been first duly sworn, was examined and testified as follows:

CHAIRMAN GLEIMAN: Please be seated.

DIRECT EXAMINATION

BY MR. HOLLIES:

Q Mr. Ramage, I believe you have in front of you two copies of a document that is marked USPS-T-2, Direct Testimony of Mark F. Ramage on behalf of United States Postal Service. Is that correct?

A Yes, I do.

Q Was that document prepared by you or under your direction?

A Yes, it was.

Q And were you to testify orally today, would your

testimony be the same?

A Yes.

MR. HOLLIES: The Postal Service moves for admission but not transcription into the record of USPS-T-2.

CHAIRMAN GLEIMAN: Is there any objection?

[No response.]

CHAIRMAN GLEIMAN: Hearing none, I will direct counsel to provide the reporter with two copies of Mr. Ramage's direct testimony. The testimony is received into evidence and, as is our practice with respect to Postal Service direct testimony, it will not be transcribed into the record.

[Direct Testimony and Exhibits of Mark F. Ramage, USPS-T-2, was received into evidence.]

MR. COSTICH: Mr. Ramage, have you had an opportunity to examine the packet of designated written cross examination that was made available earlier today?

THE WITNESS: Yes, I have.

CHAIRMAN GLEIMAN: If these questions were asked of you today, would your answers be the same as those you previously provided in writing?

THE WITNESS: Yes.

CHAIRMAN GLEIMAN: No corrections or additions at this point in time?

THE WITNESS: That is correct.

CHAIRMAN GLEIMAN: Counsel, if you would please provide two copies of the corrected designated written cross examination of Witness Ramage to the reporter, the material will be received into evidence and transcribed into the record.

[Designation of Written Cross-Examination of Mark F. Ramage was received into evidence and transcribed into the record.]

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, DC 20268-0001

Postal Rate and Fee Changes, 2000 Docket No. R2000-1

DESIGNATION OF WRITTEN CROSS-EXAMINATION
OF UNITED STATES POSTAL SERVICE
WITNESS MARK F. RAMAGE
(USPS-T-2)

Party	Interrogatories
Alliance of Nonprofit Mailers	ADVO/USPS-T2-1-2 ANM/USPS-T2-1, 3-4, 9-17, 19, 23 UPS/USPS-T2-1
Major Mailers Association	MMA/USPS-T2-1
Newspaper Association of America	ADVO/USPS-T2-1-2 ANM/USPS-T2-1, 9, 11-14 MMA/USPS-T2-1 NAA/USPS-T28-3a redirected to T2
Office of the Consumer Advocate	ADVO/USPS-T2-1 ANM/USPS-T2-13-14 NAA/USPS-T28-3a redirected to T2

Respectfully submitted,

Margaret P. Crenshaw

Margaret P. Crenshaw
Secretary

INTERROGATORY RESPONSES OF
UNITED STATES POSTAL SERVICE
WITNESS MARK F. RAMAGE (T-2)
DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interrogatory:	Designating Parties:
ADVO/USPS-T2-1	ANM, NAA, OCA
ADVO/USPS-T2-2	ANM, NAA
ANM/USPS-T2-1	ANM, NAA
ANM/USPS-T2-3	ANM
ANM/USPS-T2-4	ANM
ANM/USPS-T2-9	ANM, NAA
ANM/USPS-T2-10	ANM
ANM/USPS-T2-11	ANM, NAA
ANM/USPS-T2-12	ANM, NAA
ANM/USPS-T2-13	ANM, NAA, OCA
ANM/USPS-T2-14	ANM, NAA, OCA
ANM/USPS-T2-15	ANM
ANM/USPS-T2-16	ANM
ANM/USPS-T2-17	ANM
ANM/USPS-T2-19	ANM
ANM/USPS-T2-23	ANM
MMA/USPS-T2-1	MMA, NAA
NAA/USPS-T28-3a redirected to T2	NAA, OCA
UPS/USPS-T2-1	ANM

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T2-1. The IOCS tallies are used to allocate Cost Segment 6 and 7 accrued costs among the eight city letter carrier route types. For each of those eight route type accrued cost estimates, please provide (a) the base year 1998 cost estimate and (b) its standard deviation, confidence interval, and coefficient of variation.

RESPONSE:

(a) My understanding is that these base year 1998 cost estimates are contained in witness Meehan's workpapers.

(b) In Table 2 of my testimony, I have provided CVs for base year IOCS cost estimates at the subclass level. It is not feasible to directly compute sampling error estimates at all other levels of disaggregation or for all other estimates, so I have presented a generalized variance function which may be used to approximate CVs for these estimates. Please see my response to ANM/USPS-T2-13. The generalized variance approximation may slightly understate sampling error for these accrued cost estimates since it was developed from attributable cost estimates.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T2-2. The IOCS tallies are used to allocate letter carrier route costs for each letter route type between in-office and out-office activity components. For each of the eight city letter route types, please provide the base year 1998 in-office and out-of-office cost estimates with their standard deviations, confidence intervals, and coefficients of variation.

RESPONSE:

Please refer to my response to ADVO/USPS-T2-1.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-1.

(a) Please provide a table showing, for each of the fiscal years 1990 through 1999: (a) the total number of IOCS tallies for Cost Segment 3.1, Mail processing, and (b) a breakdown of those tallies into direct tallies, mixed mail tallies, and not handling mail tallies.

(b) Provide a similar table for Cost Segment 6.1, In-office Carrier Cost.

(c) For each of the same years, please specify the number of direct tallies for Carrier route ("ECR") commercial and nonprofit Standard A (formerly third-class) mail.

RESPONSE:

The Postal Service has objected to providing these analyses for each of the fiscal years 1990 through 1999. The following response provides the requested tabulations for three fiscal years, 1993, 1996, and 1998 (the respective base years in Docket Nos. R94-1, R97-1, and R2000-1).

(a) The following table summarizes the IOCS tallies for Cost Segment 3.1, mail processing.

Table A - Mail Processing

	1993	1996	1998
Direct Tallies	96122	88132	87019
Mixed Mail Tallies	18673	17836	16809
Non-Handling Tallies	60146	54988	58805

(b) The following table summarizes the IOCS tallies for Cost Segment 6.1, In-Office Carrier Cost.

Table B - Carriers

	1993	1996	1998
Direct Tallies	6327	5322	5159
Mixed Mail Tallies	273	289	316
Non-Handling Tallies	2671	2718	2906

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

(c) The following table summarizes the number of direct tallies for Carrier route ("ECR") commercial and nonprofit Standard A (formerly third-class) mail.

Table C - ECR

	1993	1996	1998
ECR-Commercial	6920	6344	5843
ECR-Nonprofit	715	549	575

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-3. Witness Kingsley, USPS-T-10, describes the Postal Service's plans to introduce automated flat sorting equipment and reduce the amount of manual and mechanized sorting of flats. Once all of the AFSM 100s described in her testimony are fully deployed, do you expect that will result in a further increase in (i) the percentage of not handling tallies, and (ii) the percentage of mixed mail tallies? Please explain.

RESPONSE:

I have not studied this matter.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-4. Witness Kingsley, USPS-T-10, also describes the Postal Service's plans for increased use of robotics and tray management systems. Please explain how widespread deployment of robotics and tray management systems is likely to affect the percentages of not handling and mixed mail tallies.

RESPONSE:

I have not studied this matter.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-9. Please refer to your testimony at page 6, lines 14-20, where you discuss the coefficient of variation ("CV").

(a) In terms of the reliability of the mail processing cost estimates produced by the IOCS, is a mixed mail tally as accurate and reliable an indicator of cost as is a direct tally? Please explain fully.

(b) How are mixed mail tallies treated when computing the CV? In particular, are mixed mail tallies included in "n," where "n" represents the total number of observations? If so, please provide the theoretical justification for including the number of mixed mail tallies in "n."

(c) For any given sample size, what effect does the percentage or proportion of mixed mail tallies have on the CV?

(d) How are not handling mail tallies treated when computing the CV? In particular, are not handling mail tallies included in "n," where "n" represent the total number of observations? If so, please provide the theoretical justification for including the number of not handling mail tallies in "n."

(e) For any given sample size, what effect does the percentage or proportion of not handling tallies have on the CV?

RESPONSE:

(a) I believe that a mixed mail tally is as accurate and reliable as a direct mail tally. If the data collector observes the sample employee handling a container or item of mixed mail, then that is how it is recorded. Mixed mail tallies can lead to an accurate and reliable estimate of the costs of the observed activity "mixed mail". The cost weighted sum of these mixed mail observations is about $1.1 billion with a CV approximation of around 1%. Only one subclass of direct mail (First Class Letters & Parcels) would be expected to have a smaller CV (around .8%) for its cost weighted sum of about $3.7 billion.

(b) CV's for IOCS cost estimates are computed using a bootstrap estimation procedure as described in USPS-LR-I-12, Appendix I. Bootstrapping consists of randomly selecting the same number of observations with replacement from the sample data, and calculating estimates based on the selected observations.

This is repeated many times and the variance of the resulting estimates over all iterations is calculated. An IOCS sample observation in which the sampled employee was handling an item or a container is a valid sample observation and is eligible for resampling just as any other IOCS sample observation.[1] So, if a particular stratum has n observations (including some mixed mail ones), then a replicate sample of size n is chosen with replacement from these n observations for each iteration.

(c) I have not studied the relationship between the proportion of mixed mail observations and resulting CVs.

(d) "Not handling" observations are valid IOCS sample observations, just as are mixed mail observations. Consequently, they are also included in "n". See also my response to part (b), above.

(e) I have not studied the relationship between the proportion of mixed mail observations and resulting CVs.

[1] For counted mixed mail observations, a single sample observation is divided into multiple records on the IOCS data file, one for each subclass by shape combination represented in the count of the mixed mail item. The weighting factors for that observation are also divided proportionally to the counts of each mail category observed in the item so that the total weight for the observation remains unchanged. When the data are resampled in the bootstrap process, the entire set of records corresponding to the original underlying observation is treated as the sampling unit.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-10. The 29 CV's for Cost Segment 3.1 Mail Processing–Clerks and Mailhandlers, shown in your Table 1, range were distributed as follows in BY98.

Range of CV	Number
0.00—1.00	2
1.01—2.01	3
2.01—3.00	3
3.01—4.00	4
4.01—5.00	4
5.01—10.00	5
10.01—20.00	4
20.01—40.00	1
> 40.01	3
Total	29

What was the comparable distribution in fiscal years 1990 through 1997? In responding to this question, you may use a different distribution if you so desire, but please provide comparable distributions for the fiscal years 1990 through 1998.

RESPONSE:

The Postal Service has objected to production of this table for every year from 1990 through 1998. Instead, we have produced the table for a time series including FYs 1993, 1996, and 1998. The following table provides analogous summary tabulations of CVs that were presented in Dockets No. R94-1, R97-1, and R2000-1. The distribution for FY 1993 was extracted from Table 1 of USPS-T-1, Docket No. R94-1.[2] The distribution for FY 1996 was extracted from Table 6 of USPS-T-12, Docket No. R97-1.[3]

[2] For comparability with the FY 1998 column, the CVs of subtotals and mixed mail shown in Table 1 of USPS-T-1, Docket No R94-1, have been excluded from this distribution.

[3] For comparability with the FY 1998 column, the CV for mixed mail shown in USPS-T-12, Docket No. R97-1, has been excluded from this distribution

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

	FY1993	FY1996	FY 1998
Range of CV			Number
0.00—1.00	1	2	2
1.01—2.01	2	4	3
2.01—3.00	4	2	3
3.01—4.00	5	3	4
4.01—5.00	5	4	4
5.01—10.00	6	7	5
10.01—20.00	2	4	4
20.01—40.00	4	3	1
> 40.01	1	2	3
Total	30	31	29

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-11. The CVs shown in your Table 1 range from a low of 0.46 percent to a high of 66.87 percent. The Postal Service and the Commission, of course, use only the point estimates of cost produced by the IOCS. How high can the CV's be and still provide confidence that the point estimate of cost is in fact a reliable indicator of the true cost?

RESPONSE:

The CVs are provided so that users of the IOCS estimates can weigh how much random variation could be expected simply due to the specific sample we observed against the intended use of the estimate. There is no one answer or formula to indicate that only estimates with CVs below a pre-determined level should be used. The decision as to whether a particular level of sampling variation is acceptable depends on the intended use of the estimate.

Consider a cost estimate of 10,000,000 with a CV of 10%. Then the associated 95% confidence interval would be from 8,000,000 to 12,000,000. With this 10% CV, we would be highly confident that the true cost is less than 15,000,000, but we would be less confident that the true cost is less than 10,500,000.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-12. Referring to the distribution of CVs shown in ANM/USPS-T2-9, which of the CVs shown there are would you consider to be so high as to render the cost estimate either unreliable, or likely to result in substantial variation from case to case?

RESPONSE:

A point estimate with high CV could be expected to vary more substantially from sample to sample than a point estimate with a lower CV. The user of that estimate is made aware of the extent of that type of variation via sampling error estimates, such as those provided in Table 1. There is no one answer or formula to indicate that only estimates with CVs below a pre-determined level should be used. See my response to ANM/USPS-T2-11.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-13. USPS witness Sharon Daniel (USPS-T-28) uses IOCS tallies to estimate the cost of First-Class Mail, Periodicals, and Standard A mail by weight increment.

(a) Can the formula which you use to compute the CV for cost estimates by subclass also be used to compute the CV for the cost estimates by weight increments in witness Daniel's testimony? Please explain.

(b) Please provide the CV's for each weight increment cost estimate developed by witness Daniel, and explain what formula you use for this purpose.

RESPONSE:

(a) - (b) The bootstrap procedure can be used to compute CVs for many different types of cost estimates developed from the IOCS sample data, including the cost estimates by weight increment produced by witness Daniel.

However, even with modern computers, both the time required and costs of directly computing variances for a large number of estimates is excessive. When a simple relationship between survey estimates and their variances can be determined from a relatively small subset of possible estimates, that relationship can be used to approximate variances for other estimates. This is referred to as the generalized variance function (GVF) approach. The GVF approach is particularly useful for surveys for which it is impractical to compute and tabulate CVs for every potential estimate, or when it is not possible in advance to anticipate all estimates for which sampling error estimates may be required.

For IOCS, a GVF was estimated using the set of estimates and associated bootstrap variances from USPS-LR-I-12. This GVF is specified as follows:

$\ln(V) = a + b \ln(C)$, where

C = the cost estimate,

V = the relative variance of the cost estimate = $(CV)^2$,

a = 4.14590908, and

b = -0.943352.

This GVF was then evaluated for each IOCS-based cost estimate contained in Tables 1, 2, and 4a of witness Daniel's testimony, USPS-T-28. The results are provided in the attached table for the cost segment 3.1, 3.2, and 6.1 estimates.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

CVs for Cost Estimates of USPS-T-28 Table 1:

Costs by Ounce Increment for First-Class Single-Piece

(from USPS LR-I-91 detailed costs)

	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11+	Total
all mp (3.1) tally	5,688,966	1,046,407	506,122	357,547	143,170	94,341	65,956	65,005	42,948	42,304	23,260	8,076,026
cv estimate	0.5%	1.2%	1.6%	1.9%	2.9%	3.6%	4.2%	4.3%	5.2%	5.2%	6.9%	0.4%
window service (3.2) tally	716,026	49,149	19,864	15,205	7,834	5,013	3,169	2,452	2,207	1,878	2,459	825,257
cv estimate	1.4%	4.9%	7.5%	8.5%	11.6%	14.3%	17.7%	20.0%	21.0%	22.7%	20.0%	1.3%
delivery in-office (6.1) tally	1,071,699	115,867	40,767	27,972	12,610	7,091	4,231	4,781	3,189	1,949	1,751	1,291,907
cv estimate	1.1%	3.2%	5.3%	6.4%	9.2%	12.1%	15.5%	14.6%	17.7%	22.3%	23.5%	1.0%
Total of 3.1, 3.2, and 3.3	7,476,693	1,211,423	566,754	400,724	163,614	106,445	73,355	72,238	48,343	46,130	27,470	10,193,189
cv estimate	0.5%	1.1%	1.5%	1.8%	2.8%	3.4%	4.0%	4.1%	4.9%	5.0%	6.4%	0.4%

CVs for Cost Estimates of USPS-T-28 Table 2:

Costs by Ounce Increment for First-Class Presort

(from USPS LR-I-91 detailed costs)

	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11+	Total
all mp (3.1) tally	2,100,683	191,020	63,609	45,344	10,313	9,605	2,354	2,923	1,270	3,810	1,709	2,422,927
cv estimate	0.8%	2.6%	4.3%	5.1%	10.2%	10.5%	20.4%	18.4%	27.3%	16.3%	23.7%	0.8%
window service (3.2) tally	38,043	1,841	204	111	377	23	13	10	11	9	126	40,613
cv estimate	5.5%	22.9%	64.7%	86.2%	48.4%	180.6%	238.2%	267.0%	255.8%	280.8%	81.1%	5.3%
delivery in-office (6.1) tally	606,998	45,769	8,792	4,082	1,223	1,012	519	754	201	188	238	668,395
cv estimate	1.5%	5.0%	11.0%	15.7%	27.8%	30.4%	41.6%	34.9%	65.1%	67.2%	60.1%	1.4%
Total of 3.1, 3.2, and 3.3	2,745,724	238,629	72,605	49,537	11,914	10,640	2,886	3,687	1,482	4,007	2,073	3,131,934
cv estimate	0.7%	2.3%	4.1%	4.9%	9.5%	10.0%	18.5%	16.5%	25.4%	15.9%	21.7%	0.7%

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

CVs for Cost Estimates of USPS-T-28 Table 4a:

Regular and Nonprofit Periodicals Combined Unit Costs by Weight Increment

(from USPS LR-I-93 detailed costs)

	0 to 1	1 to 2	2 to 3	3 to 5	5 to 6	6 to 7	7 to 9	9 to 13	over 13	Total
all mp (3.1) tally	43,531	92,106	93,316	258,185	111,023	73,024	129,619	108,149	163,659	1,072,613
cv estimate	5.2%	3.6%	3.6%	2.2%	3.3%	4.0%	3.1%	3.4%	2.8%	1.1%
window service (3.2) tally	6	1,056	205	1,132	154	382	392	306	144	3,759
cv estimate	339.4%	29.8%	64.5%	28.8%	73.8%	49.3%	47.5%	53.4%	76.2%	16.4%
delivery in-office (6.1) tally	11,502	26,494	22,182	65,332	29,856	26,221	34,208	27,536	22,449	265,781
cv estimate	9.7%	6.5%	7.1%	4.3%	6.2%	6.5%	5.8%	6.4%	7.0%	2.2%
Total of 3.1, 3.2, and 3.3	55,040	119,656	115,703	324,648	141,033	99,608	164,220	135,992	186,252	1,342,152
cv estimate	4.6%	3.2%	3.3%	2.0%	3.0%	3.5%	2.8%	3.0%	2.6%	1.0%

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-14. USPS witness Sharon Daniel states that the "IOCS was not specifically designed for the purpose of measuring the impact of weight on costs." USPS-T-28, p. 4, lines 24-28.

(a) Do you agree?

(b) If your answer to part (a) is anything but unqualified agreement, please explain fully.

(c) If the Postal Service contends that the IOCS produces a valid and reliable measure of the effect of weight on costs, please produce all studies, analyses, and similar documents generated since Docket No. R97-1 that support this contention.

RESPONSE:

(a)-(b) I agree with Sharon Daniel's statement. I do not think that IOCS alone can measure the impact of weight on costs because it cannot be used to estimate volumes. However, the IOCS can produce reliable estimates for which it was not specifically designed. For example, it can be used to estimate costs by weight increment for various subclasses of mail. My response to ANM/USPS-T2-13 demonstrates that there are many weight increments for which the IOCS cost estimates have small CV's.

(c) Not applicable.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-15. During Base Year 1998, what was the Postal Service's total expenditure on the IOCS? Please break down the total into IOCS tally clerks, training, computer processing, etc.

RESPONSE:

The Postal Service's expenditure for salaries and benefits for IOCS field data collection, training, and supervision is estimated to be approximately 15 million dollars for FY 1998.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-16. Witness Kingsley, USPS-T-10, describes future plans to mechanize and automate mail handling further, including automation of flats processing, possible DPS-ing of flats, tray management systems, robotics, mail cartridge systems for DBCSs, etc.

(a) Please confirm that prior automation has been accompanied by a decrease in the percentage of direct IOCS tallies and an increase in the number of mixed mail and not handling tallies. If you fail to confirm without qualification, please explain fully your answer, and produce or provide page citations to all data on which you reply.

(b) Is there any reason to doubt that the percentage of direct tallies will diminish further with continued increases in mechanization and automation? Please explain any answer that is not an unqualified negative.

(c) Please confirm that a continued diminution of direct IOCS tallies is likely to lead to further increases in the range of the coefficient of variation at the 95% confidence level, a further diminution in the reliability of IOCS cost estimates, and increasing year-to- year variability in mail processing cost estimates. Please explain any answer that is not an unqualified confirmation.

RESPONSE:

(a)-(c) I did not study this, but see my responses to ANM/USPS-T2-1(a) and to ANM/USPS-T2-9, parts (c) and (e). The purpose of my testimony is to describe the In-Office Cost System for Base Year 1998 and to present measures of reliability of major cost estimates for that time period. This does not extend to determining or speculating on issues of cost causality.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-17. What is the role of the IOCS in a "lights-out" facility (such as the Postal Service's experimental facility in Ft. Myers, Florida is reported to be) where most of the labor is involved in loading and off-loading trucks, moving empty equipment, removing occasional machine jams, maintenance and repairs, etc.?

RESPONSE:

The Ft. Myers facility is included in the IOCS sample, and the role of IOCS in that facility is much like the role IOCS plays in other facilities. Although the Ft. Myers P&DC is refered to as a "lights-out" facility, it is my understanding that it has not yet reached the level of automation implied in this question. The activities referred to in this interrogatory correspond to those measured in IOCS questions 18 and 19. A tabulation of BY 1998 IOCS question 18 data shows that only about 12.2 percent of the observations are working on the "Platform" while about 64.5 percent were working in "Distribution and Related Mail Processing". Also, a tabulation of the activity codes for clerk and mailhandlers shows that only 7.1 percent of the observations were handling empty equipment while 61.2 percent of the observations were handling direct mail.

Q18	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1. Platform	48	12.2	48	12.2
2. Collect&prep	22	5.6	70	17.9
3. Mailproc&dist	253	64.5	323	82.4
4. Misc operation	8	2.0	331	84.4
6. Admin/other	61	15.6	392	100.0

ACT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
direct mail	240	61.2	240	61.2
empty equip	28	7.1	268	68.4
mixed mail	59	15.1	327	83.4
other	65	16.6	392	100.0

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-19. This question refers to attachment ANM/USPS-T2-19, which is hereby incorporated as part of the question. The mail processing cost and volume data in the attachment are from LR-I-96. The percentages in the bottom portion are computed from the data in the top part.

(a) Please confirm that the mail processing cost and volume data in the top portion have been correctly transcribed. If you do not confirm, provide the correct data.

(b) Please confirm that, for shape, presort condition and weight, the three Commercial ECR letter categories shown here (Basic, Auto and High Density/Saturation combined) constitute reasonably homogeneous subcategories vis-a-vis their respective Nonprofit ECR letter counterparts? If you do not confirm, please provide and discuss all significant cost-causing differences.

(c) The bottom portion of the table in the attachment indicates that, for Auto ECR letters, the Nonprofit Test Year volume (439 million) amounts to 17.4 percent of the Commercial volume (2,528 million), while nonprofit dollar-weighted IOCS tallies in Test Year amount to 17.9 percent of commercial. Please confirm that the similarity of the two percentages is unsurprising in light of the homogeneity of the mail. Please explain fully any failure to confirm.

(d) The bottom portion of the table also shows that in Test Year Basic Nonprofit ECR, letters Nonprofit receive 28.9 percent of the dollar-weighted amount attributed to Commercial ECR letters, yet the volume of Nonprofit ECR Basic letters (888 million) amounts to only 12.3 percent of the volume of Commercial ECR Basic letters (7,212 million). If Nonprofit and Commercial ECR Basic letters have an equal chance of being sampled each time an IOCS tally happens to be taken from ECR Basic letters, what is the probability of drawing a sample that is so disproportionate to the volumes of each respective rate category? What is the coefficient of variation (CV) for the mail processing cost estimate for Nonprofit Basic ECR letters?

(e) For all ECR non-letters combined, Nonprofit volume (934 million) amounts to 4.6 percent of Commercial volume (20,502 million) while Nonprofit mail processing cost (based on dollar-weighted IOCS tallies) amounts to 12.0 percent of Commercial. If Nonprofit and ECR non-letters have an equal chance of being sampled each time an IOCS tally happens to be taken from ECR non-letters, what is the probability of drawing a sample that is so disproportionate to the volumes of each respective category? What is the coefficient of variation for the mail processing cost estimate for (i) Nonprofit Basic non- letters, (ii) Nonprofit High Density/Saturation non-letters, and (iii) all Nonprofit non-letters combined?

(f) For all ECR combined, Nonprofit volume (2.9 million) amounts to 8.6 percent of Commercial volume (33.6 billion), while dollar-weighted Nonprofit mail processing cost (based on IOCS tallies) amounts to 17.3 percent of Commercial. If Nonprofit ECR mail has an equal chance of being sampled each time an IOCS tally happens to be taken from ECR mail, what is the probability of drawing a sample what is so disproportionate to the volumes of each respective category?

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

What is the coefficient of variation for the mail processing cost estimate for all Nonprofit ECR mail?

(g) The table in the attachment relies solely on dollar-weighted IOCS tallies. For each mail processing cost estimate shown in the top portion of the table, please provide the number of direct tallies that underlie and form the basis for the dollar-weighted cost estimate. If the raw tallies are not distributed in proportion to the dollar-weighted cost estimates, please explain (i) which operations and their associated tallies have a higher- than-average cost, and (ii) why were nonprofit tallies disproportionately distributed among the operations with higher-than-average cost.

(h) As pointed out in the preceding part (f), the volume of all Nonprofit ECR (2.9 million) amounts to only 8.6 percent of Commercial volume (33.6 billion). On a percentage basis, the volume of Nonprofit ECR might reasonably be described as "small," if small is defined as anything less than 10 percent. From a statistical viewpoint, does 2.9 million pieces constitute a relatively small volume for obtaining reasonably accurate mail processing cost estimates that are not likely to offer much variation owing to random differences in the sample?

(i) How large do the volume and the sample have to be before one can expect relatively little variation in the cost estimate owing to random variation?

RESPONSE:

Parts (a), (b), and (g) have been redirected to witness Daniel.

(c)-(f) I did not produce any test year costs, nor produce CVs for test year cost estimates. Evaluation of test year methodologies is beyond the scope of my testimony. Please see my response to ANM/USPS-T2-16. However base year subclass level CVs are provided for mail processing costs in Table 1 of my testimony. Coefficients of variation for cost estimates of other categories of mail can be approximated using the generalized variance function as outlined in my response to ANM/USPS-T2-13. Since IOCS samples employee in-office time and not mail volume, I have not studied mailpiece selection probabilities.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

(h) See my respone to parts (c)-(f), above. The IOCS does not sample mail volumes. It is possible for two products to have similar volumes, yet dissimilar mail processing costs and consequently dissimilar CVs for those mailprocessing costs. Measures of sampling error for mail processing cost estimates are reported in Table 1 of my testimony for the BY 1998 cost estimates. The CV for Nonprofit ECR mailprocessing costs is about 7.22 percent.

(i) See my responses to part (h) of this interrogatory, above, and to ANM/USPS-T2-11. The magnitude of costs (not volumes) for an activity drives the CVs in IOCS.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T2-23. Please answer the second sentence of ANM/USPS-T2-15.

RESPONSE:

A further breakdown of IOCS costs to the requested level of detail is not available. I am informed that the Postal Service does not have accounting data at this level of detail.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO AN INTERROGATORY OF MAJOR MAILERS ASSOCIATION

MMA/USPS-T2-1. On page 3 of your prepared testimony you indicate that one purpose of your testimony is to discuss the reliability of major cost estimates that are generated from the In-Office Cost System. In Table 1, entitled "CV's For Mailprocessing Costs" and Table 2, entitled "CV's For City Carrier In Office Costs," you list the MODS-based estimated mean distributed costs and coefficients of variation.

(a) Please refer to Library References LR-I-81 and LR-I-137. How accurate are the individual MODS cost pool data shown in those Library References for First-Class single piece letters, single piece metered letters, presort automated letters, and presort non-automated letters, presort carrier route letters, and presort non-carrier route letters. Please explain your conclusions regarding the accuracy of the individual MODS cost pool data.

(b) Please explain the meaning of the coefficient of variation (.46% for First- Class letters and parcels and 1.22% for presort letters and parcels) as that term is used in your Table 1.

(c) Please explain the meaning of the coefficient of variation (.69% for First- Class letters and parcels and 1.35% for presort letters and parcels) as that term is used in your Table 2.

(d) According to the Postal Service's institutional response to MMA/USPS-T24-3(a), the average weight of a metered letter is .57 ounces. According to LR-I-91a, the average weight of a presorted letter is .62 ounces. Are the MODS cost pools presented in LR-I-162a (which comes from LR-I-61) sufficiently reliable to accurately reflect differences in mail processing costs for two categories of mail of the same shape, but that experience differences in the average weight of .05 ounces? Please explain your answer and provide any documents that support your conclusions.

(e) According to USPS witness Miller's response to MMA/USPS-T24-1(a), heavy weight metered letters (weighing between 3.5 and 13 ounces) "might be affecting" the cost pool estimates, causing those costs to be 64% higher than for automated presort letters that weigh up to 3.3362 ounces. According to LR-I-91b, First-Class single piece letters weighing between 3.5 and 13 ounces comprise .16% of all single piece letters. Are the MODS cost pools presented in LR-I-162a sufficiently reliable to accurately reflect differences in mail processing costs for two categories of mail of the same shape, but that experience differences in the upper weight limit for such a small number of pieces? Please explain your answer.

(f) When aggregate MODS cost data are broken down to the specific cost pool levels that are shown, for example, in LR-I-162a, which is more accurate: the individual cost pool data amounts or the sum of the individual cost pool data amounts? Please provide an explanation for your conclusions regarding this matter.

RESPONSE:

(a) I have not studied this matter and am not familiar with these library references. I have provided CVs for base year IOCS cost estimates in Tables 1-3 of my

testimony at the subclass level. It is not feasible to produce CVs at all other levels of disaggregation or for all other estimates. In my response to ANM/USPS-T2-13, I have provided a generalized variance function (GVF) that may be useful for approximating sampling error for other IOCS based cost estimates. This GVF is appropriate for cost estimates at the national level, across cost pools. We have not developed CVs at the cost pool level and the GVF was not developed from cost pool level estimates. It is possible that the GVF could under- or over-state variances at the cost pool level due to differences in cost pool variability factors and due to the proportion of the cost pool total due to direct mail IOCS dollar weighted tallies.

(b)-(c) The meaning of the column labeled "CV" in Tables 1 to 3 of my testimony is the same. The CV column refers to the estimate of the coefficient of variation for the corresponding cost estimate provided in the column labeled "Cost Est." of the table. This is a measure of the amount of variation one could expect due to sampling alone. See page 6, lines 15-20. The CV is calculated by dividing the standard deviation (column labeled "Std Deviation") by the cost estimate. Thus, if the CV estimate were 10%, then the standard deviation estimate is 10% the magnitude of the cost estimate.

For the "Letters and Parcels" row of Table 1, the CV is 0.46 percent. This means that for this row, the standard deviation is approximately 0.46 percent of the size

of the cost estimate. This is verified by dividing the estimated standard deviation (22,659) by the cost estimate (4,972,053) as follows:

(22659)/(4972053) = 0.004557 = 0.4557 percent, or approximately 0.46 percent.

The other CVs reported in Tables 1-3 have similar meaning.

(d) See my response to part (a) of this interrogatory, above. Although the IOCS does record the weight of the mailpiece for observations in which the sample employee was handling a piece of mail, it does not measure distinctions in weight as small as 0.05 ounces. In question 23G, the weight is recorded in half ounce increments up to 4 ounces, and then in whole ounce increments for weights over 4 ounces. See page 16-1 of the F-45, USPS-LR-I-14.

(e) See my response to part (a) of this interrogatory, above.

(f) See my response to part (a) of this interrogatory, above. However, general statements can be made regarding sums of estimates and their sampling errors. For example, if the estimates are not correlated[1], then the CV of a sum would be

$$cv(x+y) = (x^2 cv(x)^2 + y^2 cv(y)^2)^{0.5} / (x+y).$$

For the IOCS estimates and CVs reported in my testimony, it is often the case that $cv(x+y)<\min(cv(x),cv(y))$, however, one can construct examples for which

[1] This will underestimate (overestimate) the sampling error if the two estimates are highly positively (negatively) correlated.

cv(x+y)>cv(x).[2] In addition, the IOCS generalized variance function may provide additional insights regarding the reliability of individual estimates and of their sums.

[2] For example, if x and y are uncorrelated, x=100, cv(x)=.2, y=100, and cv(y)=.1, then cv(x+y)=.11.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF THE NEWSPAPER ASSOCIATION OF AMERICA,
REDIRECTED FROM WITNESS DANIEL

NAA/USPS-T28-3. Please refer to Library Reference USPS-I-100, textual summary, at page 1-2.

a. Please explain why data are collected by half-ounce weight increments up to four ounces, but only by full ounce increments between four and 16 ounces.

b. Did you make any specific use in your testimony of the half-ounce increments between one and four ounces. If so, please explain where. If not, please explain why not.

RESPONSE:

a. Data are collected by half-ounce increments so that IOCS might be used to provide potentially useful weight-related cost insights beyond what could be derived from tallies which only record full ounces. Below four ounces, the half-ounce weight data are also used to edit and validate international observations, because the international LC mail has a half-ounce rate structure. Half-ounce data are not recorded beyond four ounces because in that weight range there is a relatively low frequency of IOCS observations for small weight increments.

b. Answered by witness Daniel.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAMAGE
TO INTERROGATORIES OF UNITED PARCEL SERVICE

UPS/USPS-T2-1. Identify all instances in which you have relied on or used in your testimony in any way any FY 1999 cost, revenue, volume, or other data, and state in each such instance why you used FY 1999 data instead of data for BY 1998.

RESPONSE:

My testimony does not rely on FY 1999 cost, revenue, volume, or other data.

CHAIRMAN GLEIMAN: Is there any additional designated written cross examination that anyone has? If not, then we will move on to oral cross examination.

The only participant that filed for oral cross examination was the Major Mailers Association. Mr. Hall, I understand you are the point man for that organization -- if you would like to begin.

MR. HALL: Thank you, Chairman Gleiman. We have reviewed the possible cross and have decided at this point that we do not have to ask any questions. We are satisfied with the written designations.

CHAIRMAN GLEIMAN: If that is the case, then I think we move right along to questions from the bench. Are there questions from the bench that anyone has? Any of my colleagues?

[No response.]

CHAIRMAN GLEIMAN: If not, I have a few questions that I would like to start with and then perhaps my colleagues will have had an opportunity to gather their thoughts and see if they have any additional questions.

When you are dealing with a relatively small volume of mail, maybe a billion pieces or two billion pieces of mail in a particular subclass, is that mail going to be sampled less than a larger subclass that has 50 billion pieces, say, in it?

THE WITNESS: Well, in IOCS we are not actually sampling the mail, we are sampling employees and recording their activity at any point in time. Some classes of mail may require more activity by the employees than others so it is not -- it is not completely correct that it's strictly more volume it corresponds to.

CHAIRMAN GLEIMAN: Well, let's add another consideration. Let us assume for the sake of discussion that we are dealing with a subclass of mail that has a relatively-speaking small volume and also is heavily work shared so that it is not in the mailstream from collection to delivery but enters the mailstream further downstream, if you will. Does that have an impact on the extent to which the mail is likely to be -- or employees handling that mail, employees are likely to be handling that mail when the employees are sampled?

THE WITNESS: Yes. In that situation there would be a substantial less amount of employee cost handling that mail and we would measure that amount of less cost with IOCS so we wouldn't capture that many employees actually handling that class of mail.

CHAIRMAN GLEIMAN: It is likely in that kind of a situation that the CV would be higher than it would likely be for a larger volume type of mail, a category of mail that was less work shared?

THE WITNESS: In general terms, yes. The estimates of costs that are small from IOCS would have larger CVs than cost estimates that are large. I'm sorry?

CHAIRMAN GLEIMAN: You can either pull the mike closer -- if you wish, you could just stick the little mike onto your --

THE WITNESS: I will try talking closer to the mike, see if that works.

CHAIRMAN GLEIMAN: We can't get anybody to buy our new mike. I decided not to use one either. I find myself putting it on and off as we went through the hearings.

Speaking of CVs, is there some number, you know, if it is below "x" there is a relative degree of confidence, people are comfortable with the underlying numbers that produce the coefficient of variability but if it is higher than "x" perhaps people are a little bit less comfortable with the underlying numbers?

THE WITNESS: Well, I tried to address this in one of my interrogatory responses. I believe it really depends on what the intended use is also what alternatives you have to the data.

There is not a hard and fast rule for that.

CHAIRMAN GLEIMAN: Is it better to have a coefficient of variability of 2.57 percent or 7.22 percent?

THE WITNESS: Well, clearly when you have a

smaller CV, such as the ~~2 whatever~~ 2-point-whatever percent, your confidence interval is going to be narrower and you can make different probability statements about what the true value would be than you could with something with a larger CV.

CHAIRMAN GLEIMAN: Relatively speaking, if you were dealing with something that was 2.5 as opposed to 7.5, just to have some round numbers, percent, two different coefficients of variability, could you draw some conclusions about your confidence in one number versus -- or the underlying numbers associated with the 2.5 as opposed to the numbers underlying 7.5?

THE WITNESS: I mean, yes, you can say that there is going to be less sample, a lot less sampling variation for the one with that 2-point-something percent CV than there is with the 7-point-something CV. In other words, if you were to repeat the sample a number of times and produce the same estimates, the same functional estimates, you would likely see more variation with that 7 percent CV than you would with the 2 percent CV.

So the answer is yes, there is lots less variation corresponding to the estimates with smaller CVs.

CHAIRMAN GLEIMAN: And you mentioned the confidence interval before. The higher in that case, the confidence interval would be much less than 95 percent, say.

THE WITNESS: Well, let's say the width of the

confidence interval would be narrower, a 95 percent confidence interval, it wouldn't be as wide for a 2 percent CV. Does that answer your question?

CHAIRMAN GLEIMAN: Yes. That is what -- I am trying to sort these concepts out in my own mind and how they relate.

I have not had a chance to review the open transcript from yesterday, but at one point last evening, counsel for ValPak, Carol Wright, Mr. Olson, was asking some questions of Witness Hunter, and he was asking Witness Hunter about the treatment of letter size Standard A pieces that were above the break point in terms of weight, otherwise met all the conditions of being letter, in terms of their thickness and their aspect ratio, height, length, and if I understood correctly, and again, I haven't had a chance to review the transcript, but I thought Mr. Hunter said that in the case of the RPW system, that the inputs were obtained from the 3602s that were filed by mailers. I think I have the right form number, I usually get the form numbers confused, but I think that is the one that was mentioned.

And Mr. Hunter mentioned that for the type of piece that was being discussed, on the back side of the form, that there was an indication of whether it was considered to be a letter or a flat, and that if it was over

the break point, that it was tallied as a flat, or counted as a flat for RPW purposes, even though it was letter size, the determining factor apparently being that it was above the break point weight-wise.

And Mr. Olson's question to Mr. Hunter, and Mr. Hunter indicated that he was not an expert on the IOCS, the question was, how does the IOCS treat a piece of mail like that, if, when an employee is sampled, that employee happens to be handling said piece of mail? Is it characterized as a letter or a flat? Would you happen to know the answer to that, or could you get it for us?

THE WITNESS: In IOCS, the shape of a piece is determined by its physical characteristics, the length, width and thickness. Presumably, if it met those criteria for a letter, it would -- we would record it as a letter. We would not say that it is greater than a break point and therefore its shape is something else.

I am not sure -- I mean I --

CHAIRMAN GLEIMAN: That is satisfactory.

THE WITNESS: Okay.

CHAIRMAN GLEIMAN: There was some confusion and Mr. Hunter was not exactly sure, and that helps, I think. I have, I promise, really, just one more question, and I do mean just one more question. In the last rate case, there was considerable discussion about the manner in which the

Postal Service distributed costs for mixed mail tallies and for nonhandling tallies. And the Commission, as I recall, decided that rather than base it on the direct tallies on the dock, which was a very low percentage of tallies, direct tallies, 10 percent or something on that order, and then looking at what made up the 10 percent and making the distribution based on that, and we applied this rule in our recommended decision, that we would use -- a larger base should be used. That you should look at all the tallies of the mail throughout the system, and the distribution should be made not based on the makeup of that 10 percent, but proportionately on a broader base.

As I understand it, in the instant case, the Postal Service has treated nonhandling tallies in that manner, distributing them on a broader base, but has not distributed the mixed mail tallies on the broader base. Is my understanding correct, Part A and Part B? So, can you explain why it is you treated the nonhandling tallies, the distribution of the nonhandling tallies one way and the mixed tallies another way?

THE WITNESS: Well, I don't think I can respond very well to that because I am not the person -- I don't think I am the appropriate witness for that. The distribution, the methodology for distributing mixed mail or nonhandling, I believe is in ~~Fantai-Smith's~~ Van-Ty-Smith's testimony. I am

not positive, but we can check on that.

CHAIRMAN GLEIMAN: All right. I will reserve the question for Witness ~~Fantai Smith~~ Van-T-Smith in that case. And I thank you.

I have no further questions. Does anyone else?

[No response.]

CHAIRMAN GLEIMAN: If there are no other questions, then that brings us to follow-up as a consequence of questions from the bench. The Consumer Advocate, Mr. Costich.

MR. COSTICH: Thank you, Mr. Chairman, Rand Costich for the OCA.

CROSS-EXAMINATION

BY MR. COSTICH:

Q Welcome back, Mr. Ramage.

A Thank you.

Q The Chairman asked you some questions about an otherwise letter-shaped piece that, because of its weight, is recorded as a flat in the RPW. Do you recall that?

A Yes.

Q When an IOCS tally-taker samples an employee and records characteristics of a piece that that employee might be handling, does the employee determine that the piece is a letter or a flat?

A This is the data collector which determines that.

Q The data collector will record letter, flat?

A They will record the shape under the shape question on the IOCS form, and there is various choices, letter or flat, card, parcel, and they will, based on the physical characteristics of the piece, they will select a shape.

Q Do they carry around templates so they determine whether a borderline piece is a letter or a flat?

A I am not positive, we can check on that.

Q It may not be necessary. Do they record the dimensions of the piece?

CHAIRMAN GLEIMAN: Mr. Costich, could you speak up a little bit? We are having difficulty hearing you. We have our cone of silence operating again up here in the front of the room.

THE WITNESS: No, the answer to that is we don't record characteristics, I mean the dimensions of a piece.

BY MR. COSTICH:

Q So there would be no way for a computer program to reclassify a piece from letter shape to flat shaped based on the characteristics recorded?

A I am not positive, I haven't looked into that.

MR. COSTICH: Could I ask that the witness or the Postal Service look into that?

CHAIRMAN GLEIMAN: You can certainly ask. Is the

Postal Service willing to look into that?

MR. HOLLIES: I believe I saw the witness nod affirmatively.

THE WITNESS: Excuse me. Yes, it is possible to look into that.

MR. HOLLIES: That is sufficient, I think, to take on that commitment.

CHAIRMAN GLEIMAN: And when can we expect a response?

MR. HOLLIES: It would appear that your usual one week period probably can be complied with in this instance.

CHAIRMAN GLEIMAN: That was a can be complied with?

MR. HOLLIES: That is correct.

CHAIRMAN GLEIMAN: Okay. Is that agreeable with you, -- to you, Mr. Ramage? I mean Mr. Costich.

MR. COSTICH: Folks always get us mixed up.

CHAIRMAN GLEIMAN: You look so much alike. You both wear glasses.

BY MR. COSTICH:

Q Just so we are sure on the question, what I am hoping to determine is whether IOCS could recognize the kinds of pieces that the Chairman was discussing earlier, the letters that weigh more than the break point, and somehow reclassify their shape during computer processing of

the data.

A Yeah, we can look into that and make a determination of that.

MR. COSTICH: Thank you. I have no further questions.

CHAIRMAN GLEIMAN: Is there any further follow-up?

[No response.]

CHAIRMAN GLEIMAN: If not, that brings us to redirect. Would you like a moment or two?

MR. HOLLIES: Definitely.

CHAIRMAN GLEIMAN: Five okay, or do you need more?

MR. HOLLIES: Five may work.

CHAIRMAN GLEIMAN: Okay. Five it is. We are off the record.

[Recess.]

CHAIRMAN GLEIMAN: Mr. Hollies?

MR. HOLLIES: As much as I might personally care to delve further into statistical research design, my colleagues have persuaded me otherwise. We have no redirect.

CHAIRMAN GLEIMAN: Since we had booked some time for your redirect, can I ask some more questions?

[Laughter.]

MR. HOLLIES: I would like to at least let you know here that the next witness is still reviewing the

designated written cross, and is not yet ready. It will be a few minutes yet.

CHAIRMAN GLEIMAN: You're encouraging --

MR. HOLLIES: Please do not take that as encouragement. It was beyond this; it's a separate procedural matter, I thought you might care to be advised of.

CHAIRMAN GLEIMAN: Several of your colleagues just went pale at the suggestion that you made that I fill up the time with some additional questions.

[Laughter.]

CHAIRMAN GLEIMAN: If there is no redirect, Mr. Ramage, that completes your testimony here today. We appreciate your appearance and your contributions to the record. Thank you again, and you are excused.

[Witness Ramage excused.]

[Fire alarm sounds.]

CHAIRMAN GLEIMAN: And what great timing. The fire bell just rang. Ms. Daniel, you can take all that stuff out to the sidewalk with you, and continue. We'll reconvene in 15 minutes.

[Recess.]

CHAIRMAN GLEIMAN: Mr. Alverno, would like another moment? We can arrange that.

MR. ALVERNO: I think she's just making a

correction to an interrogatory that will be designated.

CHAIRMAN GLEIMAN: Let's just wait a second. If you want to let me know when you're ready to proceed?

MR. ALVERNO: Okay, thank you.

CHAIRMAN GLEIMAN: Mr. Alverno, if you would like to introduce the next Postal Service witness?

MR. ALVERNO: The Postal Service calls Sharon Daniel.

CHAIRMAN GLEIMAN: Mr. Alverno, you can proceed.

Whereupon,

SHARON DANIEL,

a witness, having been called for examination, and, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. ALVERNO:

Q Please introduce yourself.

A My name is Sharon Daniel.

Q And where are you employed?

A I'm employed in Cost Studies at the United States Postal Service Headquarters.

Q Now, earlier I handed you a copy of a document entitled Direct Testimony of Sharon Daniel on Behalf of United States Postal Service. I've now given those to the Reporter.

Did you have a chance to examine those documents?

A I did.

Q And was this testimony prepared by you or under your direction?

A It was.

Q And did you have any changes or corrections to make?

A I will just note that the errata that we filed on March 1st were included.

Q And with these changes, if you were to testify orally today, would your testimony be the same?

A It would.

MR. ALVERNO: Mr. Chairman, I would like to ask that the Direct Testimony of Sharon Daniel on Behalf of United States Postal Service be received into evidence at this time.

CHAIRMAN GLEIMAN: Is there any objection?

[No response.]

CHAIRMAN GLEIMAN: Hearing none, I'll direct that counsel provide two copies of the corrected Direct Testimony of Witness Daniel to the Reporter, and the testimony will be received into evidence and, as is our practice, will not be transcribed into the record.

[Direct Testimony of Sharon Daniel, USPS T-28, was received in

evidence.]

MR. ALVERNO: We have some Library References, too, that we'd like Sharon Daniel to sponsor.

CHAIRMAN GLEIMAN: You can move them at this point.

MR. ALVERNO: Okay.

BY MR. ALVERNO:

Q Ms. Daniel, are you familiar with Library References USPS LRI-91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, and 173?

A Yes, I am.

Q And do you sponsor these Library References?

A Yes, I do.

MR. ALVERNO: Mr. Chairman, I ask that these Library References be moved into evidence at this time.

CHAIRMAN GLEIMAN: They will be moved into evidence, and they will not be transcribed into the record.

[Library References Numbered LRI-91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, and 173 were received into evidence.]

CHAIRMAN GLEIMAN: Ms. Daniel, have you had an opportunity to examine the packet of Designated Written Cross Examination that was provided to you earlier today?

THE WITNESS: Yes, I have.

CHAIRMAN GLEIMAN: Just recently. If these questions were asked of you today, would your answers be the same as those you previously provided in writing?

THE WITNESS: I would have to make a few corrections.

CHAIRMAN GLEIMAN: Can you tell us what those corrections are?

THE WITNESS: Absolutely. I have changed the header on Attachment 2, the Total Tally Record Count Pages of ValPak 16, 17, and 25, replace ABP with VP.

I would also note that I added attachments to ValPak-24 that were missing from the pile, and I added pages -- the attachments to NAA-22.

I've also swapped pages of ADVO-12 with the more readable copy.

CHAIRMAN GLEIMAN: And those changes have been incorporated into the package?

THE WITNESS: Yes, sir. And those are the only changes you made? Right, the revised version to ADVO-14 and ValPak-9 that we filed yesterday are included.

CHAIRMAN GLEIMAN: Counsel, if you would please provide two copies of the corrected Designated Written Cross Examination of Witness Daniel to the Reporter, I'll direct that the material be received into evidence and transcribed into the record.

[Designation of Written Cross Examination of Sharon Daniel was received into evidence and transcribed into the record.]

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, DC 20268-0001

Postal Rate and Fee Changes, 2000 Docket No. R2000-1

DESIGNATION OF WRITTEN CROSS-EXAMINATION
OF UNITED STATES POSTAL SERVICE
WITNESS SHARON DANIEL
(USPS-T-28)

Party	Interrogatories
Advo, Inc.	AAPS/USPS-T28-2, 4-5 ABA&NAPM/USPS-T28-4, 6, 9 ADVO/USPS-T28-1-4, 8-12, 14 ANM/USPS-T28-7-8 MMA/USPS-T28-4 NAA/USPS-T28-1, 5, 7, 11-14 VP-CW/USPS-T28-18, 22-23
Alliance of Nonprofit Mailers	ABA&NAPM/USPS-T28-2 ANM/USPS-T2-19a-b, g redirected to T28 ANM/USPS-T28-1-14
American Bankers Association and National Association of Presort Mailers	ABA&NAPM/USPS-T28-1-2, 4-6, 9-12, 17, 19-20, 22, 26-29, 32-33, 37 MMA/USPS-T28-5, 8, 11
Mail Order Association of America	AAPS/USPS-T28-2-5 ABA&NAPM/USPS-T28-5, 8, 10 ANM/USPS-T2-19a-b, g redirected to T28 ANM/USPS-T28-2, 7, 9 NAA/USPS-T28-5-7, 9-10, 12-13
Major Mailers Association	MMA/USPS-T28-1, 3-12 NAA/USPS-T28-11-12 VP-CW/USPS-T28-1-2

Newspaper Association of America	AAPS/USPS-T28-1-5 AAPS/USPS-T35-4 redirected to T28 ABA&NAPM/USPS-T28-1-10, 22-23, 25-27, 34-36 ADVO/USPS-T28-1-4, 11 ANM/USPS-T2-19a-b, g redirected to T28 ANM/USPS-T28-5, 7 MMA/USPS-T28-1-2, 4-6, 8-12, 13a, 16-18 NAA/USPS-T28-1-2, 3b, 4-5, 7-26 VP-CW/USPS-T28-7, 13, 16-26
Office of the Consumer Advocate	ABA&NAPM/USPS-T28-15, 20-21, 28, 30, 36-37 ANM/USPS-T28-5, 7, 11 KE/USPS-T28-1 MMA/USPS-T28-3, 11-12, 16-18
Val-Pak Direct Marketing, Val-Pak Dealers, & Carol Wright	VP-CW/USPS-T28-1-26

Respectfully submitted,

Margaret P. Crenshaw

Margaret P. Crenshaw
Secretary

INTERROGATORY RESPONSES OF
UNITED STATES POSTAL SERVICE
WITNESS SHARON DANIEL (T-28)
DESIGNATED AS WRITTEN CROSS-EXAMINATION

Interrogatory:	Designating Parties:
AAPS/USPS-T28-1	NAA
AAPS/USPS-T28-2	Advo, MOAA, NAA
AAPS/USPS-T28-3	MOAA, NAA
AAPS/USPS-T28-4	Advo, MOAA, NAA
AAPS/USPS-T28-5	Advo, MOAA, NAA
AAPS/USPS-T35-4 redirected to T28	NAA
ABA&NAPM/USPS-T28-1	ABA&NAPM, NAA
ABA&NAPM/USPS-T28-2	ABA&NAPM, ANM, NAA
ABA&NAPM/USPS-T28-3	NAA
ABA&NAPM/USPS-T28-4	ABA&NAPM, Advo, NAA
ABA&NAPM/USPS-T28-5	ABA&NAPM, MOAA, NAA
ABA&NAPM/USPS-T28-6	ABA&NAPM, Advo, NAA
ABA&NAPM/USPS-T28-7	NAA
ABA&NAPM/USPS-T28-8	MOAA, NAA
ABA&NAPM/USPS-T28-9	ABA&NAPM, Advo, NAA
ABA&NAPM/USPS-T28-10	ABA&NAPM, MOAA, NAA
ABA&NAPM/USPS-T28-11	ABA&NAPM
ABA&NAPM/USPS-T28-12	ABA&NAPM
ABA&NAPM/USPS-T28-15	OCA
ABA&NAPM/USPS-T28-17	ABA&NAPM
ABA&NAPM/USPS-T28-19	ABA&NAPM
ABA&NAPM/USPS-T28-20	ABA&NAPM, OCA
ABA&NAPM/USPS-T28-21	OCA
ABA&NAPM/USPS-T28-22	ABA&NAPM, NAA
ABA&NAPM/USPS-T28-23	NAA
ABA&NAPM/USPS-T28-25	NAA
ABA&NAPM/USPS-T28-26	ABA&NAPM, NAA
ABA&NAPM/USPS-T28-27	ABA&NAPM, NAA
ABA&NAPM/USPS-T28-28	ABA&NAPM, OCA
ABA&NAPM/USPS-T28-29	ABA&NAPM
ABA&NAPM/USPS-T28-30	OCA
ABA&NAPM/USPS-T28-32	ABA&NAPM
ABA&NAPM/USPS-T28-33	ABA&NAPM

ABA&NAPM/USPS-T28-34	NAA
ABA&NAPM/USPS-T28-35	NAA
ABA&NAPM/USPS-T28-36	NAA, OCA
ABA&NAPM/USPS-T28-37	ABA&NAPM, OCA
ADVO/USPS-T28-1	Advo, NAA
ADVO/USPS-T28-2	Advo, NAA
ADVO/USPS-T28-3	Advo, NAA
ADVO/USPS-T28-4	Advo, NAA
ADVO/USPS-T28-8	Advo
ADVO/USPS-T28-9	Advo
ADVO/USPS-T28-10	Advo
ADVO/USPS-T28-11	Advo, NAA
ADVO/USPS-T28-12	Advo
ADVO/USPS-T28-14	Advo
ANM/USPS-T28-1	ANM
ANM/USPS-T28-2	ANM, MOAA
ANM/USPS-T28-3	ANM
ANM/USPS-T28-4	ANM
ANM/USPS-T28-5	ANM, NAA, OCA
ANM/USPS-T28-6	ANM
ANM/USPS-T28-7	Advo, ANM, MOAA, NAA, OCA
ANM/USPS-T28-8	Advo, ANM
ANM/USPS-T28-9	ANM, MOAA
ANM/USPS-T28-10	ANM
ANM/USPS-T28-11	ANM, OCA
ANM/USPS-T28-12	ANM
ANM/USPS-T28-13	ANM
ANM/USPS-T28-14	ANM
ANM/USPS-T2-19a redirected to T28	ANM, MOAA, NAA
ANM/USPS-T2-19b redirected to T28	ANM, MOAA, NAA
ANM/USPS-T2-19g redirected to T28	ANM, MOAA, NAA
KE/USPS-T28-1	OCA
MMA/USPS-T28-1	MMA, NAA
MMA/USPS-T28-2	NAA
MMA/USPS-T28-3	MMA, OCA
MMA/USPS-T28-4	Advo, MMA, NAA
MMA/USPS-T28-5	ABA&NAPM, MMA, NAA
MMA/USPS-T28-6	MMA, NAA
MMA/USPS-T28-7	MMA

MMA/USPS-T28-8	ABA&NAPM, MMA, NAA
MMA/USPS-T28-9	MMA, NAA
MMA/USPS-T28-10	MMA, NAA
MMA/USPS-T28-11	ABA&NAPM, MMA, NAA, OCA
MMA/USPS-T28-12	MMA, NAA, OCA
MMA/USPS-T28-13a	NAA
MMA/USPS-T28-16	NAA, OCA
MMA/USPS-T28-17	NAA, OCA
MMA/USPS-T28-18	NAA, OCA
NAA/USPS-T28-1	Advo, NAA
NAA/USPS-T28-2	NAA
NAA/USPS-T28-3b	NAA
NAA/USPS-T28-4	NAA
NAA/USPS-T28-5	Advo, MOAA, NAA
NAA/USPS-T28-6	MOAA
NAA/USPS-T28-7	Advo, MOAA, NAA
NAA/USPS-T28-8	NAA
NAA/USPS-T28-9	MOAA, NAA
NAA/USPS-T28-10	MOAA, NAA
NAA/USPS-T28-11	Advo, MMA, NAA
NAA/USPS-T28-12	Advo, MMA, MOAA, NAA
NAA/USPS-T28-13	Advo, MOAA, NAA
NAA/USPS-T28-14	Advo, NAA
NAA/USPS-T28-15	NAA
NAA/USPS-T28-16	NAA
NAA/USPS-T28-17	NAA
NAA/USPS-T28-18	NAA
NAA/USPS-T28-19	NAA
NAA/USPS-T28-20	NAA
NAA/USPS-T28-21	NAA
NAA/USPS-T28-22	NAA
NAA/USPS-T28-23	NAA
NAA/USPS-T28-24	NAA
NAA/USPS-T28-25	NAA
NAA/USPS-T28-26	NAA
VP-CW/USPS-T28-1	MMA, VP-CW
VP-CW/USPS-T28-2	MMA, VP-CW
VP-CW/USPS-T28-3	VP-CW
VP-CW/USPS-T28-4	VP-CW

VP-CW/USPS-T28-5	VP-CW
VP-CW/USPS-T28-6	VP-CW
VP-CW/USPS-T28-7	NAA, VP-CW
VP-CW/USPS-T28-8	VP-CW
VP-CW/USPS-T28-9	VP-CW
VP-CW/USPS-T28-10	VP-CW
VP-CW/USPS-T28-11	VP-CW
VP-CW/USPS-T28-12	VP-CW
VP-CW/USPS-T28-13	NAA, VP-CW
VP-CW/USPS-T28-14	VP-CW
VP-CW/USPS-T28-15	VP-CW
VP-CW/USPS-T28-16	NAA, VP-CW
VP-CW/USPS-T28-17	NAA, VP-CW
VP-CW/USPS-T28-18	Advo, NAA, VP-CW
VP-CW/USPS-T28-19	NAA, VP-CW
VP-CW/USPS-T28-20	NAA, VP-CW
VP-CW/USPS-T28-21	NAA, VP-CW
VP-CW/USPS-T28-22	Advo, NAA, VP-CW
VP-CW/USPS-T28-23	Advo, NAA, VP-CW
VP-CW/USPS-T28-24	NAA, VP-CW
VP-CW/USPS-T28-25	NAA, VP-CW
VP-CW/USPS-T28-26	NAA, VP-CW

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ASSOCIATION OF ALTERNATE POSTAL SYSTEMS

AAPS/USPS-T28-1. At page 3, lines 26-27 of your testimony, you indicated that, besides weight, "shape, origin/destination combination, cube and level of presorting and dropshipping of mail can affect the cost of mail." Can the degree to which mail is bound or loose also affect costs? In other words, holding everything else constant, is it more costly to handle an eight-ounce bound catalog or an eight ounce shared mail set with numerous coupons and single sheets of glossy paper inside a folded supermarket brochure? Has the Postal Service studied this issue? If so, please provide a copy of the study.

RESPONSE:

The degree to which mail is bound or loose could conceivably affect costs, but to my knowledge, no cost study of this issue has been conducted.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ASSOCIATION OF ALTERNATE POSTAL SYSTEMS

AAPS/USPS-T28-2. You state on page 4, line 8, that the weight study methodology "involves every major cost component." Did the Postal Service actually study the effect of weight on every major cost component, or was the effect simply assumed as to some. If the effect on some cost components was assumed, which ones?

RESPONSE:

Section IV on pages 5-10 of my testimony discusses how costs were distributed to weight increment. The following costs were allocated to weight increment in a manner consistent with how the CRA allocates costs to subclass and are not assumptions. Generally, costs in segments 3.1, mail processing; 3.2, window service; and 6.1, city carrier in-office, were distributed on the basis of IOCS tallies. Costs in segment 6.2, in-office support, were distributed on the basis of cost segment 6.1 costs as is consistent with Base Year methodology. Costs in cost segment 7.4, city carrier street support, were distributed on the basis of total city carrier costs as is consistent with Base Year methodology. Costs in segment 10, rural carriers, were distributed to shape and then on the basis of pieces as is consistent with rural carrier compensation. Air and water transportation costs in segment 14 were distributed on the basis of weight. Highway and rail, also in segment 14, and vehicle service costs, segment 8, were distributed on the basis of cube, as is consistent with Base Year methodology.

The following costs were allocated to weight increment based on a reasonable set of assumptions. City carrier street Route and Access costs, segments 7.1 and 7.2, were assumed to vary with pieces, while costs in segment 7.3, Elemental Load, were assumed to vary with weight within shape. The justification of these assumptions can be found on pages 8-9 of my testimony. "Other" costs were assumed to vary with weight.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ASSOCIATION OF ALTERNATE POSTAL SYSTEMS

AAPS/USPS-T28-3. *Please explain, with references to your testimony or to the testimony of other Postal Service witnesses, any new studies or initiatives undertaken since Docket R97-1 to study the effect of weight on costs other than in-office costs – specifically on carrier street time.*

RESPONSE:

As explained on page 8-9 of my testimony, I reexamined previous assumptions on the impact of weight on costs. In this Docket, elemental load costs are treated as weight-related within shape. This departs from the assumption in Docket No. R97-1 that assumed these costs varied in proportion to volume within shape. Assumptions regarding access and route costs were also reexamined, but these were not changed; that is, as in Docket No. R97-1, access and route costs remain piece-related. To the best of my knowledge, no other studies have been undertaken since Docket No. R97-1 to study the effect of weight on carrier street-time costs.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ASSOCIATION OF ALTERNATE POSTAL SYSTEMS

AAPS/USPS-T28-4. Beginning at page 8, you discuss cost segment 7.

(a). Please confirm that, for cost segment 7.1, Route Time, the Postal Service simply assumed that weight would not affect costs. If you do not confirm, please explain how the effect of weight was studied.

(b). Please confirm that, for cost segment 7.2, Access time, the Postal Service simply assumed that weight would not affect costs. If you do not confirm, please explain how the effect of weight was studied.

(c). Please expand on your explanation at pages 8-9 that, for cost segment 7.3, Elemental Load, costs were allocated "on the basis of weight within shape...."

(d). Please explain in greater detail what you mean at page 9, lines 3-6, when you say that for cost segment 7.4, Street Support, costs are distributed to weight in proportion to the sum of costs in segments 6.1 through 7.3. Does this mean that to the extent that weight in [sic] assumed not to affect those segments, that assumption is carried forward to segment 7.4?

RESPONSE:

(a-b). Strictly speaking, the mathematical formulae allocate access and route costs strictly on the basis of pieces; however, please see page 8 lines 25-31 of my testimony, which reads:

> Since flats and parcels cost more to load than letters, and flats and parcels are heavier on average than letters, it seems reasonable that heavier pieces of the same shape may cost more to load than lighter pieces of the same shape. However, if weight is used as a distribution key, costs will double as weight doubles. This is not necessarily the case for load time, but using weight as a key compensates for any weight-related effects in route and access time, which have been allocated on the basis of piece.

Thus, the Postal Service has not simply assumed weight would not affect route and access time costs. See also my response to interrogatory AAPS/USPS-T28-5.

(c) Elemental load costs vary with shape and a distribution key has been developed in

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ASSOCIATION OF ALTERNATE POSTAL SYSTEMS

USPS LR-I-95 to allocate elemental load costs to letters, flats and parcels by subclass. The costs for each shape are then distributed to weight increment in proportion to the number of pounds in each weight increment. For example, see Section 1 page 13 row 10 of USPS LR-I-92.

(d) The Base Year methodology allocates costs in segment 7.4, Street Support, in proportion to the sum of all the other city carrier costs in segments 6.1 through 7.3. Thus, the city carrier street support costs are assumed to vary with weight to the same degree as all other city carrier costs (i.e., in-office, route, access and load) vary with weight.

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AAPS/USPS-T28-5. Assume that a carrier has 500 stops on her route and a saturation ECR piece to deliver to each stop every day, in addition to an assortment of other mail (including perhaps, other saturation pieces). Assume further that on three days the saturation piece weighs one ounce and on three days the saturation piece weighs ten ounces. Please explain with reference to each to the out-of-office functions of the carrier and support personnel whether the costs will vary depending upon whether the piece weighs one ounce or ten ounces. If any other assumptions are necessary to respond to this question, please provide reasonable assumptions.

RESPONSE:

The hypothetical presented in this question is not very likely.

7.1 Route costs *may* vary depending upon whether the piece weighs one ounce or ten ounces, but the cost study allocates route costs as if they will not vary. To the extent these costs do vary with weight, allocating all of elemental load costs directly in proportion to weight could compensate for any understatement that could arise by allocating route costs on the basis of piece.

7.2 Access costs should not vary depending upon whether the piece weighs one ounce or ten ounces; therefore, the cost study allocates access costs as if they will not vary. To the extent these costs possibly vary with weight, allocating all of elemental load costs directly in proportion to weight could compensate for any understatement that may arise by allocating access costs on the basis of piece.

7.3 Elemental Load costs probably vary to some degree although certainly less than ten times more depending upon whether the piece weighs one ounce or ten ounces. The cost study, however, distributes elemental load costs directly proportional to the weight of the piece. To the extent these costs do vary less than 100% with weight, allocating all of elemental load costs directly in proportion to weight overstates the true impact of weight, although it is not known by how much. Therefore, to the extent this assumption overestimates the impact of weight on elemental load costs, this is expected to compensate for the extent to which route or access costs may have been understated.

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7.4 Support Costs are considered to vary in proportion to all other city carrier costs in the CRA. Therefore, these costs should vary to the same degree as the costs in the office as well as those on the street varied and have been allocated as such.

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AAPS/USPS-T35-4. Please enumerate the cost functions that are significantly different in amount between processing one 8-ounce saturation piece entered at the DDU and two 4-ounce saturation pieces entered at the DDU.

RESPONSE:

The requested costs are not available at the requested rate category level; however, given the cost distribution methodologies underlying the study USPS LR-I-92, the cost for an 8-ounce ECR flat is approximately 11.9 cents, and the cost for two 4-ounce flats is approximately 15.8 cents, for a difference of 3.9 cents. Of the 3.9 cents, 0.74 cent is in mail processing, 0.03 cent is in window service, 1.14 cent is in city delivery in-office, 0.6 cent is in city delivery – street, 1.38 cent is in rural delivery. (The costs are from the 3-5 and 7-9 ounce increments, USPS-LR-I-92, Section 2, page 28.)

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ABA&NAPM/USPS-T28-1. For each 1/2 ounce (and, separately, each 1 ounce) weight increment in your weight and cost study tables, please supply for each class/subclass/rate category of mail you study the direct volume variable costs, without any piggybacks or other indirect costs added in.

RESPONSE:

To calculate direct labor volume variable costs, one need simply follow these steps:

- replace the values in column [5] "TY Piggy" on the "factors" worksheet with the value 1.0 in "LR94aMOD.xls" "LR94bBMC.xls" and "LR94cNMD.xls."
- sort the values in the worksheets "TYMODdata" "TYBMCdata" and "TYNMODdata" by shape and class and past the sum by shape and class into the appropriate lines on the "TYMP" tab in USPS LR-I-91-93.
- replace the values in column [20] on the "...all (detailed)" worksheet in these library reference files with the value 1.0. Data in rows 4-10 will then contain direct labor costs only for Mail Processing, Window Service, City and Rural Carriers, and Vehicle Service Drivers.

Transportation costs in rows 14-15 do not contain any labor and "Other" costs in row 16 will contain all indirect costs as well as postmaster and claims and inquiry and related indirect costs such as employee labor relations, time and attendance, space, and benefits, as well as stamps and dispenser costs. They also may include training, international mail supplies, and indemnities.

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ABA&NAPM/USPS-T28-2. You testify on page 3, lines 15-16, that your results "show increasing weight results in higher total unit cost of handling mail...". Please confirm that your results, as shown below in the table, also show a substantially higher "marginal cost" for handling a one to two ounce letter than a zero to one ounce letter for both First Class presort and single piece, while they show a substantially decreasing marginal cost for Standard A Regular mail in the same weight increments. Please explain the discrepancy between your First Class presort and Standard A Regular results for the second and third ounce increments, for what is essentially physically identical letter shaped mail between the two categories.

Marginal Weight Related Costs of Light Weight Pieces

Category	First Oz.	Second Oz.	Third Oz.
FCM single piece	0.202	0.224	0.092
FCM presort	0.100	0.177	0.067
Standard A Regular	0.126	0.039	0.016

RESPONSE:

Not confirmed for the First-Class Mail Single Piece second and third ounce figures, which should be 0.223 and 0.093, respectively, as provided in the errata to my testimony filed on 3/1/00. Also, these costs are identified in my testimony as "marginal cost difference" which reflects the difference in total TY unit costs between each ounce increment; they have not been characterized as "Marginal Weight Related Costs of Light Weight Pieces" as set forth in this question. The total TY unit costs from which the figures in the table above are derived represent an average of all characteristics of pieces in each weight increment. Data and analyses are not presently available to explain all of the cost-causative factors which may vary between the subclasses by weight increment; however, the impact of the changing shape mix is discussed in my testimony at pages 12, 15-16. See also my response to interrogatory MMA/USPS-T28-11.

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ABA&NAPM/USPS-T28-3. Please define "marginal cost" as you employ the term in your weight table? Are any piggybacks, indirect costs or other factor costs included in your definition? Do your definitions differ as between your weight tables for First Class and Standard A mail?

RESPONSE:

"Marginal cost"[1] as employed in the label "Marginal Cost Difference" in Tables 1, 2, 4a, and 4b of my testimony and in the analyses presented in USPS LR-I-91-93 (First-Class, Standard Mail (A), and Periodicals Weight Studies) is meant to describe the change in total TY unit costs between weight increments. The weight studies are an analysis of total TY costs, not just direct labor, and as such, include indirect costs which have been distributed via piggyback factors.

[1] It is my understanding that the Postal Service computes volume-variable cost such that marginal cost and unit volume-variable cost are equivalent. Therefore, I sometimes use the terms "marginal cost" and "[unit] volume-variable cost" interchangeably.

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ABA&NAPM-T28-4.

a. Please confirm that your data points for Standard A Regular and ECR Mail through weight increments are a fairly tight fit (relatively high R square) for your line fitting exercises for those mailstreams, while your data points for First Class are so erratic (by one ounce increment) that you did not even attempt line fitting. Please present the four R-square values (First Class single piece, First Class presort, Standard A, Regular and ECR) and other measures of variance including standard deviation.

b. For your line fitting by ½ ounce increments, please confirm that the data points for Standard A Regular and ECR Mail through weight increments are a fairly tight fit (relatively high R square), while the corresponding lines drawn for First Class presort and single piece mail are based on such erratic data (very low R-square). Please present the four R-square values and other measures of variance including standard deviation.

RESPONSE:

a. The R^2 values and standard errors of the slope, intercept and y estimate, of the trendlines for combined weight increments for Standard Mail (A) Regular and ECR presented on page 12 of Section 1 and 2 of USPS LR-I-92 as determined by Excel using the LINEST function are in the table below. However, this trendline analysis has not been relied upon by the Postal Service because the trendline produced by EXCEL gives each data point an equal weight. The data used to support the Standard Mail (A) pound rate is found in Table 3 of my testimony. Since data from a trendline analysis are not used in my testimony to support the First-Class rate design, a trendline was not presented. Plotting a trendline for First-Class Single Piece and Presort Mail data by ounce increment on page 12 of Section 1 and 2 of USPS LR-I-91 in EXCEL using the same techniques as used for Standard Mail (A) results in the R^2 values and standard errors of the slope, intercept and y estimate shown in the table below.

combined weight increments		Standard Errors		
	R squared	Slope	Intercept	y estimate
Standard Mail (A) Regular	0.889	0.006	0.044	0.076
Standard Mail (A) ECR	0.882	0.002	0.018	0.031
First-Class Single-Piece	0.613	0.011	0.059	0.091
First-Class Presort	0.465	0.025	0.137	0.209

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b. The R^2 values and standard errors of the slope, intercept and y estimate, of the trendlines for detailed (1/2 ounce) weight increments for Standard Mail (A) Regular and ECR presented on page 10 of Section 1 and 2 of USPS LR-I-92 as determined by Excel using the LINEST function are in the table below. However, this trendline analysis has not been relied upon by the Postal Service because the trendline produced by EXCEL gives each data point an equal weight. The data used to support the Standard Mail (A) pound rate is found in Table 3 of my testimony. Since data from a trendline analysis are not used in my testimony to support the First-Class rate design, a trendline was not presented. Plotting a trendline for First-Class Single Piece and Presort Mail data by ½ ounce increment on page 10 of Section 1 and 2 of USPS LR-I-91 in EXCEL using the same techniques as used for Std. A results in the R^2 values and standard errors of the slope, intercept and y estimate shown in the table below. However, this technique has not been relied upon by the Postal Service because the trendline produced by EXCEL gives each data point an equal weight.

½ ounce weight increments		Standard Errors		
	R squared	Slope	Intercept	y estimate
Standard Mail (A) Regular	0.671	0.013	0.135	0.178
Standard Mail (A) ECR	0.604	0.004	0.031	0.060
First-Class Single-Piece	0.470	0.012	0.069	0.152
First-Class Presort	0.306	0.019	0.105	0.232

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ABA&NAPM/USPS-T28-5. Please explain what you mean at page 1 line 7 of your testimony that your weight studies give USPS pricing witnesses Fronk and Moeller "a general indication" of how costs are influenced by weight.

a. Does your terminology mean that little confidence can be attached to your individual "marginal cost" numbers by one ounce or half ounce increment?
b. Does it mean that only your trend lines over several ounces are meaningful?

RESPONSE:

The weight studies provide an understanding of the weight-cost relationship, but it is not represented that the weight figures provided represent the precise cost for each ounce increment.

a. No

b. No.

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ABA&NAPM/USPS-T28-6.

a. On page 3, lines 14-15, please explain the qualifier "In general ...", and cite all instances for which your generality does not apply.
b. Please confirm that for Standard A Regular mail test year unit costs, in LR-I-92, Section 1, your "marginal costs" go down through the first three ounce increments.
c. In your testimony at page 3, lines 17-20, please explain why you emphasize that [marginal] costs do not tend to go up for "lighter weight" "flats and parcels," but neglect to mention that marginal costs go down for lighter weight letter mail as indicated in 2.b. above.

RESPONSE:

a. As discussed on page 3 lines 17-20, increasing weight does not result in higher total unit costs within specific shapes and between selected ounce increments as can be seen by examining the data presented in USPS LR-I-91-93. See also the response to subpart (c).
b. Confirmed that the difference between total Standard Mail (A) Regular All Shapes TY Unit Costs by Combined Weight Increments found on page 12 of LR-I-92, Section 1 declines from $0.126 (the difference between 0 and the average unit cost of mail under 1 ounce), to $0.039 (the difference between the unit cost of mail under one ounce and the unit cost of mail between 1 and 2 ounces), to $0.016 (the difference between the average unit cost of mail between 2 and 3 ounces and the unit cost of mail between 1 and 2 ounces).
c. My testimony at page 3 lines 17-20 does not refer to the "marginal cost difference" (meaning the total unit cost differences between weight increments). Rather, the cited passage refers to the fact that the total unit costs decline in the lighter weight increments before increasing in the heavier increments, thereby forming a u-shaped cost curve as discussed on page 12. Total unit costs for letters have a more linear-pattern and usually increase as weight increases with the exception that very lightweight letters may be slightly more costly than two ounce letters in some Standard Mail (A) subclasses.

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ABA&NAPM/USPS-T28-7. On page 3, line 22, you qualify the results of your weight studies, by saying they provide "a general [italicized] indication" of the effect that weight has on total volume variable costs". You state, again in italics, that these numbers are not intended to be an "exact [italicized] quantification of costs for every individual weight increment."

a. Which cost estimates that you study do you have the most confidence in, which numbers do you have the least confidence in, by mail category?
b. Which individual weight increment numbers do approximate an exact quantification? Which do not? Why, and why not?

RESPONSE:

These statements are meant to convey that individual estimates with lower volume would tend to have a higher margin of error associated with them as seen in the Coefficients of Variation (CVs) calculated by witness Ramage in response to interrogatory ANM/USPS-T2-13.

a. I generally have more confidence in estimates with lower CVs than those with higher CVs.
b. All estimates of TY unit costs derived from the IOCS sampling system have some degree of variation associated with them and are therefore not "exact."

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ABA&NAPM/USPS-T28-8. On page 4, lines 13-16, you mention "new distribution techniques" which improve upon prior methods for relating cost to weight for Standard Mail (A) and periodicals.

a. What are these new techniques and how do the results vary from the old technique?
b. Are the new techniques used for First Class letter mail? If not, why not?
c. If your answer to b. is "No", please explain what technique is used for First Class letter mail, how and why it varies from the old and new techniques used for Standard Mail (A).

RESPONSE:

a. The method by which "no weight" tallies are distributed to ounce increment is new and is described in USPS LR-I-99. See also the response to interrogatories NAA/USPS-T28-1-2. The methodology used by witness McGrane in Docket No. R97-1 has not been conducted for this case; however, a PRC version of First-Class Single-Piece, Presort and Standard Mail (A) Regular has been presented in response to interrogatory MMA/USPS-T28-13(b), which references USPS LR-I-235.
b. Yes.
c. N/A

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ABA&NAPM/USPS-T28-9.

a. On page 4, you defend the use of IOCS continuous sampling over an engineering type study for the measurement of weight on cost. Has the size of IOCS samples greatly declined over the past several years?

b. Is it not also true that an engineering study, while one time only, could have a much more statistically sound (i. e. larger) sample size that might reduce all the apparent anomalies?

RESPONSE:

a. It is my understanding that the size of the IOCS samples has been materially the same since the Base Year in Docket No. R94-1.

b. Since no engineering study has been conducted to measure the impact of weight in the Test Year, there is no way of measuring the statistical reliability of such a study. It is, moreover, uncertain how large the sample size would need to be to produce estimates with lower CVs than the estimates presented in my testimony. Furthermore, I do not know how an engineering study could be used to determine the impact of weight on costs for non-piece distribution activities. Finally, it is doubtful that a one-time field study could be superior to the data used in the weight studies described in my testimony, which are based on a national sample of all operations over the course of a year.

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ABA&NAPM/USPS-T28-10. Please explain the sentence on page 10, lines 4-5. Are you saying that your weight related costs, which you describe in your tables as "marginal costs", exceed CRA total unit attributable costs? Are you in your "Other" costs distributing USPS institutional costs by mail class and weight increment?

RESPONSE:

The weight studies presented in my testimony and in USPS LR-I-91-93 distribute the total TY costs for each subclass to weight increment. As stated in my response to ABA&NAPM/USPS-T28-3, I have described the use of the identifier "marginal cost difference" in my weight studies to represent the differences in total TY unit costs between weight increments. The sum of the total costs in each ounce increment *equals*, not exceeds, the CRA total attributable costs in the TY. "Other" costs are the portion of CRA total unit attributable costs not reflected in the analysis of the other cost segments such as mail processing, transportation and delivery. "Other" costs consist primarily of postmaster and claims and inquiry and related indirect costs such as employee labor relations, time and attendance, space, and benefits, as well as stamps and dispenser costs. They also may include training, international mail supplies, and indemnities. The analysis does not distribute any institutional costs.

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ABA&NAPM/USPS-T28-11. Please refer to your figure in USPS-T-28 Table 1, specifically the marginal cost points in the figure $0.20 and $0.43. Please confirm that the difference between these two marginal costs reflects on the x axis the difference between a 0.4 ounce piece of mail and a 1.4 ounce piece of mail. Please confirm it does not measure the difference between the marginal cost of a one ounce piece of mail and a two ounce piece of mail.

RESPONSE:

These two figures reflect the total TY unit costs of First-Class Single-Piece mail weighing less than one ounce and for mail weighing between one and two ounces. The average weight of these pieces is 0.4 ounce and 1.4 ounces respectively.

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ABA&NAPM/USPS-T28-12. Is the erratic nature of your First Class single piece weight data the result of your decision to group all shapes together, as you indicate on page 10?

RESPONSE:

I do not feel the First-Class Single-Piece weight data present in Table 1 is erratic.

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ABA&NAPM/USPS-T28-15. In LR-I-95 as well as your testimony, USPS-T-28, please confirm that nowhere do you develop the delivery costs of either single piece or bulk metered letter mail.

RESPONSE:

Not confirmed. The cost of First-Class Single-Piece mail by shape is calculated in USPS LR-I-95 and reported in Table 7 of USPS-T-28; however, this estimate is not used by the Postal Service.

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ABA&NAPM/USPS-T28-17. On page 25 of your testimony you state rural unit delivery costs for DPSed and non-DPSed letters. Please provide the corresponding data for city carriers.

RESPONSE:

These data are not available for city carriers. DPS is a compensation category for rural carriers; therefore, data are available in witness Meehan's workpapers to derive the cost for rural carriers to deliver DPS and non-DPSed letters. Data provided in USPS LR-I-95 for city in-office direct labor is per RPW *piece*, not per *city carrier-delivered letter*. An estimate of savings due to DPS is calculated in column A on the "Summary TY" page in USPS LR-I-95.

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ABA&NAPM/USPS-T28-19. In the development of your delivery costs, why is some support labor (CPA, cost segment 6.2) included and other support labor (CRA, cost segment 7.5) excluded?

RESPONSE:

There is no cost segment 7.5. "Street support" costs are reported in cost segment 7.4 and are included in the development of my delivery costs. Please see "Column I" on the "Summary TY" worksheet in USPS LR-I-95.

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ABA&NAPM/USPS-T28-20. Please confirm from LR-I-95, "Rural DPS", page 1, that the percentage of First Class (1) basic automation (2) automated 3 digit and (3) automated 5 digit letters that are delivery point sequenced (DPSed) is greater than for the corresponding rate categories for Standard A Regular letter mail.

a. Please list the corresponding DPS percentages for city carrier letter mail.

b. Are your rural DPS percentages applied to city carrier cost segments anywhere in LR-I-95? If so, please explain why.

RESPONSE:

Confirmed that *page 20* of USPS LR-I-95 (the "Rural DPS" sheet in the electronic version) shows the percentages of First-Class (1) basic automation (2) automated 3 digit and (3) automated 5 digit letters that are delivery point sequenced (DPSed) are greater than for the corresponding rate categories for Standard Mail (A) Regular letter mail.

a. The corresponding DPS percentages for city carrier letter mail are the same. These percentages were developed from the letter mail flow models in Docket No.R97-1 and are applicable to both city and rural carriers. They have been used in this Docket to distribute Rural DPS costs to class of mail in the Base Year.

b. The DPS percentages in USPS LR-I-95 p.20 are used on the "Summary BY" worksheet because these are the best estimates of the percentage DPS for city and rural carriers combined in the BY. New TY estimates of the percentage of DPS letters by rate category are developed by witness Miller (USPS-T-24) in this Docket. These percentages are applied to both city and rural carrier costs on the "Summary TY" worksheet (pages 5-7) in USPS LR-I-95. Separate estimates of the percentage of DPS letters by rate category for city versus rural carriers are not available.

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ABA&NAPM/USPS-T28-21. Please explain in detail the procedures you used to roll forward your sample weight and cost data for base year 1998 in LR-I-102 to the test year data found in your testimony and LR-I-91.

RESPONSE:

Ratios of the volumes in each subclass in the Base Year and the Test Year were multiplied by each volume estimate and each weight estimate for each weight increment. Please see the double and triple asterisk footnotes on page 8 of USPS LR-I-91.

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ABA&NAPM/USPS-T28-22. Refer to LR91 tables "Single-Piece All Shapes Test Year Unit Cost by Function," Presort All Shapes Test Year unit Cost by Function," LR92 tables "Std. A Reg. All Shapes Test Year Unit Cost by Function," and "Std. A ECR All Shapes Test Year Unit Cost by Function." (all costs are in cents)

	Single-Piece	Presort	Std. A Reg.	Std. A ECR
Delivery Unit Cost:				
(City Delivery in office + City Delivery Street + Vehicle Services + Rural Delivery)				
0-1 ounce	5.2	4.3	5.0	4.77
1-2 ounce	8.1	9.5	6.4	5.33
% Change	56%	121%	28%	12%

Please explain why the unit delivery costs for the 2nd ounce for single piece and presort are disproportionately higher than the corresponding delivery unit costs for Std. A Reg and Std A ECR?

RESPONSE:

The costs cited above are per RPW piece. To the extent that mail in each subclass and weight increment has a different probability of being delivered by city or rural carriers or destinating at a P.O. Box, cost would be expected to vary. Information is not available to quantify volumes by weight increment by modes of delivery. In addition, since these costs represent all shapes, the change in shape mix may also be influencing the cost of delivery as would varying percentages of delivery point sequenced letters by weight increment or the percent of high density and saturation mail in ECR.

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ABA&NAPM/USPS-T28-23. Refer to LR91 tables "Single-Piece Letters Test Year Unit Cost by Function," Presort Letters Test Year unit Cost by Function," LR92 tables "Std. A Reg. Letters Test Year Unit Cost by Function," and "Std. A ECR Letters Test Year Unit Cost by Function." (all costs are in cents)

	Single-Piece	Presort	Std. A Reg.	Std. A ECR
Delivery Unit Cost:				
(City Delivery in office + City Delivery Street + Vehicle Services + Rural Delivery)				
0-1 ounce	5.2	4.28	4.5	4.5
1-2 ounce	8.2	9.62	5.0	6.04
% Change	58%	125%	11%	34%

Please explain why the unit delivery costs for the 2nd ounce for single piece and presort are disproportionately higher than the corresponding delivery unit costs for Std. A Reg and Std A ECR?

RESPONSE:

With the exception of shape mix changes, please see the response to ABA&NAPM/USPS-T28-22.

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ABA&NAPM/USPS-T28-25.

a. Do your piggyback factors include equipment and facility user costs for each weight increment in your study?

b. By adding USPS witness Smith's piggyback costs and indirect costs for each weight increment, are you double counting, or are you breaking down total piggyback costs, premium pay factors and other indirect costs as calculated by witness Smith?

c. If your answer to b. is that you are breaking down totals, please provide a spread sheet showing those totals by major piggyback or indirect cost factor on a per piece, unit cost basis over each 1/2 ounce and full ounce cost-weight increment you provide for Tables 1 and 2 of LR-I-91.

RESPONSE:

a. Yes.

b. The use of piggyback factors does not double count, but rather allocates indirect costs on basis of direct labor using the appropriate factors.

c. Indirect costs by ounce increment can be calculated by multiplying direct labor costs by the difference of the piggyback factor less one.

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ABA&NAPM/USPS-T28-26. Intuitively, how could the 2nd ounce of First Class presort mail cost more than the 2nd ounce of First Class single piece mail, since shapes vary more with the latter than the former, since the former is viewed as being "cleaner" mail, and since it avoids several work activity steps that First Class single piece does not avoid?

RESPONSE:

Contrary to the premise of the question, the 2nd ounce of First Class Presort mail does not cost more than the 2nd ounce of First Class Single Piece mail. According to Table 1 of USPS-T-28, First-Class Single-Piece Mail weighing between 1 and 2 ounces costs 0.425 cent. According to Table 2 of USPS-T-28, First-Class Presort Mail weighing between 1 and 2 ounces costs 0.277 cent. This relationship is intuitive.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF AMERICAN BANKERS ASSOCIATION AND NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-27. Refer to LR-I-91, Tables "Single-Piece Letters Test Year Unit Cost by Function," and "Presort Letters Test Year Unit Cost by Function," and LR92, Tables "Std. A Reg. Letters Test Year Unit Cost by Function," and " Std. A ECR Letters Test Year Unit Cost by Function." (All costs are in cents)

	Single-Piece	Presort	Std. A Reg.	Std. A ECR
Mail Processing Unit Cost:				
0-1 ounce	11.7	4.45	5.9	1.47
1-2 ounce	19.8	12.93	5.5	1.97
% Change	69.2%	190.6%	- 6.8%	34%

a. Please explain what weight related factors would cause a First Class presort letter to have a 191% increase in marginal costs between the first and second ounce while a Standard A Regular letter would exhibit an absolute reduction in marginal costs across the same weight increment.
b. Please explain what weight related factors would cause a First Class presort letter to have nearly 3 times the increase in marginal cost between the first and second ounce that a First Class single piece letter has.

RESPONSE:

a-b. As stated in response to ABA&NAPM/USPS-T28-2, "[d]ata and analyses are not presently available to explain all of the cost-causative factors which may vary between the subclasses by weight increment." Please also see responses to interrogatories MMA/USPS-T28-8(c), 11(d-f).

NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-28. Refer to LR-I-91, Section 1 Page 1 Table 1, titled "Single-Piece All Shapes Test Year Unit Costs By Function", supporting detail. Explain how mail processing costs for the 2nd ounce (29.6¢) vs 1st ounce (12.4¢) can be higher by about 139%?

a. Do RCR costs vary by weight?
b. Do MLOCR costs vary by this weight increment?
c. Do RBCS costs, that is manual video encoding, vary by weight?
d. Do BCS costs vary by this weight increment?
e. If your answer is "yes" to any of the above, please explain fully and provide all engineering study data that would support your answer.

RESPONSE:

The costs on Section 1, page 1 of USPS LR-I-91 are an average of all shapes. One reason for the higher mail processing cost in the second ounce is that there is a higher proportion of flats and parcels in the second ounce than in the first ounce as seen in Figure 1 on page 12 of USPS-T-28. Flats and parcels incur more mail processing costs than letters.

a-e. I have not analyzed the effect of weight on costs on a cost pool basis as explained in the response to VP-CW/USPS-T28-2. However, it is my understanding that Operations and Engineering personnel believe that throughput of OCRs and BCSs is affected by weight. I have been told that it does take longer for the belts to "grasp" a heavy piece, which increases the gaps between pieces and reduces throughputs. Sometimes it does result in jams which damage the offending piece as well as pieces that follow behind. A letter also tends to become thicker with added weight, which means fewer pieces per tray, more tray handlings, and more MTE handlings at the feed and sweep ends. Thick letters fill up the higher density bins on a DBCS very fast. If a bin is full, it will stop the machine until it is cleared. Please also see the results of the engineering study conducted in 1995 discussed in interrogatory MMA/USPS-T28-5. Decreased throughput leads to higher costs.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL
NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-29. In LR-I-91, Section 2, Table 2, supporting detail for presort letters, explain how unit mail processing costs for the second ounce of workshared mail can be 191% higher than the first ounce costs?

a. Does this mean MLOCRs and BCSs pass a standard size business letter mail weighing between one and two ounces at a speed 1.91 times slower than an identical letter weighing one ounce or less? Please provide any engineering studies that support this claim if your answer is in the affirmative.

b. If your answer to a. is in the affirmative, why should the depreciation charge be any different from the first ounce (that is why is the charge not set equal to 0) due to the speed difference assuming there is excess capacity (idle machine time) within the time window such mail is processed?

c. Do letters through three ounces cause any more physical wear and tear on a piece of automation machinery than a one ounce letter? Please provide any documentation that exists to support your answer.

d. Apart from wear and tear on the machine, do heavier weight letters through three ounces cause any more downtime for automation machinery, e.g. jams, than one ounce letters do? Please provide any documentation that exists to support your answer.

RESPONSE:

a. No. The data in USPS LR-I-91 represent all the characteristics of pieces in each weight increment. All else is not equal. Please also see response to MMA/USPS-T33-4.

b. N/A

c-d. Please see response to interrogatory ABA&NAPM/USPS-T28-28.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF AMERICAN BANKERS ASSOCIATION AND NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-30

a. In Table 2, supporting detail for presort letters, please explain how in-office city delivery costs can be 182% greater for a presort letter weighing between 1 and 2 ounces than for a presort letter weighing one ounce or less.

b. For both single piece and presort, please explain why city delivery street unit costs vary widely between the first and second ounce, but vary only slightly for rural delivery costs.

RESPONSE:

a. Please see response to ABA&NAPM/USPS-T28-23.

b. One reason is because elemental load costs were allocated on the basis of weight but rural delivery costs are allocated on the basis of piece because rural carriers are compensated on this basis.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL
NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-32. Please explain what advantages in weight studies are gained from using PERMIT system over BRAVIS.

RESPONSE:

BRAVIS contains the same information as PERMIT. BRAVIS has been discontinued.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL
NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-33. Please refer to document for USPS LR-I-102 "First-Class, Standard Mail (A), and Periodicals Volume by Shape and Weight Increment." On page 10 you state that "First-Class and Standard Mail (A) metered and stamped revenue estimates at non-PERMIT offices are obtained from a linear regression model. These estimates are used to assign non-PERMIT offices to the appropriate office size stratum."

a. Please provide any studies done to make sure that this procedure does not result in biased estimates of revenues for non-PERMIT offices.
b. Please provide all statistical results for regression model and parameter estimates reported in Table 8 such as standard errors of estimates, sample size, R-squared, and etc.
c. For the First-Class estimation of revenues for non-PERMIT offices you use FY 95 data whereas for the Standard Mail (A) you use FY 96 data. Please explain why you use different sets of data for your estimations?
d. Please explain why you did not use data over FY 94 to FY 97 period for your estimation.
e. Could there be other variables that may account for the variations in the revenues? For example, month-of-the-quarter effect or geographic-location effect.

RESPONSE:

a. It is my understanding that linear regression estimates using ordinary least squares procedures provide unbiased estimates of the regression parameters. This is a statistical property of the estimator.
b. Regression statistics are reported in Attachments 1 and 2 to this interrogatory.
c. It is my understanding that the regression estimates were produced several years ago when data for these years were the most recent available. First-Class regression estimates were produced first when only FY 95 data were available. Standard Mail (A) regression estimates were produced later when FY 96 data were available. The estimates for the regression parameters have not been updated using more recent data. In addition, it is my understanding that the estimates of the regression parameters are not the same as the estimates of revenue. These parameters are constants in a linear equation. The independent variables use FY 98 data and, therefore, produce revenue estimates for FY 98.
d. See response to subpart (c) of ABA&NAPM/USPS-T28-33.

e. It is my understanding that no other explanatory variables were investigated. The model estimates the amount of metered and stamped bulk entered revenue at non-PERMIT offices. While there may be geographic importance for bulk entered revenue in general, any effect of geography is mitigated by restricting the view to non-PERMIT offices, which, by nature, are small. Also, specifying revenue by month within a quarter would lead to severe colinearity problems in the estimation.

First-Class Mail Regression Estimates
(Standard Errors in Parentheses)

Dependent Variable: Bulk Entered First-Class Metered and Stamped Revenue

Independent Variables	PQ1	PQ2	PQ3	PQ4
Permit Imprint Presort Revenue	0.187064	0.248894	0.254393	0.161755
	(.0462)	(.0466)	(.0502)	(.0510)
All Metered Revenue	0.234259	0.244983	0.240415	0.261537
	(.0103)	(.0110)	(.0110)	(.0113)
All Metered Revenue Squared (in millions)	-0.004364	-0.00415	-0.004106	-0.003343
	(.0006)	(.0006)	(.0006)	(.0005)
R-Squared	0.43	0.45	0.44	0.46
Number of Observations	830	830	830	830

Standard Mail (A) Regression Estimates
(Standard Errors in Parentheses)

Regular and ECR Large Office Estimate
Dependent Variable: Bulk Entered Standard Mail (A) Metered and Stamped Revenue

Independent Variables	PQ1	PQ2	PQ3	PQ4
Permit Imprint Revenue	0.097314	0.103178	0.13003	0.115697
	(.0142)	(.0140)	(.0151)	(.0136)
All Metered Revenue	0.023253	0.019722	0.016672	0.015445
	(.0058)	(.0051)	(.0053)	(.0048)
All Metered Revenue Squared (in millions)	-0.000104	-0.00011	-0.000048	-0.000045
	(.0001)	(.0001)	(.0001)	(.00004)
R-Squared	0.21	0.21	0.28	0.23
Number of Observations	312	331	345	343

Regular and ECR Small Office Estimate
Dependent Variable: Bulk Entered Standard Mail (A) Metered and Stamped Revenue

Independent Variables	PQ1	PQ2	PQ3	PQ4
Permit Imprint Revenue	0.086807	0.100748	0.103331	0.121616
	(.0218)	(.0259)	(.0199)	(.0206)
All Metered Revenue	0.009477	0.011302	0.006696	0.005279
	(.0034)	(.0035)	(.0028)	(.0028)
All Metered Revenue Squared (in millions)	-0.000336	-0.000123	-0.000523	-0.000422
	(.0004)	(.0004)	(.0003)	(.0002)
R-Squared	0.11	0.09	0.11	0.11
Number of Observations	779	910	1024	1045

Standard Mail (A) Regression Estimates, continued
(Standard Errors in Parentheses)

Nonprofit and Nonprofit
ECR Estimate
Dependent Variable: Bulk Entered Standard
Mail (A) Metered and Stamped Revenue

Independent Variables	PQ1	PQ2	PQ3	PQ4
Permit Imprint Revenue	0.272776	0.165223	0.146355	0.170342
	(.0218)	(.0195)	(.0218)	(.0211)
All Metered Revenue	-0.001207	0.001546	0.0025	0.00101
	(.0014)	(.0011)	(.0012)	(.0011)
All Metered Revenue Squared (in millions)	-0.000035	-0.000096	-0.000102	-0.000052
	(.0001)	(.00004)	(.00004)	(.00004)
R-Squared	0.18	0.10	0.07	0.08
Number of Observations	937	1051	1168	1212

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL
TO INTERROGATORIES OF AMERICAN BANKERS ASSOCIATION AND
NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-34. Please refer to document for USPS LR-I-102 "First-Class, Standard Mail (A), and Periodicals Volume by Shape and Weight Increment." On page 12 you state that "Observations that can not meet the standards for any of these three groups are discarded." Please provide the discard rate.

RESPONSE:

The discard rate is .0008 (.08 percent).

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF AMERICAN BANKERS ASSOCIATION AND NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-35. Please refer to document for USPS LR-I-102 "First-Class, Standard Mail (A), and Periodicals Volume by Shape and Weight Increment." On page 12 you state that "The data editing rules are complex and depend on the information contained in the PERMIT record."

a. Please explain how these rules are determined.

b. Furthermore, provide any studies showing the effect of different editing rules on the integrity of the data.

RESPONSE:

a. See Docket No. R97-1, USPS LR-H-117, Appendix A.

b. It is my understanding that there are no other studies which examine these rules.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF AMERICAN BANKERS ASSOCIATION AND NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-36. Please refer to document for USPS LR-I-102 "First-Class, Standard Mail (A), and Periodicals Volume by Shape and Weight Increment." On page 12 you discuss the filling of missing data.

a. Please provide a summary of missing data in terms of percentages missing and non-missing data for different mail categories.

b. Further, you state that "...the average revenues for the office are computed over the available accounting periods in the year." Are there schemes that might be superior to such simple averaging? Have you tried any other schemes to fill missing data other than simple averaging?

RESPONSE:

a. It is my understanding that filled-in estimates of missing revenue account for 0.5 percent of all PERMIT system revenue. These revenues are not broken down by mail category.

b. Because the amount of missing revenue is not significant, extensive research into alternative methodologies is not cost effective.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL
NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-37

a. Please refer to document for USPS LR-I-102 "First-Class, Standard Mail (A), and Periodicals Volume by Shape and Weight Increment" On page 16 section VIII, you discuss the inflation of data "...to certain GFY 98 published RPW estimates." Explain what you mean by "certain" GFY 98 published RPW estimates. Please provide any studies that this inflation of the strata results to RPW estimates level is unbiased across all mail categories and weight increments.

b. Please refer to document for USPS LR-I-102 "First-Class, Standard Mail (A), and Periodicals Volume by Shape and Weight Increment." On page 9 you state that "For all classes the PERMIT transactions in each stratum are inflated to the total revenue in each stratum. The computed revenue control factor is applied to pieces and weight data as well, while maintaining the full array of rate characteristics including rate element, shape, and weight increment." Please provide any studies that show that this inflation is statistically unbiased with respect to the shape and weight increment.

RESPONSE:

a. The mail categories used for the control step in First-Class are listed in the following table. Following each mail category is the revenue control factor that shows the relative consistency to the official estimates. These values are the response to subpart (b) of interrogatory ABA&NAPM/USPS-T28-31.

Mail Category	Control Factor
Presort nonautomation letters, flats, and parcels	.9919
Presort nonautomation nonstandard letters, flats, and parcels	.8385
Basic presort automation letters	.9731
3-Digit presort automation letters	.9861
5-Digit presort automation letters	1.0032
Carrier route presort automation letters	.9914
Basic presort automation flats	1.0608
3/5-Digit presort automation flats	.9609
Basic presort nonstandard automation flats	.8841
3/5-Digit presort nonstandard automation flats	.9219
Presort nonautomation cards	1.1530
Basic presort automation cards	.9659
3-Digit presort automation cards	.9420
5-Digit presort automation cards	.9001
Carrier route presort automation cards	.8897

The mail categories used for the control step in Periodicals are listed next. Following each mail category is the weight control factor that shows the relative consistency to the official estimates. These values are the response to subpart (b) of interrogatory ABA&NAPM/USPS-T28-31.

Mail Category	Control Factor
Regular	.9949
Nonprofit	.9889
Classroom	1.0951
Within County	.9339

The mail categories used for the control step in Standard Mail (A) are listed next. Following each mail category is the revenue, piece, and weight control factors that show the relative consistency to the official estimates. These values are the response to subpart (b) of interrogatory ABA&NAPM/USPS-T28-31.

Mail Category	Control Factors		
	Revenue	Pieces	Weight
Regular, Non-ECR	.9950	.9967	.9962
ECR	1.0273	1.0307	1.0538
Nonprofit	.9849	.9866	.9817
Nonprofit ECR	1.0119	1.0131	.9995

It is my understanding that this control to RPW is not an inflation step in the sense of estimating volumes of missing offices or mailers. Instead it is a simple control process to bring the estimates in line with published numbers for comparison, without distorting the underlying distributions by shape and weight increment.

b. It is my understanding that there are no studies that evaluate this inflation procedure. An evaluation would require a large survey or census of all non-PERMIT post offices. Such a study would be prohibitively expensive.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-1. With respect to LR-I-92, LR92bECR.xls Section 2, page 9 (Tab: volume&lbs), please:

(a). Explain why total base year letter volume of 13,295,273,000 differs from the comparable volume of 12,943,926,795 shown in witness Moeller's WP-1, page 1.
(b). Explain why total base year nonletter (flats + parcels) volume of 20,763,854,000 differs from the comparable volume of 21,115,199,912 (piece rated + pound rated) shown in witness Moeller's WP-1, page 1.
(c). Reconcile total base year letter weight of 687,184,000 to 1998 billing determinants.
(d). Reconcile total base year nonletter (flats + parcels) weight of 4,184,897,000 to 1998 billing determinants.

RESPONSE:

(a-b). The letter and nonletter volumes in USPS LR-I-92 are derived in USPS LR-I-102. These volumes are based on the processing category recorded in PERMIT, which should correspond to the DMM definition of shape. It is my understanding that the volumes in witness Moeller's WP-1 are from billing determinants which are based on the rates paid, *not necessarily the DMM defined shape.* For example, letter-shaped pieces as defined by the DMM that weigh over 3.3 ounces will pay the nonletter rate. Witness Moeller will show these pieces as nonletters, while USPS LR-I-92 will show these pieces as letters. Thus, the number of letters in USPS LR-I-92 is higher than those in witness Moeller's WP-1 and the number of nonletters in USPS LR-I-92 is lower than those in witness Moeller's WP-1.

(c-d). The total base year ECR letter weight in USPS LR-I-92 is 687,184,000 while the comparable figure in the 1998 billing determinants is 638,615,889. The total base year ECR nonletter weight in USPS LR-I-92 is 4,184,897,000 while the comparable figure in the 1998 billing determinants is 4,233,465,774. The weight of letters in USPS LR-I-92 is higher than those in witness Moeller's WP-1 and the weight of nonletters in USPS LR-I-92 is lower than those in witness Moeller's WP-1 for the reasons discussed in response to subparts (a-b).

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-2. With respect to LR-95, spreadsheet LR95del.xls, tab "summaryBY," there is a figure of 8,330,028 for ECR Saturation Nonletters in the column labeled (000s) "Permit Volume." The total of this column for BY ECR is 34,059,127 which ties in with the Total ECR volume shown in witness Moeller's WP-1, p. 1. However, Moeller WP-1, p. 1, shows that BY NL ECR Saturation volumes are 8,940,756 (piece rated (6,184,030) + pound rated (2,756,726)). Please reconcile the difference.

RESPONSE:

PERMIT volume is based on processing category which should match the DMM definition of shape. It is my understanding that the volumes in witness Moeller's WP-1 are from billing determinants which is based on the rates paid. See also the response to interrogatory ADVO/USPS-T28-1.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-3. Please confirm that the DPS cost savings distributed on page 12 of USPS LR I-95 are already included in the test year costs (from USPS-T-14, WP.H) used on pages 5 and 6. If you cannot, please explain why not.

RESPONSE:

Confirmed.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-4. Please refer to LRs I-97 and I-98:

(a). Please explain how total ECR Vehicle Service Driver costs were distributed among the ECR subcategories and provide the rationale for that distribution key.

(b) Please explain how total ECR Purchased Transportation costs were distributed among the ECR subcategories and provide the rationale for that distribution key.

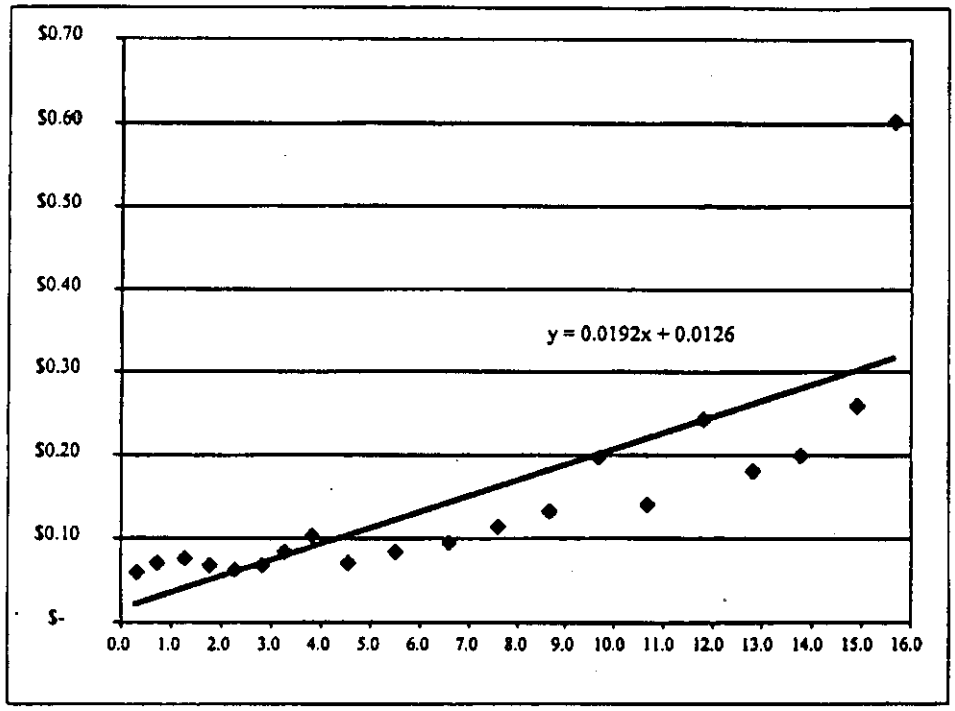
RESPONSE:

(a). Vehicle Service Driver costs are allocated to shape in Section 8 of USPS LR-I-98 by multiplying the density (pounds per cubic foot as determined in USPS LR-MCR-13 Supplement) for letters, flats, and parcels by the number of pounds of each shape to compute the number of cubic feet for each shape. The proportion of cubic feet was used as the distribution key. Volume variable costs of Vehicle Service Driver labor are distributed to classes and subclasses of mail in the CRA in the same proportions as cubic feet of total mail. This approach was therefore used to distribute Vehicle Service Driver costs to shape. Flats and parcels were combined into a nonletter category for use in USPS LR-I-97.

(b). Air and water transportation costs are allocated to shape in Section 8 of USPS LR-I-98 by using the proportion of pounds by shape as the distribution key. This is consistent with how air and water transportation costs are incurred according to the summary descriptions filed as USPS LR-I-1 sections 14.1.1.1 and 14.1.4.1 respectively. Highway and rail transportation costs are allocated to shape in Section 8 of USPS LR-I-98 by using the proportion of cubic feet by shape (calculated in the same manner as described in subpart (a)) as the distribution key. This is consistent with how highway and rail transportation costs are incurred according to the summary descriptions filed as USPS LR-I-1 sections 14.1.2.1 and 14.1.3.1. Flats and parcels were combined into a nonletter category for use in USPS LR-I-97.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-8. In LR-92, Spreadsheet LR92bECR.xls Worksheet "ECR all (detailed)," you present a graph of ECR unit costs by ounce increment. That graph, with the scale adjusted for better viewing, is copied from your spreadsheet below:



With respect to this graph, please respond to the following:

(a) Please confirm that this graph accurately represents the graph shown in your referenced worksheet, with the x and y axes adjusted for better viewing. If you cannot confirm, please provide what you believe to be the correct graph, in approximately the same scale as shown above.

(b) Please confirm that the straight line on this graph represents your simple unweighted straight-line regression of the data points, shown by the equation y = 0.0192x + 0.0126.

(c) Please confirm that below 2 ounces,
   (i) There are 4 actual unit cost data points shown;
   (ii) All 4 of the actual unit cost data points lie above the line that represents the equation.
   (iii) The percentage difference between the actual and formula unit costs is progressively greater for the lightest weight increments, i.e., in the 0-5 ounce increment the actual unit cost is more than 3 times or 200% greater than the formula unit cost, whereas in the 1.5-2.0 ounce increment the actual unit cost is more than 40% greater than the formula unit cost.

(d) Please confirm that above 4 ounces,
   (i) There are 12 actual unit cost data points shown.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

(ii) Nine of the 12 actual unit cost data points lie below the line that represents the equation, and 8 of those 9 are more than 20% lower than the formula unit cost.

(iii) Two of the 12 actual unit cost data points lie approximately on the line that represents the equation.

(iv) Only one of the 12 unit cost data points -- for the last 15-16 ounce increment -- lies above the line that represents the equation.

(e) With respect to the last 15-16 ounce increment, please confirm that:

(i) The unit cost for the last 15-16 ounce increment is 2.3 times (or 130%) greater than the unit cost for the 14-15 ounce increment.

(ii) The volume in the last 15-16 ounce increment constitutes less than 0.04% (four ten-thousandths) of total ECR volume.

(iii) In developing the equation shown on the graph, the unit cost for this last weight increment was given equal weight with the unit costs for all other weigh increments.

If you cannot confirm any of the above, please provide the figures you believe to be correct and indicate your source and derivation.

RESPONSE:

a. Confirmed.

b. Confirmed.

c. (i) Confirmed.

(ii) Confirmed.

(iii) Confirmed.

d. (i) Confirmed.

(ii) Not confirmed. There are actually 10 unit cost data points technically below the line that represents the equation. Confirmed that 8 are more than 20 percent lower than the formula.

(iii) Confirmed. One is technically slightly below the line and one is slightly above the line.

(iv) Confirmed.

e. (i) Confirmed. The precise figure is actually 131.6%.

(ii) Confirmed

(iii) Confirmed.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-9. Please refer to the table below, which is based on the ECR unit cost data by ounce increment contained in your LR-92, Worksheet LR92bECR.xls:

Weight Increment	Ave. Wt. (oz.)	Unit Cost	Formula	Unit Cost - Formula	Unit Cost / Formula
0 to .5	0.33	$ 0.058	$ 0.019	$ 0.040	209%
.5 to 1.0	0.73	$ 0.072	$ 0.027	$ 0.045	168%
1.0 to 1.5	1.28	$ 0.076	$ 0.037	$ 0.039	105%
1.5 to 2	1.78	$ 0.068	$ 0.047	$ 0.021	44%
2 to 2.5	2.30	$ 0.062	$ 0.057	$ 0.005	8%
2.5 to 3	2.81	$ 0.069	$ 0.066	$ 0.003	4%
3 to 3.5	3.29	$ 0.084	$ 0.076	$ 0.008	11%
3.5 to 4	3.85	$ 0.103	$ 0.086	$ 0.016	19%
4 to 5	4.56	$ 0.072	$ 0.100	$ (0.028)	-28%
5 to 6	5.53	$ 0.085	$ 0.119	$ (0.034)	-28%
6 to 7	6.59	$ 0.094	$ 0.139	$ (0.045)	-32%
7 to 8	7.61	$ 0.114	$ 0.159	$ (0.045)	-28%
8 to 9	8.67	$ 0.132	$ 0.179	$ (0.047)	-26%
9 to 10	9.67	$ 0.198	$ 0.198	$ (0.000)	0%
10 to 11	10.68	$ 0.141	$ 0.218	$ (0.076)	-35%
11 to 12	11.78	$ 0.244	$ 0.239	$ 0.005	2%
12 to 13	12.80	$ 0.181	$ 0.258	$ (0.077)	-30%
13 to 14	13.77	$ 0.200	$ 0.277	$ (0.077)	-28%
14 to 15	14.91	$ 0.260	$ 0.299	$ (0.039)	-13%
15 to 16+	15.69	$ 0.601	$ 0.314	$ 0.287	92%

With respect to this table and your Worksheet LR92bECR.xls please confirm the following:

(a) The average weights per piece (total weight in ounces ÷ total volume) and the unit costs by ounce increment shown above accurately reflect the data in Worksheet LR92bECR.xls.

(b) The costs in the "Formula" column, derived from the equation y = 0.0192x + 0.0126 shown in your worksheet (where x = the average weight by ounce increment shown in column 2 above), accurately reflect the "predicted" or "formula" unit costs derived from your equation.

(c) The values in "Unit Cost - Formula" column accurately represent the differences between the actual unit costs in your worksheet and the "predicted" or "formula" unit costs derived from your equation.

(d) The values in "Unit Cost ÷ Formula" column accurately represent the percentage differences between the actual unit costs in your worksheet and the "predicted" or "formula" unit costs derived from your equation.

RESPONSE:

a-d. Confirmed.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-10. Please provide, in a format similar to that presented in your Worksheet LR92bECR.xls adjusted attributable costs, mail volumes, and unit costs separately for (i) ECR total and (ii) ECR flats, after adjustment for worksharing characteristics. Please explain and provide your derivations.

RESPONSE:

Attached are replications of pages 17-19 of Section 2, USPS LR-I-92 showing ECR flats unit costs adjusted for worksharing. The adjustments were calculated in the same manner as the Periodicals worksharing adjustments calculated in USPS LR-I-94 and shown in Table 4a and 4b on pages 19a and 19b of USPS-T-28. The volumes and pounds by rate category and weight increment were provided in USPS LR-I-225 in response to interrogatory ANM/USPS-T28-8(c) and are also attached to this response.

The "presort cost avoidance" by weight increment is calculated by summing the product of the percentages of pieces by presort/density rate category and the sum of the mail processing and delivery cost differences of each presort/density rate category from the sum of ECR Basic mail processing and delivery costs summarized in Table 7 on page 29 of USPS T-28. The "difference from average " is calculated by subtracting the "presort cost avoidance" by weight increment from the average "presort cost avoidance."

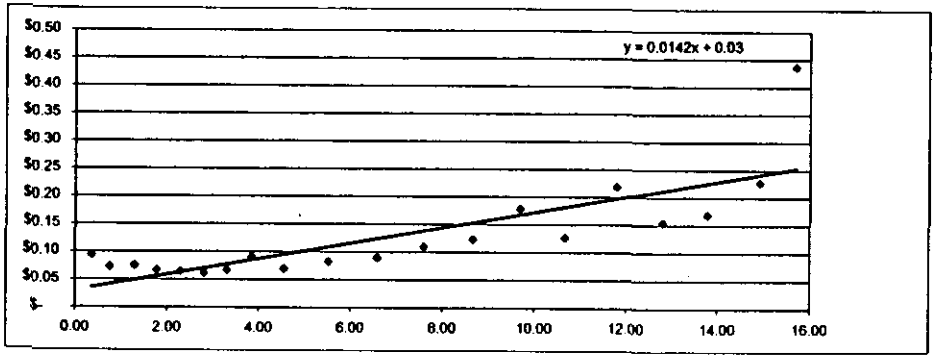
The "average dropship cost avoidance" is calculated by summing the product of the number of pounds in each weight increment by presort/density rate category and the non-transportation-related savings calculated in Attachment C Table 1 of witness Crum's testimony (USPS-T-27) and, then dividing that sum by the number of pieces in each weight increment. The "difference from average " is calculated by subtracting the "average dropship cost avoidance" by weight increment from the average "average dropship cost avoidance." Non-transportation related dropship savings are used because transportation costs have been allocated to weight increment using a constant cost per pound (or cost per cubic foot) which does not recognize differences by ounce increment due to dropshipping.

Total adjusted costs can be calculated in a similar manner by following the above steps for letters and parcels.

Std. A ECR Flats Test Year Unit Costs Adjusted for Worksharing by Detailed (1/2 ounce) Weight Increments

	0 to .5	.5 to 1.0	1.0 to 1.5	1.5 to 2	2 to 2.5	2.5 to 3	3 to 3.5	3.5 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10
[1]volume	564,954,858	1,538,149,736	1,579,231,292	2,251,235,576	2,953,269,941	2,515,986,994	1,711,263,145	1,503,269,484	2,959,192,538	1,337,073,000	696,823,156	370,600,505	200,728,753	78,154,228
[2]pounds	13,117,053	73,465,544	126,948,795	251,250,884	424,269,234	441,644,110	352,650,441	361,616,825	843,906,989	462,267,161	287,191,633	176,288,105	108,751,201	47,256,234
[3]cubic feet (weight/density	635,208	3,557,653	6,244,494	12,167,113	20,545,726	21,387,124	17,077,503	17,511,711	40,867,167	22,385,819	13,907,585	8,536,954	5,266,402	2,288,437
[4]total mp (3.1) tally	15,402	24,841	30,778	24,571	19,790	20,275	25,093	31,905	17,093	10,078	5,962	6,386	3,089	3,837
[5]window service (3.2) tally	197	537	643	787	1,032	998	598	526	1,034	467	243	129	70	27
[6]delivery in-office (6.1) tally	17,689	33,882	28,171	28,060	22,890	21,298	20,434	27,826	18,635	11,261	5,327	3,611	3,352	2,196
[7]delivery in-office (6.2) 6.1	3,585	6,790	5,646	5,623	4,587	4,268	4,095	5,576	3,734	2,257	1,067	724	672	440
[8]del. route (7.1) piece	877	2,387	2,451	3,494	4,583	3,905	2,656	2,333	4,593	2,075	1,081	575	312	121
[9]del. access (7.2) piece	822	2,238	2,298	3,276	4,298	3,661	2,490	2,188	4,306	1,946	1,014	539	292	114
[10]elem. load (7.3)shape&w	*1,109*	*6,212*	10,904	21,246	35,877	37,346	29,821	30,579	71,362	39,090	24,285	14,907	9,196	3,996
[11]del. support (7.4) sum6&'	3,767	8,140	7,977	10,206	12,313	12,051	10,084	11,453	18,000	9,896	5,771	3,573	2,394	1,170
[12]vehicle service (8) cube	210	1,178	2,067	4,028	6,802	7,081	5,654	5,798	13,530	7,412	4,605	2,826	1,744	758
[13]delivery rural (10)shape&	7,790	21,210	21,777	31,044	40,724	34,694	23,598	20,729	40,806	18,438	9,609	5,110	2,768	1,078
[14]air/water trans. (14) weig	4	21	37	73	123	128	102	105	245	134	83	51	32	14
[15]hwy/rail trans. (14)cube	171	956	1,677	3,268	5,518	5,744	4,587	4,704	10,977	6,013	3,735	2,293	1,415	615
[16]Other weight	83	463	813	1,584	2,675	2,784	2,223	2,280	5,321	2,914	1,811	1,111	686	298
[17]Total Cost	51,906	108,857	115,239	137,261	161,212	154,234	131,435	146,001	209,635	111,980	64,594	41,838	26,020	14,663
Adjusted Total Cost	**52,773**	**110,112**	**117,941**	**149,371**	**188,847**	**153,419**	**113,670**	**136,655**	**203,768**	**109,784**	**82,203**	**40,458**	**24,675**	**13,886**
[18]Total Unit Cost	$ 0.092	$ 0.071	$ 0.073	$ 0.061	$ 0.055	$ 0.061	$ 0.077	$ 0.097	$ 0.071	$ 0.084	$ 0.093	$ 0.113	$ 0.130	$ 0.188
worksharing adjustment	**$ 0.002**	**$ 0.001**	**$ 0.002**	**$ 0.005**	**$ 0.009**	**$ (0.000)**	**$ (0.010)**	**$ (0.006)**	**$ (0.002)**	**$ (0.002)**	**$ (0.003)**	**$ (0.004)**	**$ (0.007)**	**$ (0.010)**
adjusted unit cost	**$ 0.093**	**$ 0.072**	**$ 0.075**	**$ 0.066**	**$ 0.064**	**$ 0.061**	**$ 0.066**	**$ 0.091**	**$ 0.069**	**$ 0.082**	**$ 0.089**	**$ 0.109**	**$ 0.123**	**$ 0.178**
Marginal Cost Difference		$ (0.021)	$ 0.002	$ (0.012)	$ (0.006)	$ 0.007	$ 0.016	$ 0.020	$ (0.026)	$ 0.013	$ 0.009	$ 0.020	$ 0.017	$ 0.058

adj. flat unit cost < 3.0 oz.	$ 0.0677	adj. flat unit cost < 3.5 oz.	$ 0.0676
adj. flat unit cost > 3.0 oz.	$ 0.0818	adj. flat unit cost > 3.5 oz.	$ 0.0854
flat + parcel unit cost < 3.0 ounces	**$ 0.0657**	**flat+parcel unit cost < 3.5 ounces**	**$ 0.0674**
flat + parcel unit cost > 3.0 ounces	**$ 0.0883**	**flat+parcel unit cost > 3.5 ounces**	**$ 0.0906**



1-2: USPS LR-I-102
3: density (ft^3/lb)* Weight
4: USPS LR-I-94
5: USPS LR-I-99
6: USPS LR-I-100
7: =[6]by oz/[6]total*[7]total
8&9: =[1]by oz/[1]total*[8&9]total
10&13: [10&13]total*distribution key*[2]by oz/[2]total
11: =SUM([6]:[10]by oz)/SUM([6]:[10]total)*[11]total
12&15: =[3]by oz/[3]total*[12&15]total
14&16: =[2]by oz/[2]total*[14&16]total
17: =SUM([4]:[16])
18: [17]/[1]*1000

	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16+	Total	Unit Cost (cents)	Dist Key/ density
[1]volume	74,151,676	33,648,929	31,986,547	25,237,776	17,121,687	12,998,186	20,455,078,007		
[2]pounds	49,484,527	24,765,525	25,580,175	21,715,429	15,957,465	12,747,976	4,122,895,307		
[3]cubic feet (weight/density	2,396,345	1,200,268	1,238,749	1,051,595	772,759	617,335	199,655,947		20.65 USPS-LR-MCR-13 Supplement
[4]total mp (3.1) tally	1,675	2,149	740	111	1,105	3,562	248,441	1.21457	Tally
[5]window service (3.2) tally	26	12	11	9	6	5	7,357	0.036	Tally
[6]delivery in-office (6.1) tally	413	1,171	436	820	424	253	248,349	1.214	Tally
[7]delivery in-office (6.2) 6.1	83	235	87	164	85	51	49,769	0.243	6.1
[8]del. route (7.1) piece	115	52	50	39	27	20	31,746	0.155	Volume
[9]del. access (7.2) piece	108	49	47	37	25	19	29,766	0.146	Volume
[10]elem. load (7.3)shape&w	4,184	2,096	2,163	1,836	1,349	1,078	348,639	1.704	64.17%
[11]del. support (7.4) sum6&7	877	613	490	497	332	249	119,854	0.586	6.1 - 7.3
[12]vehicle service (8) cube	793	397	410	348	256	204	66,102	0.323	cube
[13]delivery rural (10)shape&	1,023	464	441	348	236	179	282,066	1.379	62.66%
[14]air/water trans. (14) weig	14	7	7	6	5	4	1,196	0.006	weight
[15]hwy/rail trans. (14)cube	644	322	333	282	208	166	53,626	0.262	cube
[16]Other weight	312	156	161	137	101	80	25,994	0.127	weight
[17]Total Cost	10,267	7,724	5,377	4,635	4,157	5,870	1,512,906	7.396	
Adjusted Total Cost	**9,346**	**7,347**	**4,917**	**4,259**	**3,887**	**5,871**	**1,512,906**		
[18]Total Unit Cost	$ 0.138	$ 0.230	$ 0.168	$ 0.184	$ 0.243	$ 0.452	$ 0.074		
worksharing adjustment	**$ (0.012)**	**$ (0.011)**	**$ (0.014)**	**$ (0.015)**	**$ (0.016)**	**$ (0.015)**	**$ -**		
adjusted unit cost	**$ 0.126**	**$ 0.218**	**$ 0.154**	**$ 0.169**	**$ 0.227**	**$ 0.436**	**$ 0.074**		
Marginal Cost Difference	$ (0.049)	$ 0.091	$ (0.061)	$ 0.016	$ 0.059	$ 0.209			

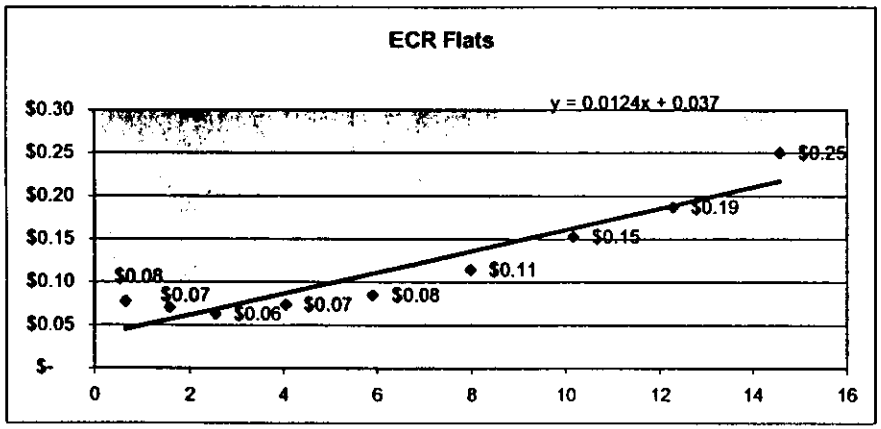
adj. flat unit cost < 3.0 oz
adj. flat unit cost > 3.0 oz.
flat + parcel unit co
flat + parcel unit co

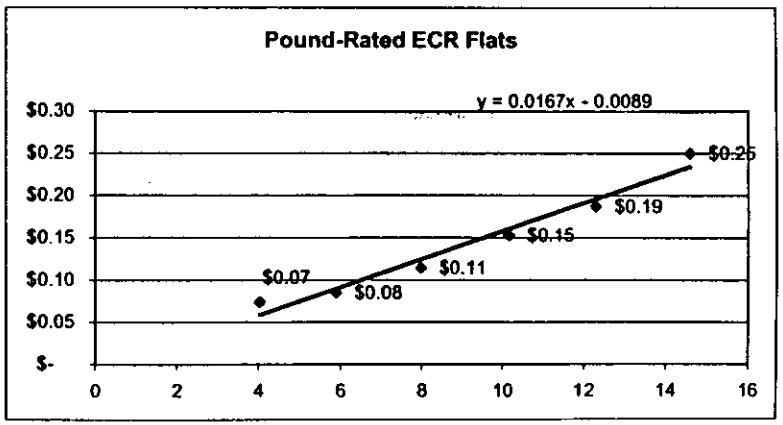
flat+parcel unit cost total 0.0757

1-2: USPS LR-I-102
3: density (ft³/lb)* Weight
4: USPS LR-I-94
5: USPS LR-I-99
6: USPS LR-I-100
7: =[6]by oz/[6]total*[7]total
8&9: =[1]by oz/[1]total*[8&9]t
10&13: [10&13]total*distributi
11: =SUM([6]:[10]by oz)/SUM
12&15: =[3]by oz/[3]total*[12
14&16: =[2]by oz/[2]total*[14
17: =SUM([4]:[16])
18: [17]/[1]*1000

Std. A ECR Flats Test Year Unit Costs Adjusted for Worksharing by Combined Weight Increments (from 3CECR flats detailed worksheet)

	0 to 1	1 to 2	2 to 3	3 to 5	5 to 7	7 to 9	9 to 11	11 to 13	over 13	Total
volume	2,103,104,594	3,830,466,868	5,469,256,935	6,173,725,167	2,033,896,156	571,329,258	152,305,904	65,635,475	55,357,650	20,455,078,007
pounds	86,582,596	380,199,679	865,913,345	1,558,174,255	749,458,794	285,039,307	96,740,761	50,365,700	50,420,870	4,122,895,307
cubic feet (weight/density)	4,192,862	18,411,607	41,932,850	75,456,380	36,293,404	13,803,356	4,684,783	2,439,017	2,441,689	199,655,947
all mp (3.1) tally	40,243	55,349	40,065	74,091	16,039	9,475	5,512	2,890	4,778	248,441
window service (3.2) tally	735	1,430	2,029	2,158	711	200	53	23	19	7,357
delivery in-office (6.1) tally	51,771	56,231	44,188	66,895	16,588	6,964	2,609	1,607	1,497	248,349
delivery in-office (6.2) 6.1	10,375	11,269	8,855	13,406	3,324	1,396	523	322	300	49,769
del. route (7.1) piece	3,264	5,945	8,488	9,582	3,157	887	236	102	86	31,746
del. access (7.2) piece	3,060	5,574	7,959	8,984	2,960	831	222	96	81	29,766
elem. load (7.3)shape&wt	7,322	32,150	73,223	131,762	63,376	24,103	8,181	4,259	4,264	348,639
del. support (7.4) sum6&7	11,907	18,183	24,364	39,537	15,667	5,967	2,047	1,104	1,079	119,854
vehicle service (8) cube	1,388	6,096	13,883	24,982	12,016	4,570	1,551	808	808	66,102
delivery rural (10)shape&pc	29,001	52,820	75,419	85,133	28,047	7,878	2,100	905	763	282,066
air/water trans. (14) weight	25	110	251	452	217	83	28	15	15	1,196
hwy/rail trans. (14)cube	1,126	4,945	11,263	20,267	9,748	3,707	1,258	655	656	53,626
Other weight	546	2,397	5,459	9,824	4,725	1,797	610	318	318	25,994
Total Cost	160,763	252,499	315,446	487,072	176,574	67,858	24,930	13,101	14,663	1,512,906
Total Unit Cost	$ 0.076	$ 0.066	$ 0.058	$ 0.079	$ 0.087	$ 0.119	$ 0.164	$ 0.200	$ 0.265	$ 0.074
worksharing adjustment	$ 0.001	$ 0.004	$ 0.005	$ (0.005)	$ (0.002)	$ (0.005)	$ (0.011)	$ (0.013)	$ (0.015)	0
adjusted unit cost	$ 0.077	$ 0.070	$ 0.063	$ 0.074	$ 0.085	$ 0.114	$ 0.153	$ 0.187	$ 0.250	$ 0.074
Marginal Cost Difference		$ (0.008)	$ (0.007)	$ 0.011	$ 0.011	$ 0.029	$ 0.039	$ 0.034	$ 0.063	





Standard (A) Regular Rate PFY 1998 Flats Weight

	0 -0.5 oz	0.5 oz - 1.0 oz	1.0 oz - 1.5 oz	1.5 oz - 2.0 oz	2.0 oz - 2.5 oz	2.5 oz - 3.0 oz	3.0 oz - 3.5 oz	3.5 oz - 4.0 oz	4.0 oz - 5.0 oz	5.0 oz - 6.0 oz
STD A BULK NONLTR ECR BASIC PIECE F	1,663,658	5,550,558	7,174,133	8,531,271	13,164,844	13,556,888	12,450,017	0	0	0
STD A BULK NONLTR ECR BASIC POUND	0	0	0	0	0	0	4,056,985	10,367,530	14,827,056	17,167,099
STD A BULK NONLTR ECR BASIC BMC PII	603,360	10,337,551	19,618,816	25,026,256	30,851,766	66,563,185	53,524,453	0	0	0
STD A BULK NONLTR ECR BASIC BMC PC	0	0	0	0	0	0	19,339,953	62,132,884	98,691,137	47,050,172
STD A BULK NONLTR ECR BASIC SCF PIE	4,561,869	21,466,324	35,959,523	64,643,120	82,709,020	161,224,867	128,368,343	0	0	0
STD A BULK NONLTR ECR BASIC SCF PO	0	0	0	0	0	0	61,972,412	175,155,373	380,738,181	200,741,513
STD A BULK NONLTR ECR BASIC DDU PII	362,714	1,185,464	1,666,607	3,751,985	4,757,975	3,471,657	2,133,235	0	0	0
STD A BULK NONLTR ECR BASIC DDU PC	0	0	0	0	0	0	1,217,174	3,637,585	6,269,651	5,208,621
ECR Basic	**7,191,601**	**38,539,897**	**64,419,080**	**101,952,633**	**131,483,605**	**244,816,598**	**283,062,572**	**251,293,372**	**500,526,025**	**270,167,405**
STD A BULK NONLTR ECR HIGH DENSITY	34,625	366,433	291,906	461,848	819,163	1,236,899	869,121	0	0	0
STD A BULK NONLTR ECR HIGH DENSITY	0	0	0	0	0	0	258,368	671,434	679,285	657,940
STD A BULK NONLTR ECR HIGH DENSITY	31,564	226,099	279,700	133,993	725,392	1,613,438	934,467	0	0	0
STD A BULK NONLTR ECR HIGH DENSITY	0	0	0	0	0	0	347,283	1,420,802	66,061	36,598
STD A BULK NONLTR ECR HIGH DENSITY	374,741	1,764,303	5,192,262	8,471,575	18,294,302	27,370,931	9,159,438	0	0	0
STD A BULK NONLTR ECR HIGH DENSITY	0	0	0	0	0	0	2,525,604	16,790,722	20,301,333	13,313,157
STD A BULK NONLTR ECR HIGH DENSITY	92,199	1,257,806	3,280,507	6,613,670	8,788,807	6,378,103	3,186,192	0	0	0
STD A BULK NONLTR ECR HIGH DENSITY	0	0	0	0	0	0	1,563,115	5,832,478	19,344,682	17,653,292
ECR High Density	**533,129**	**3,614,642**	**9,044,376**	**15,681,086**	**28,627,664**	**36,599,371**	**18,843,587**	**24,715,436**	**40,391,361**	**31,660,987**
STD A BULK NONLTR ECR SAT PIECE RA	920,882	4,172,362	3,744,069	3,752,916	3,888,045	3,706,225	1,857,978	0	0	0
STD A BULK NONLTR ECR SAT POUND R	0	0	0	0	0	0	1,100,437	3,211,799	5,033,878	4,051,063
STD A BULK NONLTR ECR SAT BMC PIEC	499,210	4,352,920	8,531,089	6,365,247	2,603,267	2,797,551	805,898	0	0	0
STD A BULK NONLTR ECR SAT BMC POU	0	0	0	0	0	0	481,343	624,187	537,885	239,884
STD A BULK NONLTR ECR SAT SCF PIEC	3,091,481	16,540,833	22,524,721	43,168,001	96,670,078	85,902,218	17,437,927	0	0	0
STD A BULK NONLTR ECR SAT SCF POUI	0	0	0	0	0	0	8,713,754	25,761,963	53,868,387	28,394,284
STD A BULK NONLTR ECR SAT DDU PIEC	1,047,922	7,181,182	22,328,867	83,533,106	166,403,740	73,450,749	15,938,959	0	0	0
STD A BULK NONLTR ECR SAT DDU POU	0	0	0	0	0	0	8,902,393	60,618,749	254,304,755	133,644,972
ECR Saturation	**5,559,495**	**32,247,297**	**57,128,747**	**136,819,271**	**269,565,130**	**165,856,743**	**55,238,689**	**90,216,699**	**313,744,904**	**166,330,204**

	0 -0.5 oz	0.5 oz - 1.0 oz	1.0 oz - 1.5 oz	1.5 oz - 2.0 oz	2.0 oz - 2.5 oz	2.5 oz - 3.0 oz	3.0 oz - 3.5 oz	3.5 oz - 4.0 oz	4.0 oz - 5.0 oz	5.0 oz - 6.0 oz
ECR Nondropship	2,619,165	10,089,354	11,210,108	12,746,035	17,872,052	18,500,011	20,592,905	14,250,763	20,540,219	21,876,103
ECR BMC Dropship	1,134,133	14,916,570	28,429,606	31,525,497	34,180,425	70,974,174	75,433,397	64,177,873	99,295,082	47,326,654
ECR SCF Dropship	8,028,092	39,771,461	63,676,507	116,282,696	197,673,400	274,498,017	228,177,478	217,708,058	454,907,901	242,448,954
ECR DDU Dropship	1,502,835	9,624,452	27,275,981	93,898,762	179,950,522	83,300,509	32,941,068	70,088,812	279,919,088	156,506,885

Standard Mail (A) ECR Flat Weight Data
5 of 11

Response to ADVO/USPS-T28-10

	0 -0.5 oz	0.5 oz - 1.0 oz	1.0 oz - 1.5 oz	1.5 oz - 2.0 oz	2.0 oz - 2.5 oz	2.5 oz - 3.0 oz	3.0 oz - 3.5 oz	3.5 oz - 4.0 oz	4.0 oz - 5.0 oz	5.0 oz - 6.0 oz
	0 -0.5 oz	0.5 oz - 1.0 oz	1.0 oz - 1.5 oz	1.5 oz - 2.0 oz	2.0 oz - 2.5 oz	2.5 oz - 3.0 oz	3.0 oz - 3.5 oz	3.5 oz - 4.0 oz	4 to 5	5 to 6
ECR Nondropship	2,619,165	10,089,354	11,210,108	12,746,035	17,872,052	18,500,011	20,592,905	14,250,763	20,540,219	21,876,103
	20%	14%	9%	5%	4%	4%	6%	4%	2%	5%
ECR BMC Dropship	1,134,133	14,916,570	28,429,606	31,525,497	34,180,425	70,974,174	75,433,397	64,177,873	99,295,082	47,326,654
0.0182	9%	20%	22%	12%	8%	16%	21%	18%	12%	10%
ECR SCF Dropship	8,028,092	39,771,461	63,676,507	116,282,696	197,673,400	274,498,017	228,177,478	217,708,058	454,907,901	242,448,954
0.0300	60%	53%	49%	46%	46%	61%	64%	59%	53%	52%
ECR DDU Dropship	1,502,835	9,624,452	27,275,981	93,898,762	179,950,522	83,300,509	32,941,068	70,088,812	279,919,088	156,506,885
0.0399	11%	13%	21%	37%	42%	19%	9%	19%	33%	33%
total	13,284,225	74,401,836	130,592,202	254,452,989	429,676,398	447,272,711	357,144,848	366,225,506	854,662,290	468,158,596
total dropship cost avoidance	$ 3,214	$ 18,486	$ 35,160	$ 78,088	$ 137,323	$ 128,504	$ 95,326	$ 104,958	$ 266,232	$ 143,794
avg dropship cost avoidance per pound	$ 0.0002	$ 0.0002	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003
difference from average	$ 0.0001	$ 0.0000	$ 0.0000	$ (0.0000)	$ (0.0000)	$ 0.0000	$ 0.0000	$ 0.0000	$ (0.0000)	$ (0.0000)

	0 to 1	1 to 2	2 to 3	3 to 5	5 to 7	7 to 9	9 to 11	11 to 13	over 13	Total
ECR Nondropship	12,708,519	23,956,144	36,372,063	55,383,888	40,152,337	10,609,605	5,637,638	3,447,078	2,977,133	191,244,404
	14%	6%	4%	4%	5%	4%	6%	7%	6%	5%
ECR BMC Dropship	16,050,703	59,955,102	105,154,599	238,906,352	74,787,114	29,774,570	10,224,727	7,643,096	5,628,137	548,124,401
0.0182	18%	16%	12%	15%	10%	10%	10%	15%	11%	13%
ECR SCF Dropship	47,799,553	179,959,203	472,171,417	900,793,437	397,884,635	163,070,457	67,106,184	33,699,251	39,639,016	2,302,123,152
0.0300	55%	47%	54%	57%	52%	56%	68%	66%	78%	55%
ECR DDU Dropship	11,127,287	121,174,743	263,251,032	382,948,968	246,186,300	85,217,402	15,005,140	6,218,168	2,819,180	1,133,948,220
0.0399	13%	31%	30%	24%	32%	30%	15%	12%	6%	27%
total	87,686,061	385,045,192	876,949,110	1,578,032,645	759,010,386	288,672,034	97,973,689	51,007,594	51,063,467	4,175,440,177
total dropship cost avoidance	$ 21,701	$ 113,248	$ 265,827	$ 466,516	$ 231,205	$ 88,342	$ 27,980	$ 13,982	$ 14,041	$ 1,242,841
avg dropship cost avoidance per pound	$ 0.0002	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003
difference from average	$ 0.0001	$ 0.0000	$ (0.0000)	$ 0.0000	$ (0.0000)	$ (0.0000)	$ 0.0000	$ 0.0000	$ 0.0000	$ -

Standard (A) Regular Rate PFY 1998 Flats

	6.0 oz - 7.0 oz	7.0 oz - 8.0 oz	8.0 oz - 9.0 oz	9.0 oz - 10.0 oz	0.0 oz - 11.0 oz	1.0 oz - 12.0 oz	2.0 oz - 13.0 oz	3.0 oz - 14.0 oz	4.0 oz - 15.0 oz	5.0 oz - 16.0 oz	Total Pieces
STD A BULK NONLTR ECR BASIC PIECE F	0	0	0	0	0	0	0	0	0	0	62,091,370
STD A BULK NONLTR ECR BASIC POUND	15,095,957	4,035,233	3,105,611	2,135,093	1,861,959	1,420,390	1,177,053	954,684	485,723	829,010	77,519,385
STD A BULK NONLTR ECR BASIC BMC PI	0	0	0	0	0	0	0	0	0	0	206,525,386
STD A BULK NONLTR ECR BASIC BMC PC	27,429,953	17,392,526	12,347,651	5,893,703	4,231,542	3,773,321	3,751,234	1,628,905	2,137,641	1,658,503	307,459,125
STD A BULK NONLTR ECR BASIC SCF PIE	0	0	0	0	0	0	0	0	0	0	498,933,067
STD A BULK NONLTR ECR BASIC SCF PO	133,717,529	86,760,218	59,290,526	27,188,658	34,581,118	14,165,508	17,807,615	17,167,105	12,324,501	9,263,621	1,230,873,878
STD A BULK NONLTR ECR BASIC DDU PI	0	0	0	0	0	0	0	0	0	0	17,329,638
STD A BULK NONLTR ECR BASIC DDU PC	4,241,428	3,759,409	2,522,647	1,665,101	1,540,195	979,805	498,807	242,359	184,435	156,988	32,124,205
ECR Basic	**180,484,868**	**111,947,386**	**77,266,435**	**36,882,554**	**42,214,815**	**20,339,024**	**23,234,709**	**19,993,053**	**15,132,300**	**11,908,121**	**2,432,856,053**
STD A BULK NONLTR ECR HIGH DENSITY	0	0	0	0	0	0	0	0	0	0	4,079,994
STD A BULK NONLTR ECR HIGH DENSITY	463,384	361,248	208,073	98,261	56,589	20,609	11,450	4,428	3,666	3,807	3,498,544
STD A BULK NONLTR ECR HIGH DENSITY	0	0	0	0	0	0	0	0	0	0	3,944,654
STD A BULK NONLTR ECR HIGH DENSITY	1,016	4,945	382	0	1,296	0	0	0	0	0	1,878,383
STD A BULK NONLTR ECR HIGH DENSITY	0	0	0	0	0	0	0	0	0	0	70,627,553
STD A BULK NONLTR ECR HIGH DENSITY	7,288,627	4,711,858	2,884,621	1,856,043	1,178,062	602,808	349,739	330,240	120,273	102,927	72,356,014
STD A BULK NONLTR ECR HIGH DENSITY	0	0	0	0	0	0	0	0	0	0	29,597,284
STD A BULK NONLTR ECR HIGH DENSITY	11,871,680	9,404,350	5,776,040	4,394,609	2,470,190	1,600,065	775,049	760,023	196,867	226,839	81,869,279
ECR High Density	**19,624,707**	**14,482,401**	**8,869,116**	**6,348,913**	**3,706,137**	**2,223,482**	**1,136,238**	**1,094,691**	**320,806**	**333,574**	**267,851,705**
STD A BULK NONLTR ECR SAT PIECE RA	0	0	0	0	0	0	0	0	0	0	22,042,476
STD A BULK NONLTR ECR SAT POUND R	2,716,893	1,701,355	1,198,084	832,566	653,170	488,036	329,539	266,289	199,499	230,026	22,012,635
STD A BULK NONLTR ECR SAT BMC PIEC	0	0	0	0	0	0	0	0	0	0	25,955,182
STD A BULK NONLTR ECR SAT BMC POU	29,491	25,868	3,198	40,253	57,932	34,753	83,788	54,871	105,654	42,563	2,361,670
STD A BULK NONLTR ECR SAT SCF PIEC	0	0	0	0	0	0	0	0	0	0	285,335,260
STD A BULK NONLTR ECR SAT SCF POUI	14,429,525	6,679,998	2,743,235	1,412,727	889,575	498,179	275,402	150,913	105,825	73,611	143,997,381
STD A BULK NONLTR ECR SAT DDU PIEC	0	0	0	0	0	0	0	0	0	0	369,884,525
STD A BULK NONLTR ECR SAT DDU POU	73,566,306	43,697,827	20,057,130	2,341,485	2,593,562	1,517,934	846,508	432,367	296,753	322,550	603,143,290
ECR Saturation	**90,742,215**	**52,105,049**	**24,001,647**	**4,627,031**	**4,194,239**	**2,538,902**	**1,535,238**	**904,441**	**707,731**	**668,750**	**1,474,732,419**

	6.0 oz - 7.0 oz	7.0 oz - 8.0 oz	8.0 oz - 9.0 oz	9.0 oz - 10.0 o	10.0 oz - 11.0	11.0 oz - 12.0	12.0 oz - 13.0	13.0 oz - 14.0	14.0 oz - 15.0	15.0 oz - 16.0	Pieces
ECR Nondropship	18,276,234	6,097,837	4,511,768	3,065,920	2,571,718	1,929,035	1,518,042	1,225,401	688,888	1,062,843	191,244,404
ECR BMC Dropship	27,460,460	17,423,340	12,351,230	5,933,957	4,290,770	3,808,074	3,835,022	1,683,777	2,243,295	1,701,066	548,124,401
ECR SCF Dropship	155,435,681	98,152,074	64,918,383	30,457,427	36,648,756	15,266,495	18,432,757	17,648,258	12,550,599	9,440,160	2,302,123,152
ECR DDU Dropship	89,679,415	56,861,585	28,355,816	8,401,194	6,603,946	4,097,804	2,120,364	1,434,749	678,055	706,376	1,133,948,220

Standard Mail (A) ECR Flat Weight Data
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Response to ADVO/USPS-T28-10

		6.0 oz - 7.0 oz	7.0 oz - 8.0 oz	8.0 oz - 9.0 oz	9.0 oz - 10.0 oz	0.0 oz - 11.0 oz	1.0 oz - 12.0 oz	2.0 oz - 13.0 oz	3.0 oz - 14.0 oz	1.0 oz - 15.0 oz	5.0 oz - 16.0 oz	Total Pieces
		6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	total
ECR Nondropship		18,276,234	6,097,837	4,511,768	3,065,920	2,571,718	1,929,035	1,518,042	1,225,401	688,888	1,062,843	191,244,404
		6%	3%	4%	6%	5%	8%	6%	6%	4%	8%	5%
ECR BMC Dropship		27,460,460	17,423,340	12,351,230	5,933,957	4,290,770	3,808,074	3,835,022	1,683,777	2,243,295	1,701,066	548,124,401
	0.0182	9%	10%	11%	12%	9%	15%	15%	8%	14%	13%	13%
ECR SCF Dropship		155,435,681	98,152,074	64,918,383	30,457,427	36,648,756	15,266,495	18,432,757	17,648,258	12,550,599	9,440,160	2,302,123,152
	0.0300	53%	55%	59%	64%	73%	61%	71%	80%	78%	73%	55%
ECR DDU Dropship		89,679,415	56,861,585	28,355,816	8,401,194	6,603,946	4,097,804	2,120,364	1,434,749	678,055	706,376	1,133,948,220
	0.0399	31%	32%	26%	18%	13%	16%	8%	7%	4%	5%	27%
total		290,851,790	178,534,836	110,137,197	47,858,498	50,115,190	25,101,408	25,906,186	21,992,185	16,160,837	12,910,445	4,175,440,177
	total dropship cost avoidance	$ 87,411	$ 55,304	$ 33,037	$ 13,569	$ 14,411	$ 6,908	$ 7,074	$ 6,173	$ 4,444	$ 3,423	$ 1,242,841
	avg dropship cost avoidance per pound	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003	$ 0.0003
	difference from average	$ (0.0000)	$ (0.0000)	$ (0.0000)	$ 0.0000	$ 0.0000	$ 0.0000	$ 0.0000	$ 0.0000	$ 0.0000	$ 0.0000	$ -

ECR Nondropship

ECR BMC Dropship

0.0182

ECR SCF Dropship

0.0300

ECR DDU Dropship

0.0399

total

total dropship cost avoidance

avg dropship cost avoidance per pound

difference from average

Standard (A) Regular Rate PFY 1998 Flat Volume

	0 -0.5 oz	0.5 oz - 1.0 oz	1.0 oz - 1.5 oz	1.5 oz - 2.0 oz	2.0 oz - 2.5 oz	2.5 oz - 3.0 oz	3.0 oz - 3.5 oz	3.5 oz - 4.0 oz	4.0 oz - 5.0 oz	5.0 oz - 6.0 oz
STD A BULK NONLTR ECR BASIC PIECE RATE	64,141,699	116,130,181	90,872,892	76,260,596	92,827,380	76,955,298	61,937,196	0	0	0
STD A BULK NONLTR ECR BASIC POUND RATE	0	0	0	0	0	0	18,625,349	43,490,439	51,877,067	48,677,589
STD A BULK NONLTR ECR BASIC BMC PIECE RATE	24,396,501	220,685,172	239,215,677	227,552,058	213,892,018	374,724,032	265,628,783	0	0	0
STD A BULK NONLTR ECR BASIC BMC POUND RATE	0	0	0	0	0	0	88,835,857	259,157,509	346,983,868	136,096,872
STD A BULK NONLTR ECR BASIC SCF PIECE RATE	182,279,318	441,815,052	435,453,218	580,906,349	574,292,843	904,581,155	636,411,590	0	0	0
STD A BULK NONLTR ECR BASIC SCF POUND RATE	0	0	0	0	0	0	285,262,024	727,891,133	1,340,879,217	580,661,643
STD A BULK NONLTR ECR BASIC DDU PIECE RATE	14,605,703	25,930,482	20,742,549	33,631,907	33,106,490	19,929,637	10,601,872	0	0	0
STD A BULK NONLTR ECR BASIC DDU POUND RATE	0	0	0	0	0	0	5,616,221	15,195,360	21,917,609	14,902,602
ECR Basic	**285,423,221**	**804,560,887**	**786,284,336**	**918,350,911**	**914,118,731**	**1,376,190,123**	**1,372,918,893**	**1,045,734,441**	**1,761,657,761**	**780,338,706**
STD A BULK NONLTR ECR HIGH DENSITY PIECE RAT	1,473,328	8,234,654	3,789,701	4,154,061	5,590,608	6,945,603	4,367,854	0	0	0
STD A BULK NONLTR ECR HIGH DENSITY POUND RA	0	0	0	0	0	0	1,178,878	2,852,380	2,335,308	1,864,390
STD A BULK NONLTR ECR HIGH DENSITY BMC PIECI	1,634,784	5,163,623	3,468,374	1,219,841	5,062,261	8,964,341	4,721,622	0	0	0
STD A BULK NONLTR ECR HIGH DENSITY BMC POUN	0	0	0	0	0	0	1,592,033	6,043,612	240,837	109,408
STD A BULK NONLTR ECR HIGH DENSITY SCF PIECE	19,502,794	39,771,647	61,307,127	76,830,968	126,568,723	155,678,030	46,068,893	0	0	0
STD A BULK NONLTR ECR HIGH DENSITY SCF POUN	0	0	0	0	0	0	11,559,238	70,596,096	70,562,910	38,382,381
STD A BULK NONLTR ECR HIGH DENSITY DDU PIECE	5,615,079	25,490,278	40,482,690	59,646,057	61,258,383	36,852,543	15,828,817	0	0	0
STD A BULK NONLTR ECR HIGH DENSITY DDU POUN	0	0	0	0	0	0	7,189,912	24,234,013	67,286,763	50,882,742
ECR High Density	**28,225,985**	**78,660,202**	**109,047,892**	**141,850,927**	**198,479,975**	**208,440,517**	**92,507,247**	**103,726,100**	**140,425,818**	**91,238,920**
STD A BULK NONLTR ECR SAT PIECE RATE	36,073,820	88,189,159	47,880,375	34,107,776	27,064,567	21,214,969	9,206,469	0	0	0
STD A BULK NONLTR ECR SAT POUND RATE	0	0	0	0	0	0	5,054,892	13,433,701	17,591,578	11,562,403
STD A BULK NONLTR ECR SAT BMC PIECE RATE	23,202,356	96,628,133	101,893,960	57,205,987	18,210,004	16,014,978	3,971,235	0	0	0
STD A BULK NONLTR ECR SAT BMC POUND RATE	0	0	0	0	0	0	2,199,175	2,634,147	1,906,202	700,697
STD A BULK NONLTR ECR SAT SCF PIECE RATE	142,392,381	344,689,156	283,075,437	394,882,739	670,804,341	494,867,722	87,390,196	0	0	0
STD A BULK NONLTR ECR SAT SCF POUND RATE	0	0	0	0	0	0	40,085,198	107,220,965	188,400,110	81,910,052
STD A BULK NONLTR ECR SAT DDU PIECE RATE	56,837,249	145,025,384	271,176,047	733,528,452	1,162,230,723	431,324,066	78,826,268	0	0	0
STD A BULK NONLTR ECR SAT DDU POUND RATE	0	0	0	0	0	0	40,913,026	249,678,778	886,924,950	388,362,753
ECR Saturation	**258,505,806**	**674,531,832**	**704,025,819**	**1,219,724,954**	**1,878,309,635**	**963,421,735**	**267,646,459**	**372,967,591**	**1,094,822,840**	**482,535,906**

	0 -0.5 oz	0.5 oz - 1.0 oz	1.0 oz - 1.5 oz	1.5 oz - 2.0 oz	2.0 oz - 2.5 oz	2.5 oz - 3.0 oz	3.0 oz - 3.5 oz	3.5 oz - 4.0 oz	4.0 oz - 5.0 oz	5.0 oz - 6.0 oz
ECR Basic	285,423,221	804,560,887	786,284,336	918,350,911	914,118,731	1,376,190,123	1,372,918,893	1,045,734,441	1,761,657,761	780,338,706
ECR High Density	28,225,985	78,660,202	109,047,892	141,850,927	198,479,975	208,440,517	92,507,247	103,726,100	140,425,818	91,238,920
ECR Saturation	258,505,806	674,531,832	704,025,819	1,219,724,954	1,878,309,635	963,421,735	267,646,459	372,967,591	1,094,822,840	482,535,906
total ecr	572,155,012	1,557,752,921	1,599,358,046	2,279,926,792	2,990,908,341	2,548,052,375	1,733,072,600	1,522,428,132	2,996,906,419	1,354,113,532

		0 -0.5 oz	0.5 oz - 1.0 oz	1.0 oz - 1.5 oz	1.5 oz - 2.0 oz	2.0 oz - 2.5 oz	2.5 oz - 3.0 oz	3.0 oz - 3.5 oz	3.5 oz - 4.0 oz	4 to 5	5 to 6
ECR Basic		**285,423,221**	**804,560,887**	**786,284,336**	**918,350,911**	**914,118,731**	**1,376,190,123**	**1,372,918,893**	**1,045,734,441**	**1,761,657,761**	**780,338,706**
	0	**50%**	**52%**	**49%**	**40%**	**31%**	**54%**	**79%**	**69%**	**59%**	**58%**
ECR High Density		**28,225,985**	**78,660,202**	**109,047,892**	**141,850,927**	**198,479,975**	**208,440,517**	**92,507,247**	**103,726,100**	**140,425,818**	**91,238,920**
	3.352	**5%**	**5%**	**7%**	**6%**	**7%**	**8%**	**5%**	**7%**	**5%**	**7%**
ECR Saturation		**258,505,806**	**674,531,832**	**704,025,819**	**1,219,724,954**	**1,878,309,635**	**963,421,735**	**267,646,459**	**372,967,591**	**1,094,822,840**	**482,535,906**
	4.068	**45%**	**43%**	**44%**	**53%**	**63%**	**38%**	**15%**	**24%**	**37%**	**36%**
Total ECR		**572,155,012**	**1,557,752,921**	**1,599,358,046**	**2,279,926,792**	**2,990,908,341**	**2,548,052,375**	**1,733,072,600**	**1,522,428,132**	**2,996,906,419**	**1,354,113,532**

	0 -0.5 oz	0.5 oz - 1.0 oz	1.0 oz - 1.5 oz	1.5 oz - 2.0 oz	2.0 oz - 2.5 oz	2.5 oz - 3.0 oz	3.0 oz - 3.5 oz	3.5 oz - 4.0 oz	4.0 oz - 5.0 oz	5.0 oz - 6.0 oz
Presort Cost avoidance	$ 0.0200	$ 0.0193	$ 0.0202	$ 0.0238	$ 0.0278	$ 0.0181	$ 0.0081	$ 0.0122	$ 0.0164	$ 0.0168
difference from average	$ 0.0016	$ 0.0009	$ 0.0017	$ 0.0054	$ 0.0093	$ (0.0003)	$ (0.0104)	$ (0.0062)	$ (0.0020)	$ (0.0017)
avg dropship cost avoidanc	$ 0.0000	$ 0.0000	$ 0.0000	$ 0.0000	$ 0.0001	$ 0.0001	$ 0.0001	$ 0.0000	$ 0.0001	$ 0.0001
difference from average	$ (0.0001)	$ (0.0000)	$ (0.0000)	$ (0.0000)	$ 0.0000	$ (0.0000)	$ (0.0000)	$ (0.0000)	$ 0.0000	$ 0.0000
total difference from average	$ 0.0015	$ 0.0008	$ 0.0017	$ 0.0054	$ 0.0094	$ (0.0003)	$ (0.0104)	$ (0.0062)	$ (0.0020)	$ (0.0016)

		0 to 1	1 to 2	2 to 3	3 to 5	5 to 7	7 to 9	9 to 11	11 to 13	over 13	
ECR Basic		1,089,984,108	1,704,635,247	2,290,308,855	4,180,311,095	1,218,325,283	377,165,609	124,214,500	56,637,818	51,615,774	11,093,198,289
	0	51%	44%	41%	67%	59%	65%	81%	85%	92%	54%
ECR High Density		106,886,186	250,898,819	406,920,492	336,659,165	138,955,702	46,831,892	16,098,479	4,459,434	1,963,363	1,309,673,532
	3.352	5%	6%	7%	5%	7%	8%	10%	7%	4%	6%
ECR Saturation		933,037,638	1,923,750,773	2,841,731,370	1,735,436,891	702,536,471	154,613,150	13,934,010	5,374,724	2,484,026	8,312,899,054
	4.068	44%	50%	51%	28%	34%	27%	9%	8%	4%	40%
Total ECR		2,129,907,932	3,879,284,838	5,538,960,716	6,252,407,151	2,059,817,457	578,610,651	154,246,990	66,471,977	56,063,164	20,715,770,875
	Presort Cost avoidance	$ 0.0195	$ 0.0223	$ 0.0233	$ 0.0131	$ 0.0161	$ 0.0136	$ 0.0072	$ 0.0055	$ 0.0030	$ 0.0184
	difference from average	$ 0.0011	$ 0.0039	$ 0.0049	$ (0.0053)	$ (0.0023)	$ (0.0049)	$ (0.0113)	$ (0.0129)	$ (0.0155)	$ -
	avg dropship cost avoidance per piece	$ 0.0000	$ 0.0000	$ 0.0000	$ 0.0001	$ 0.0001	$ 0.0002	$ 0.0002	$ 0.0002	$ 0.0003	$ 0.0001
	difference from average	$ (0.0000)	$ (0.0000)	$ (0.0000)	$ 0.0000	$ 0.0001	$ 0.0001	$ 0.0001	$ 0.0002	$ 0.0002	$ -
	total difference from average	$ 0.0010	$ 0.0039	$ 0.0049	$ (0.0053)	$ (0.0023)	$ (0.0048)	$ (0.0111)	$ (0.0128)	$ (0.0153)	$ -

Standard (A) Regular Rate PFY 1998 Flat Volume

	6.0 oz - 7.0 oz	7.0 oz - 8.0 oz	8.0 oz - 9.0 oz	9.0 oz - 10.0 oz	10.0 oz - 11.0 oz	11.0 oz - 12.0 oz	12.0 oz - 13.0 oz	13.0 oz - 14.0 oz	14.0 oz - 15.0 oz	15.0 oz - 16.0 oz	Total Pieces
STD A BULK NONLTR ECR BASIC PIECE RATE	0	0	0	0	0	0	0	0	0	0	579,125,243
STD A BULK NONLTR ECR BASIC POUND RATE	37,420,097	8,476,651	5,711,688	3,536,837	2,786,938	1,926,598	1,471,321	1,108,126	523,044	841,379	226,473,124
STD A BULK NONLTR ECR BASIC BMC PIECE RATE	0	0	0	0	0	0	0	0	0	0	1,566,094,242
STD A BULK NONLTR ECR BASIC BMC POUND RATE	66,497,806	36,265,405	22,753,329	9,764,307	6,340,436	5,086,581	4,697,706	1,890,823	2,293,555	1,693,551	988,357,606
STD A BULK NONLTR ECR BASIC SCF PIECE RATE	0	0	0	0	0	0	0	0	0	0	3,755,739,525
STD A BULK NONLTR ECR BASIC SCF POUND RATE	323,765,546	182,319,455	109,125,619	44,905,099	51,821,786	19,241,890	22,246,324	19,957,999	13,209,581	9,457,688	3,730,745,005
STD A BULK NONLTR ECR BASIC DDU PIECE RATE	0	0	0	0	0	0	0	0	0	0	158,548,640
STD A BULK NONLTR ECR BASIC DDU POUND RATE	10,303,128	7,864,345	4,649,118	2,753,444	2,305,653	1,342,396	625,001	280,939	200,202	158,886	88,114,905
ECR Basic	**437,986,578**	**234,925,856**	**142,239,753**	**60,959,687**	**63,254,813**	**27,597,465**	**29,040,353**	**23,237,888**	**16,226,383**	**12,151,504**	**11,093,198,289**
STD A BULK NONLTR ECR HIGH DENSITY PIECE RAT	0	0	0	0	0	0	0	0	0	0	34,555,809
STD A BULK NONLTR ECR HIGH DENSITY POUND RA	1,111,703	754,135	384,886	162,549	84,671	27,928	14,218	5,118	4,065	3,930	10,784,158
STD A BULK NONLTR ECR HIGH DENSITY BMC PIECE	0	0	0	0	0	0	0	0	0	0	30,234,846
STD A BULK NONLTR ECR HIGH DENSITY BMC POUN	2,538	10,232	701	0	1,979	0	0	0	0	0	8,001,338
STD A BULK NONLTR ECR HIGH DENSITY SCF PIECE	0	0	0	0	0	0	0	0	0	0	525,728,181
STD A BULK NONLTR ECR HIGH DENSITY SCF POUN	17,847,596	9,961,413	5,358,095	3,101,427	1,767,682	823,999	439,790	384,093	130,540	103,740	231,018,999
STD A BULK NONLTR ECR HIGH DENSITY DDU PIECE	0	0	0	0	0	0	0	0	0	0	245,173,847
STD A BULK NONLTR ECR HIGH DENSITY DDU POUN	28,754,945	19,704,615	10,657,815	7,285,986	3,694,186	2,182,165	971,334	886,711	214,873	230,294	224,176,353
ECR High Density	**47,716,781**	**30,430,395**	**16,401,497**	**10,549,962**	**5,548,517**	**3,034,091**	**1,425,343**	**1,275,921**	**349,478**	**337,964**	**1,309,673,532**
STD A BULK NONLTR ECR SAT PIECE RATE	0	0	0	0	0	0	0	0	0	0	263,737,135
STD A BULK NONLTR ECR SAT POUND RATE	6,578,045	3,558,813	2,212,823	1,375,267	974,238	666,521	415,125	303,981	216,674	231,805	64,175,866
STD A BULK NONLTR ECR SAT BMC PIECE RATE	0	0	0	0	0	0	0	0	0	0	317,126,652
STD A BULK NONLTR ECR SAT BMC POUND RATE	72,642	54,202	5,927	67,314	88,602	47,986	105,409	62,448	113,341	42,910	8,101,003
STD A BULK NONLTR ECR SAT SCF PIECE RATE	0	0	0	0	0	0	0	0	0	0	2,418,101,972
STD A BULK NONLTR ECR SAT SCF POUND RATE	35,263,374	14,121,843	5,086,475	2,333,305	1,330,210	680,077	346,011	175,356	115,024	73,980	477,141,979
STD A BULK NONLTR ECR SAT DDU PIECE RATE	0	0	0	0	0	0	0	0	0	0	2,878,948,189
STD A BULK NONLTR ECR SAT DDU POUND RATE	178,086,505	92,232,572	37,340,497	3,864,741	3,900,332	2,051,632	1,061,963	503,828	318,998	325,681	1,885,566,258
ECR Saturation	**220,000,566**	**109,967,429**	**44,645,721**	**7,640,627**	**6,293,383**	**3,446,216**	**1,928,509**	**1,045,613**	**764,037**	**674,376**	**8,312,899,054**

	6.0 oz - 7.0 oz	7.0 oz - 8.0 oz	8.0 oz - 9.0 oz	9.0 oz - 10.0 oz	10.0 oz - 11.0 oz	11.0 oz - 12.0 oz	12.0 oz - 13.0 oz	13.0 oz - 14.0 oz	14.0 oz - 15.0	15.0 oz - 16.0	Pieces
ECR Basic	437,986,578	234,925,856	142,239,753	60,959,687	63,254,813	27,597,465	29,040,353	23,237,888	16,226,383	12,151,504	11,093,198,289
ECR High Density	47,716,781	30,430,395	16,401,497	10,549,962	5,548,517	3,034,091	1,425,343	1,275,921	349,478	337,964	1,309,673,532
ECR Saturation	220,000,566	109,967,429	44,645,721	7,640,627	6,293,383	3,446,216	1,928,509	1,045,613	764,037	674,376	8,312,899,054
total ecr	705,703,925	375,323,680	203,286,971	79,150,277	75,096,713	34,077,773	32,394,204	25,559,423	17,339,897	13,163,844	20,715,770,875

		6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	total
ECR Basic		**437,986,578**	**234,925,856**	**142,239,753**	**60,959,687**	**63,254,813**	**27,597,465**	**29,040,353**	**23,237,888**	**16,226,383**	**12,151,504**	**11,093,198,289**
	0	**62%**	**63%**	**70%**	**77%**	**84%**	**81%**	**90%**	**91%**	**94%**	**92%**	**54%**
ECR High Density		**47,716,781**	**30,430,395**	**16,401,497**	**10,549,962**	**5,548,517**	**3,034,091**	**1,425,343**	**1,275,921**	**349,478**	**337,964**	**1,309,673,532**
	3.352	**7%**	**8%**	**8%**	**13%**	**7%**	**9%**	**4%**	**5%**	**2%**	**3%**	**6%**
ECR Saturation		**220,000,566**	**109,967,429**	**44,645,721**	**7,640,627**	**6,293,383**	**3,446,216**	**1,928,509**	**1,045,613**	**764,037**	**674,376**	**8,312,899,054**
	4.068	**31%**	**29%**	**22%**	**10%**	**8%**	**10%**	**6%**	**4%**	**4%**	**5%**	**40%**
Total ECR		**705,703,925**	**375,323,680**	**203,286,971**	**79,150,277**	**75,096,713**	**34,077,773**	**32,394,204**	**25,559,423**	**17,339,897**	**13,163,844**	**20,715,770,875**

	6.0 oz - 7.0 oz	7.0 oz - 8.0 oz	8.0 oz - 9.0 oz	9.0 oz - 10.0 oz	10.0 oz - 11.0 oz	11.0 oz - 12.0 oz	12.0 oz - 13.0 oz	13.0 oz - 14.0 oz	14.0 oz - 15.0 oz	15.0 oz - 16.0 oz	Total Pieces
Presort Cost avoidance	$ 0.0149	$ 0.0146	$ 0.0116	$ 0.0084	$ 0.0059	$ 0.0071	$ 0.0039	$ 0.0033	$ 0.0025	$ 0.0029	$ 0.0184
difference from average	$ (0.0035)	$ (0.0038)	$ (0.0068)	$ (0.0100)	$ (0.0126)	$ (0.0113)	$ (0.0145)	$ (0.0151)	$ (0.0160)	$ (0.0155)	$ -
avg dropship cost avoidanc	$ 0.0001	$ 0.0001	$ 0.0002	$ 0.0002	$ 0.0002	$ 0.0002	$ 0.0002	$ 0.0002	$ 0.0003	$ 0.0003	$ 0.0001
difference from average	$ 0.0001	$ 0.0001	$ 0.0001	$ 0.0001	$ 0.0001	$ 0.0001	$ 0.0002	$ 0.0002	$ 0.0002	$ 0.0002	$ -
total difference from average	$ (0.0034)	$ (0.0037)	$ (0.0067)	$ (0.0099)	$ (0.0124)	$ (0.0112)	$ (0.0144)	$ (0.0149)	$ (0.0158)	$ (0.0153)	

ECR Basic

0

ECR High Density

3.352

ECR Saturation

4.968

Total ECR

Presort Cost avoidance

difference from average

avg dropship cost avoidance per piece

difference from average

total difference from average

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-11. In Table 7 at page 29 of your testimony, you show ECR letter-nonletter unit costs by density tier (Basic, High Density, and Saturation). With respect to these unit costs, please answer the following:

(a) Please provide for each density tier the average weight per piece (i) for letters and (ii) for nonletters.

(b) Please confirm that for each density tier, nonletters have a higher average weight per piece than letters.

(c) Please provide for each density tier the percentage of ECR nonletters that weigh more than the breakpoint. If a precise percentage is not available, please provide the closest estimate, such as the percentage of pieces weighing more than 3.5 ounces.

(d) Please confirm that for each density tier, the unit cost differences between letters-nonletters include not only the effects of shape-related cost differences, but also the effects of weight-related cost differences between letters and nonletters (e.g., the 0.464$ unit cost difference between Saturation nonletters and Saturation letters reflects both shape- and weight-related cost effects).

RESPONSE:

a. According to the data in the Billing Determinants presented in USPS LR-I-125 the average weight per piece in ounces for ECR are:

ECR	Letters	Nonletters
Basic	0.74	3.41
High-Density	0.90	3.40
Saturation	0.95	2.93

b. Confirmed.

c. According to the data in the Billing Determinants presented in USPS LR-I-125 the percent of ECR nonletters above the breakpoint (pound-rated) are:

ECR	Pieces above breakpoint
Basic	45%
High-Density	40%
Saturation	31%

d. Confirmed.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-12. Please refer to the graph in ADVO/USPS-T28-8, which reproduces the graph in your LR-92 showing ECR unit costs by weight increment. The graph includes an unweighted linear regression line with the formula y = 0.0192x + 0.0126.

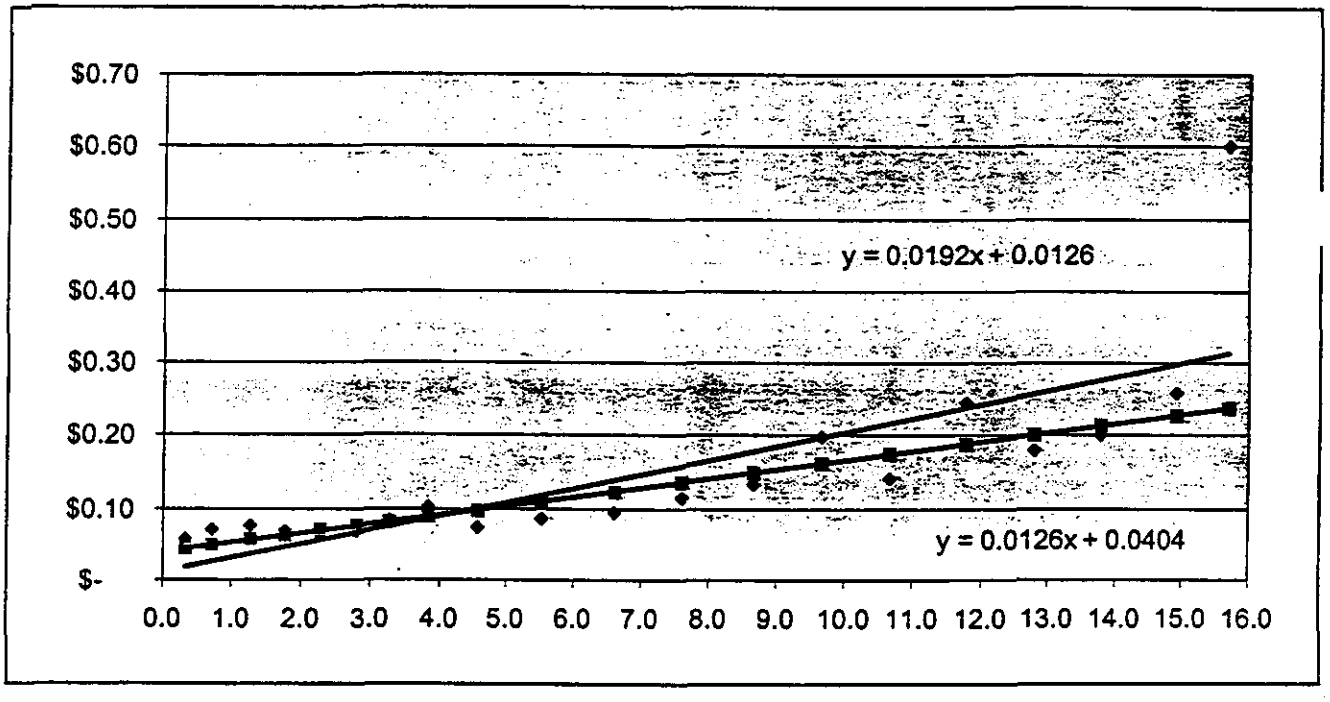
(a) Please re-run this regression excluding the data point for the last 15-16 ounce weight increment, and provide the resulting equation.

(b) Please provide a graph comparable to that in ADVO/USPS-T28-8 showing (i) all unit cost data points, (ii) your original regression line and equation, and (iii) the regression line and equation from part (a) above.

RESPONSE:

a. y = 0.0126x + .0404

b.



RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

REVISED 4/11/00

ADVO/USPS-T28-14. Please refer to Table 7 on page 29 of your testimony.

(a) Please identify the test year attributable costs, by cost component, that are not included in those figures.

(b) Please provide a unit estimate of those excluded attributable costs by shape and density level.

(c) If those excluded attributable costs do not vary by shape or density level, please so state.

RESPONSE:

a. These costs do not include:

- window service (Cost Segment 3.2) or related indirect costs, and
- vehicle service drivers (Cost Segment 8) or related indirect costs,
- transportation (Cost Segment 14)

b. Using the data in USPS LR-I-98, but changing the window service piggyback to 1.459 for window service and 1.371 for vehicle service drivers, the costs by shape are:

ECR	Window Service C/S 3.2	Vehicle Service Drivers C/S 8	Transportation C/S 14
Letters	0.042	0.060	0.050
Flats	0.036	0.323	0.268
Parcels	0.035	0.802	0.656

c. Analyses have been provided in response to ADVO/USPS-T28-13 which show window service, vehicle service drivers and transportation cost separately by shape and by Basic and High Density/Saturation.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-1. Please refer to your testimony at p. 5, footnote 1. With respect to your reference to USPS LR-I-99, please provide the exact page(s) to which your refer, and for each page cited, the line(s) to which you refer.

RESPONSE:

Footnote 1 refers generally to the direct tally data described in Section IV of the text on page 5 of Library Reference USPS LR-I-99. An electronic, soft copy of the data is found in the file entitled "LR99Sec5DIR.xls."

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-2. Please refer to your testimony at p. 4 [sic], footnote 7 [sic]. With respect to your reference to USPS LR-I-95, please provide the exact page(s) to which your refer, and for each page cited, the line(s) to which you refer.

RESPONSE:

It is assumed that this question intended to cite footnote 4 on page 7. The reference to USPS LR-I-95 is intended to refer to how the delivery costs are reconciled in the carrier route analysis of the development of delivery costs by rate category. The output of the FORTRAN program is reconciled to the base year costs by shape in witness Ramage's workpaper (WP.A.) on page 8 of the Excel file, which is printed on the 11th page of USPS LR-I-95. The reconciliation occurs in column [2] using the data in columns [6] and [7].

The reconciliation of Base Year delivery costs used in weight studies is described in section C.2. of my testimony (Conversion to Reconciled Test Year Piggybacked Costs).

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-3. Please refer to your testimony at p. 18, footnote 8 [sic]. With respect to your reference to USPS LR-I-94, please provide the exact page(s) to which your refer, and for each page cited, the line(s) to which you refer.

RESPONSE:

It is assumed that this question intended to refer to footnote 9 on page 18. The supporting calculations for the adjustments referred to can be found in Section IV of USPS LR-I-94 entitled "Regression of Periodicals Adjusted Unit Costs and Weight Increment." All of the pages in this section are relevant to supporting the calculation of the adjustments.

The names of the electronic files supporting these calculations all begin with "LR94dxxx." These files include the regression input database "LR94dreg.dbf"; the SAS program and its log and list files entitled "LR94dreg.sas, .log, .lst"; and an excel spreadsheet entitled "LR94dper.xls."

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-4. Please refer to your testimony at p. 18, footnote 8 [sic]. With respect to your reference to USPS LR-I-102, please provide the exact page(s) to which your refer, and for each page cited, the line(s) to which you refer.

RESPONSE:

It is assumed that this question intended to refer to footnote 9 on page 18. The volume data supporting the adjustments referred to in the question can be found on page 32 of USPS LR-I-102, Table 11 entitled "Periodicals Copies by Subclass, Presort Level and Ounce Increment, FY1998." All of the figures in this table are used in the calculations found on pages 1 and 2 of Section IV in USPS LR-I-94.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-5. Please refer to your testimony from page 15, line 12, through page 17.

(a) Do IOCS direct tallies for Standard A Mail under the 3.3 ounce breakpoint record the weight of pieces by ounce or half-ounce increment?

(b) Did you develop any weight-cost relationship(s) by ounce increment either for all Standard A Mail, or for any subclasses or subsets (e.g., flats or letters) of Standard A Mail?

(c) If your answer to preceding part (a) is negative, please provide a detailed explanation why you did not use the available data to develop any such estimate (as you did for Periodicals and, to some extent, for First-Class Mail).

(d) If your answer to preceding part (a) is affirmative, please provide all such weight-cost relationships which you developed, including the incremental cost per ounce which you believe best represents the weight-cost relationship for all Standard A mail and for each subclass of Standard A Mail.

RESPONSE:

(a) See page 4 line 27 of my testimony. IOCS records the weight of pieces by ½ - ounce increments for pieces weighing up to four ounces.

(b) The analyses contained in Sections 1, 3 and 4 pages 10-22, and Section 2 pages 10-23 of USPS LR-I-92 (see Table of Contents for specific pages for each shape and subclass) allocate the costs by detailed ½-ounce increment and ounce increment and by combined ounce increments by shape, separately for letters, flats, and parcels, for all four subclasses of Standard Mail (A).

(c) N/A

(d) All weight-cost analyses developed for Standard Mail (A) are contained in USPS LR-I-92. Average incremental "cost per ounce" figures for all of Standard Mail (A) or for each subclass were not developed.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-6. Please refer to Table 3 at page 17 of your testimony.

(a) Other than IOCS tallies, have you any facts or hypotheses to explain why nonprofit ECR parcels weighing less than either 3.0 to 3.5 ounces should cost over $4 per piece, while heavier nonprofit ECR parcels weighing more than either 3.0 to 3.5 ounces cost about $2 per piece?

(b) Other than IOCS tallies, have you any hypotheses to explain why nonprofit ECR parcels weighing less than either 3.0 to 3.5 ounces cost over $4 per piece, while commercial ECR parcels of the same weight cost less than $1 per piece?

(c) The average cost of all nonprofit parcels is $2.4946, while the average cost of commercial parcels is only $0.8242. Other than IOCS tallies, have you any facts or hypotheses to explain why nonprofit ECR parcels cost 3 times as much, on average, as commercial parcels?

(d) Did you compute any statistical measures of reliability for these results? If not, how credible are your results and how much weight should they be given?

(e) Please produce all studies, analyses, reports and other documentation that support your responses to parts (a) through (d).

RESPONSE:

(a-b) There are few NPECR parcels (less than 2 million in FY98), so the difference could be attributed to the difficulties associated with estimating and calculating unit costs for small volume categories.

(c) According to witness Crum's response to interrogatory PSA/USPS-T27-5(a), Nonprofit ECR parcel costs have been historically high; however, the very high unit cost reported in Table 3 at page 17 of my testimony and in witness Crum's USPS-T-27 Attachment F could be the result of a variance due to the difficulties associated with estimating and calculating unit costs for small volume categories.

(d) The purpose of my testimony was not to compute the unit costs of nonprofit and commercial parcels, but to provide cost data by appropriate weight increments to guide rate design. See witness Crum's response to interrogatory PSA/USPS-T27-5 for a discussion of the reliability of parcel unit cost estimates. Also, please see

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

witness Ramage's response to interrogatory ANM/USPS-T2-13 for a calculation of coefficients of variation associated with the weight increment cost estimates developed in my testimony.

(e) Please see witness Crum's response to interrogatory PSA/USPS-T27-5 as well as witness Ramage's response to interrogatory ANM/USPS-T2-13. I am unaware of any other studies, analyses, or reports responsive to this subpart.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-7. Please refer to Table 3 at page 17, section on Flats. Regardless of whether you use the 3.0 or 3.5-ounce breakpoint, lighter weight Regular flats cost less [sic] than heavier weight flats. At the same time, the table reports that exactly the reverse holds for ECR, NP and NPECR flats.

(a) Please confirm that the reported cost-weight relationship for Regular flats is anomalous or counterintuitive. If you fail to confirm without qualification, provide a detailed explanation for your answer, and produce all data and analyses on which you rely.

(b) Aside from IOCS tallies, do you have any facts or hypotheses to explain the weight-cost relationship that you have developed for Regular flats? If so, please state the hypotheses and produce any supporting data.

(c) Please confirm that the data in your Table 3, if credited by the Commission, would support the inference that the pound rate for the Regular Subclass should equal zero, with all costs recovered from the piece rate. If you fail to confirm without qualification, please explain in detail and produce all data on which you rely.

RESPONSE:

According to Table 3 at page 17 of my testimony, lighter weight Regular flats cost more, not less as this question stated, than heavier weight flats.

(a-b).Not confirmed. Please see my testimony page 12 line 17 through page 13 line 2. There has historically been a u-shaped pattern for flats of all classes. This is even the case in ECR, NP and NPECR flats, though the curve is not as steep, causing the average above and below 3.0 or 3.5 ounces to be different. Light-weight flats can cause problems in processing. In addition, the costs in Table 3 have not been adjusted for the effects of presorting, prebarcoding or dropshipping; therefore, if heavier weight Regular flats are dropshipped, presorted and/or prebarcoded in greater proportions than lighter weight Regular flats, one might expect heavier flats to cost less than lighter flats.

(c). The purpose of my testimony is to supply cost information to rate design witnesses. I do not have an opinion as to whether Table 3 should support a zero pound rate, as I understand that a variety of factors are considered in the rate design by the pricing witnesses.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-8. At page 18 you describe how you adjusted for differences in presorting when studying the weight-cost relationship for Periodicals.

(a) Please confirm that the effect of presort for Standard A Mail is similar to the effect you describe for Periodicals. If you fail to confirm without qualification, please provide a full explanation of all significant differences in the effect on the two classes.

(b) Did you attempt to control for the presort factor, or make any other adjustment when studying the weight-cost relationship for Standard A flats?

(c) If so, provide a detailed explanation of what you did, and produce sufficient documentation to enable third parties to test your conclusions.

(d) If not, why not?

RESPONSE:

(a) Not confirmed. The effect of presort depends on how the presort mix within each weight increment compares with the average presort mix. There is no reason to suspect that the differences in presort mix by weight increment would necessarily be the same for Periodicals as in Standard Mail (A). In fact, lighter weight Standard Mail (A) Regular flats are not significantly less presorted than the average and heavier weight Standard (A) Regular flats are not significantly more presorted than the average, as is the case with Periodicals as seen in the volumes by rate category and weight increment in the attachment.

(b) An attempt to control for the presort factor, as well as prebarcoding and dropshipping, was made in the preliminary stages of the analysis of weight and costs of Standard Mail (A) Regular flats.

(c) Volume data by weight increment were grouped together by presort/prebarcoding rate categories and pound data by weight increment were grouped together by dropship categories. The percent of volume or pounds by rate category of the total within each weight increment was calculated. Next, preliminary cost avoidance estimates were used to calculate the cost differences between prebarcoded and presorted flats from Nonautomation Basic, and between dropshipped and nondropshipped mail. Then the product of the percent of pieces of each

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

presort/prebarcode rate category within each weight increment and the preliminary estimated cost difference from Nonautomation Basic flats were summed. This "presort cost avoidance" for each weight increment was subtracted from the average calculated "presort cost avoidance" to obtain the difference from the average. To calculate the difference from average dropship costs, the product of the pounds of each dropship rate category within each weight increment and the preliminary estimated cost difference from nondropshipped mail were summed. This number was divided by the number of pieces in the weight increment to get a cost avoidance per piece. Next, this "dropship cost avoidance" for each weight increment was subtracted from the average calculated "dropship cost avoidance" to determine the difference from the average. Finally, the "presort difference from average" was added to the "dropship difference from average" to get a "total difference from average."

All of these steps were performed prior to the completion of all the final inputs and have not been performed with final figures. No analysis has therefore been documented. The process is similar to that performed for Periodicals in Section IV USPS LR-I-94. Volume data by rate category and ounce increment needed for this analysis are provided in USPS LR-I-225. Cost avoidances can be calculated using data in the testimonies of USPS witnesses Yacobucci (USPS-T-25) and Crum (USPS-T-27).

(d) N/A

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-9. At page 18 you note that "Periodicals rate design generates revenue from per piece elements and per pound elements," even though pieces and total pounds are not the only cost drivers.

(a) Please confirm that a similar statement is applicable to Standard A Mail. If you fail to confirm without qualification, provide a detailed explanation.

(b) For all Standard A Mail, or for any subclass or subset thereof (e.g., flats, letters, parcels), what is the estimated total cost of weight in excess of (i) 3.0 ounces, (ii) 3.3 ounces, and (iii) 3.5 ounces?

(c) For each estimated total cost of weight provided in response to the preceding question, please provide the percent of total cost represented by weight (e.g., similar to the result that you report for Periodicals at page 18, lines 15-16 of your testimony).

RESPONSE:

(a) Confirmed in part. Each Periodicals piece pays both a per-piece and a per-pound rate, whereas in Standard Mail (A), pieces below the breakpoint only pay a per-piece rate.

(b) Since there are relatively few parcels in total and relatively few letters weighing more than 3.0 ounces, and since data are not available to estimate costs for pieces with a 3.3 ounce breakpoint, I have estimated costs for the subset of flats in the Nonprofit, ECR and NPECR subclasses in excess of 3.0 and 3.5 ounces using a methodology similar to that used for First-Class. Since the average cost of Standard Mail (A) Regular flats weighing less than 3.0 or 3.5 ounces is higher than flats weighing more than 3.0 or 3.5 ounces, the analysis is not applicable.

		Cost in Excess of	
Subclass	Shape	3.0 ounces	3.5 ounces
Regular	Flat	N/A	N/A
Nonprofit	Flat	$0.0191	$0.0430
ECR	Flat	$0.0227	$0.0233
NPECR	Flat	$0.0320	$0.0313

(c) Using the analyses in USPS LR-I-92, the percent of total cost represented by weight according to the equations in Section 1 page 16 (y=0.0059x+0.2318,

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

x=3.69), Section 2 page 17 (y=0.0155x+0.0265, x=3.22), Section 3 page 16 (y=0.0412x+0.095, x=2.60) and Section 4 page 16 (y=0.1195x-0.3412, x=2.12) is 8.6% for Standard Mail (A) Regular flats, 65.4% for ECR flats, 53% for Nonprofit flats and N/A for NPECR flats because the equation has a negative y-intercept. These equations, however, have not been volume weighted and they do not incorporate any adjustments for dropshipping or presorting as was done for Periodicals. Thus, while the results above are derived by a similar methodology as used for Periodicals, they do not use the exact same worksharing-adjusted and volume weighted regression approach.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-10. The percentages in the table below are derived from the data in your Table 7. As you can see, Nonprofit Basic letters and nonletters each have mail processing unit costs that are sharply higher than the commercial Standard A Regular counterpart.

(a) Aside from the IOCS tallies that underlie your cost development, do you have any factual explanation, hypotheses or theories to explain why both nonprofit Basic letters and nonletters have a higher unit cost? That is, does nonprofit Basic mail have some characteristics that predictably cause higher unit costs, or are the higher unit costs simply a result of more frequent sampling by the IOCS during FY 1998? Please explain fully, and produce all data, studies and analyses that support your position.

(b) Did you develop any statistical measure of reliability (e.g., standard of deviation, coefficient of variation) for the mail processing unit cost estimates for nonprofit ECR mail? If so, please provide the results, and the range at the 95 percent confidence level.

Standard A Nonprofit ECR Unit Cost Estimates (for discounts) as a Percent of Standard A Regular ECR Unit Cost Estimates (for discounts)

	Mail Processing Costs	Delivery Costs
Letters		
Auto Basic	102.4%	69.6%
Basic	228.6%	69.6%
High density	27.4%	69.6%
Saturation	27.4%	69.6%
Non-Letters		
Basic	185.9%	70.0%
High Density	86.2%	70.0%
Saturation	86.2%	70.0%

RESPONSE:

(a) I have not studied this; however, I note that this could be due to differences in sample size. In FY98, the volume of NPECR letters was 1.8 billion and the volume of NPECR nonletters was 0.8 billion whereas the volume of ECR letters was 13.3 billion and the volume of ECR nonletters was 20.8 billion.

(b) I have not developed any statistical measures of reliability for mail processing unit cost estimates for nonprofit ECR mail.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-11. Please refer to Table 3 at page 17. Provide specific citations (page number, table, etc.) to where the supporting data can be found in USPS LR-I-92.

RESPONSE:

		REG	ECR	NP	NPECR
All Shapes	>< 3.0 oz >< 3.5 oz	Sec. 1 p.10 15th page	Sec. 2 p.10 46th page	Sec. 3 p.10 78th page	Sec. 4 p.10 108th page
	average	Sec. 1 p.11 16th page	Sec. 2 p.11 47th page	Sec. 3 p.11 79th page	Sec. 4 p.11 109th page
Letters	>< 3.0 oz >< 3.5 oz	Sec. 1 p.13 18th page	Sec. 2 p.14 50th page	Sec. 3 p.13 81st page	Sec. 4 p.13 111th page
	average	Sec. 1 p.14 19th page	Sec. 2 p.15 51st page	Sec. 3 p.14 82nd page	Sec. 4 p.14 112th page
Flats	>< 3.0 oz >< 3.5 oz	Sec. 1 p.16 21st page	Sec. 2 p.17 53rd page	Sec. 3 p.16 84th page	Sec. 4 p.16 114th page
	average	Sec. 1 p.17 22nd page	Sec. 2 p.18 54th page	Sec. 3 p.17 85th page	Sec. 4 p.17 115th page
Parcels	>< 3.0 oz >< 3.5 oz	Sec. 1 p.19 24th page	Sec. 2 p.20 56th page	Sec. 3 p.19 87th page	Sec. 4 p.19 117th page
	average	Sec. 1 p.20 25th page	Sec. 2 p.21 57th page	Sec. 3 p.20 88th page	Sec. 4 p.20 118th page
Flats& Parcels	>< 3.0 oz >< 3.5 oz	Sec. 1 p.16 21st page	Sec. 2 p.17 53rd page	Sec. 3 p.16 84th page	Sec. 4 p.16 114th page
	average	Sec. 1 p.17 22nd page	Sec. 2 p.18 54th page	Sec. 3 p.17 85th page	Sec. 4 p.17 115th page

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-12. What cost segments are included in the cost data shown in your Table 3? Please explain how the data in this table are developed.

(a) Are transportation costs included?
(b) Are carrier in-office costs included?
(c) Are carrier route costs included?
(d) Are indirect costs included?
(e) Which piggybacks are included?

RESPONSE:

As stated on page 3 lines 11-14 of my testimony, "[t]he results, which are presented in Tables 1 through 3, were derived by analyzing subclass volume-variable costs in the mail processing, window service, delivery, transportation, vehicle service and "other" cost components individually by shape and in total over all shapes." In addition, as stated on page 16 lines 7 - 8 of my testimony, the costs in this table were developed using the detailed data found in USPS LR-I-92. Sections III-IV on pages 3 through 10 of my testimony explain how the data in the library reference were developed.

(a) Yes. Please see Section IV.E on pages 9 and 10 of my testimony.
(b) Yes. Please see Section IV.C.1-3 on pages 7 and 8 of my testimony.
(c) If the question's reference to "carrier route costs" is intended to refer to carrier street costs including route costs, then the answer is yes. Please see Section IV.C.4 on pages 8 and 9 of my testimony.
(d-e) Yes, indirect costs are included by using piggyback factors. Mail Processing, Window Service, City and Rural Carriers, and Vehicle Service driver piggybacks are included. Please see my testimony Section IV.A.2 on page 5 for Mail Processing, Section IV.B.2 on pages 6-7 for Window Service, Section IV.C.2-4 pages 7-9 for City Carriers, Section IV.C.5 page 9 for Rural Carriers, and Section IV.D also page 9 for Vehicle Service.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-13. Please refer to your testimony at page 18, lines 6-9. Explain what you mean by the term "these costs" as it appears on lines 7 and 8. To what does the relative pronoun refer? Do you mean "costs" (as in line 5), TY costs by ounce increment (as in line 3), piece related costs, mail processing costs, or something else?

RESPONSE:

The costs referred to on page 18 line 6 of my testimony are the costs of light-weight Periodicals pieces which are less presorted than average. The costs referred to on page 18 line 8 of my testimony are the costs of heavier Periodicals pieces, which are more presorted than average.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ALLIANCE OF NONPROFIT MAILERS

ANM/USPS-T28-14. Please refer to Tables 4a and 4b at pages 19a and 19b. For each table, provide specific citations (page number, table, etc.) to where the supporting data can be found in USPS LR-I-93.

RESPONSE:

Table 4a is the first page of USPS LR-I-93. Table 4b is on page 13 of USPS LR-I-93. These two tables are derived from the table on pages 11-12 of USPS LR-I-93 entitled "Regular and Nonprofit Periodicals All Shapes Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments." The inputs to this table are on pages 2-10 of USPS LR-I-93 and the formulae used to derive the costs are found at the bottom left-hand side of page 11.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO INTERROGATORY OF ALLIANCE OF NONPROFIT MAILERS REDIRECTED FROM WITNESS RAMAGE

ANM/USPS-T2-19. This question refers to attachment ANM/USPS-T2-19, which is hereby incorporated as part of the question. The mail processing cost and volume data in the attachment are from LR-I-96. The percentages in the bottom portion are computed from the data in the top part.

(a) Please confirm that the mail processing cost and volume data in the top portion have been correctly transcribed. If you do not confirm, provide the correct data.

(b) Please confirm that, for shape, presort condition and weight, the three Commercial ECR letter categories shown here (Basic, Auto and High Density/Saturation combined) constitute reasonably homogeneous subcategories vis-a-vis their respective Nonprofit ECR letter counterparts? If you do not confirm, please provide and discuss all significant cost-causing differences.

(c) The bottom portion of the table in the attachment indicates that, for Auto ECR letters, the Nonprofit Test Year volume (439 million) amounts to 17.4 percent of the Commercial volume (2,528 million), while nonprofit dollar-weighted IOCS tallies in Test Year amount to 17.9 percent of commercial. Please confirm that the similarity of the two percentages is unsurprising in light of the homogeneity of the mail. Please explain fully any failure to confirm.

(d) The bottom portion of the table also shows that in Test Year Basic Nonprofit ECR, letters Nonprofit receive 28.9 percent of the dollar-weighted amount attributed to Commercial ECR letters, yet the volume of Nonprofit ECR Basic letters (888 million) amounts to only 12.3 percent of the volume of Commercial ECR Basic letters (7,212 million). If Nonprofit and Commercial ECR Basic letters have an equal chance of being sampled each time an IOCS tally happens to be taken from ECR Basic letters, what is the probability of drawing a sample that is so disproportionate to the volumes of each respective rate category? What is the coefficient of variation (CV) for the mail processing cost estimate for Nonprofit Basic ECR letters?

(e) For all ECR non-letters combined, Nonprofit volume (934 million) amounts to 4.6 percent of Commercial volume (20,502 million) while Nonprofit mail processing cost (based on dollar-weighted IOCS tallies) amounts to 12.0 percent of Commercial. If Nonprofit and ECR non-letters have an equal chance of being sampled each time an IOCS tally happens to be taken from ECR non-letters, what is the probability of drawing a sample that is so disproportionate to the volumes of each respective category? What is the coefficient of variation for the mail processing cost estimate for (i) Nonprofit Basic non-letters, (ii) Nonprofit High Density/Saturation non-letters, and (iii) all Nonprofit non-letters combined?

(f) For all ECR combined, Nonprofit volume (2.9 million) amounts to 8.6 percent of Commercial volume (33.6 billion), while dollar-weighted Nonprofit mail processing cost (based on IOCS tallies) amounts to 17.3 percent of Commercial. If Nonprofit ECR mail has an equal chance of being sampled each time an IOCS tally happens to be taken from ECR mail, what is the probability of drawing a sample what is so disproportionate to the volumes of each respective category? What is the coefficient of variation for the mail processing cost estimate for all Nonprofit ECR mail?

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO INTERROGATORY OF ALLIANCE OF NONPROFIT MAILERS REDIRECTED FROM WITNESS RAMAGE

(g) The table in the attachment relies solely on dollar-weighted IOCS tallies. For each mail processing cost estimate shown in the top portion of the table, please provide the number of direct tallies that underlie and form the basis for the dollar-weighted cost estimate. If the raw tallies are not distributed in proportion to the dollar-weighted cost estimates, please explain (i) which operations and their associated tallies have a higher-than-average cost, and (ii) why were nonprofit tallies disproportionately distributed among the operations with higher-than-average cost.

(h) As pointed out in the preceding part (f), the volume of all Nonprofit ECR (2.9 million) amounts to only 8.6 percent of Commercial volume (33.6 billion). On a percentage basis, the volume of Nonprofit ECR might reasonably be described as "small," if small is defined as anything less than 10 percent. From a statistical viewpoint, does 2.9 million pieces constitute a relatively small volume for obtaining reasonably accurate mail processing cost estimates that are not likely to offer much variation owing to random differences in the sample?

(i) How large do the volume and the sample have to be before one can expect relatively little variation in the cost estimate owing to random variation?

RESPONSE:

(a). Not confirmed. Commercial ECR Saturation Nonletters should be 10,763 not 10,753. This affects the total and subtotal. These changes are shaded and italicized in a revised version of the attachment. There are also some minor changes due to rounding. These changes are just shaded in the revised version of the attachment. None of these changes affects the percentages calculated at the bottom.

(b). It is unclear what the question intends by the phrase "reasonably homogeneous." One significant cost-causing characteristic not mentioned in the question is the level of dropshipping. The dropship profile of Basic and Saturation/High Density letters for the two subclass are as follows:

ECR	No dropshipping	DBMC	DSCF	DDU
Basic	22%	42%	34%	1%
Saturation/HD	8%	5%	74%	13%
Total	18%	31%	46%	5%

NPECR	No dropshipping	DBMC	DSCF	DDU
Basic	30%	33%	33%	3%
Saturation/HD	19%	2%	44%	35%
Total	26%	22%	37%	14%

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO INTERROGATORY OF ALLIANCE OF NONPROFIT MAILERS REDIRECTED FROM WITNESS RAMAGE

The differences in presort condition and weight per piece are as follows: ECR Basic letters are 55% of total ECR letters and NPECR Basic letters are 45% of total NPECR letters. ECR Auto Basic letters are 19% of total ECR letters and NPECR Auto Basic letters are 22% of total NPECR letters. Finally, ECR Saturation/High Density letters are 26% of total ECR letters and NPECR Saturation/High Density letters are 33% of total NPECR letters. The average weight of ECR letters is 0.8174 ounce per piece and the average weight of NPECR letters is 0.7412 ounce per piece.

(c-f) Answered by witness Ramage.

(g) The requested counts of IOCS records are provided in the attached table. The specific objects to which the terms "raw tallies" and "dollar-weighted cost estimates" refer are unclear. Note that the statement that "[t]he table in the attachment relies solely on dollar-weighted IOCS tallies" is incorrect; data sources other than IOCS are used to develop the data in the table. While it is basically correct to say that volume-variable mail processing costs in a cost pool are distributed in proportion to the dollar- weighted IOCS tallies associated with that pool, please see witness Van-Ty-Smith's testimony -- USPS-T-17, USPS LR-I-106, and the responses to ANM/USPS-T2-5 and -7 -- for full details of the IOCS processing methods. In addition, the costs in the table are Test Year costs; therefore, base year costs were converted to Test Year costs using the methodology described on page 27 of USPS-T-28.

(h-j) Answered by witness Ramage.

Revised Attachment in response to ANM/USPS-T2-19

	Test Year IOCS Mail Processing Cost (from LR-I-96) MODS	BMCs	Non-MODS	GRAND TOTAL	Test Year Vol. (from LR-I-96, p.17)
Commercial ECR					
Letters					
Basic	107,300	8,962	26,940	143,202	7,212,310
Auto	32,376	3,458	9,498	45,332	2,527,648
High-D					
Saturation	13,399	190	6,561	20,150	3,388,002
Subtotal	153,075	12,610	42,999	208,685	13,127,960
Non-letters					
Basic	171,453	15,550	53,076	240,079	10,981,789
High-D					
Saturation	10,641	747	*10,763*	*22,150*	9,520,767
Subtotal	182,094	16,297	*63,838*	*262,229*	20,502,556
TOTAL	335,169	28,907	*106,838*	*470,914*	33,630,516
Nonprofit ECR					
Letters					
Basic	33,808	1,565	5,974	41,347	888,012
Auto	6,898	428	788	8,114	439,312
High-D					
Saturation	510	0	0	510	645,932
Subtotal	41,216	1,993	6,762	49,972	1,973,255
Non-letters					
Basic	17,814	6,503	6,014	30,330	629,104
High-D					
Saturation	703	0	424	1,127	304,847
Subtotal	18,517	6,503	6,438	31,457	933,951
TOTAL	59,733	8,496	13,200	81,429	2,907,206
	Nonprofit as a Percent of Corresponding Commercial Rate				
Nonprofit ECR					
Letters					
Basic	31.5%	17.5%	22.2%	**28.9%**	**12.3%**
Auto	21.3%	12.4%	8.3%	**17.9%**	**17.4%**
High-D					
Saturation	3.8%	0.0%	0.0%	**2.5%**	**19.1%**
Subtotal	26.9%	15.8%	15.7%	**23.9%**	**15.0%**
Non-letters					
Basic	10.4%	41.8%	11.3%	**12.6%**	**5.7%**
High-D					
Saturation	6.6%	0.0%	3.9%	**5.1%**	**3.2%**
Subtotal	10.2%	39.9%	10.1%	**12.0%**	**4.6%**
TOTAL	17.8%	29.4%	12.4%	**17.3%**	**8.6%**

Attachment to ANM/USPS-T2-19

BY98 IOCS Mail Processing Direct Tally Record Counts

	MODS	BMCs	Non-MODS	GRAND TOTAL
Commercial ECR				
Letters				
Basic	463	30	105	598
Auto	124	7	24	155
High-D				
Saturation	54	1	17	72
Subtotal	641	38	146	825
Non-letters				
Basic	798	46	234	1,078
High-D				
Saturation	57	2	41	100
Subtotal	855	48	275	1,178
TOTAL	1,496	86	421	2,003
Nonprofit ECR				
Letters				
Basic	126	8	15	149
Auto	24	2	4	30
High-D				
Saturation	2	0	0	2
Subtotal	152	10	19	181
Non-letters				
Basic	81	16	22	119
High-D				
Saturation	2	0	1	3
Subtotal	83	16	23	122
TOTAL	235	26	42	303

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORY OF KEYSPAN ENERGY

KE/USPS-T28-1 On page 20 of your testimony you discuss delivery cost differences caused by shape, DPS, and high density and saturation presorting for First-Class Mail Presort, Periodicals, and Standard Mail (A). This interrogatory addresses the delivery costs of First-Class automation-compatible letters received by an addressee in high volumes.

(a) If one addressee receives consistent high volumes of mail (10,000+ pieces per day), does the Postal Service fill a dedicated delivery truck (separate from mail addressed to other locations) in order to take the mail to the premises of that one addressee? If not, how does the Postal Service facilitate the delivery of such large volumes?

(b) Does such a delivery described in part (a) occur rarely or frequently?

(c) Compared to the cost of delivery for an average First-Class letter, does such a delivery described in part (a) cost more or less on an average unit basis? Please support your answer.

(d) Would the Postal Service prefer to deliver high volumes of mail to the premises of an addressee, or have the addressee pick up the mail at the office of delivery, such as from caller or box service? Please support your answer.

(e) What percent of Courtesy Reply Mail that is received in high volumes is addressed to a post office box? Please support your answer.

(f) What percent of Qualified Business Reply Mail that is received in high volumes is addressed to a post office box? Please support your answer.

(g) What percent of all Qualified Business Reply Mail is addressed to a post office box? Please support your answer.

RESPONSE:

(a) It is my understanding that the Postal Service may fill a dedicated delivery truck in order to take the mail to the premises of an addressee who receives high volumes of mail. The Postal Service may also fill a larger truck with the mail of several customers who receive high volumes of mail in what is known as a "firm run."

(b) Such deliveries occur as needed.

(c) The unit cost of such deliveries would depend on the volume of mail being delivered.

(d) It is my understanding that the Postal Service does not have a preference.

(e) The Postal Service does not have information responsive to this request.

(f) The Postal Service does not have information responsive to this request.

(g) The Postal Service does not have information responsive to this request.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF MAJOR MAILERS ASSOCIATION

MMA/USPS-T28-1. In its R97-1 Opinion and Recommended Decision, the Commission stated:

> In repeated Opinions, the Commission has urged the Postal Service and other parties to address the cost of processing additional ounces of First-Class Mail. Regrettably, the Service has again failed to respond to this request. (Op 97-I at 301 (citations omitted)).

On page 1 of your prepared testimony, you note that the purpose of your testimony is to "[a]nalyze the relationship between weight and cost to support rate design in First-Class, Standard Mail (A), and Periodicals."

(a) Does your testimony represent the Postal Service's response to the Commission's specific request to "address the cost of processing additional ounces of First-Class Mail"? If your answer is yes, please explain in detail how your testimony provides the required information.

(b) Please explain the impact of the second ounce on postal costs for processing a First-Class letter.

(c) Please explain the impact of the second ounce on postal costs for processing a Standard A letter.

(d) Is the purpose of your testimony to provide cost support for a constant rate per additional ounce up to 13 ounces for First-Class? If your answer is affirmative, please explain how your study meets that objective.

(e) Is the purpose of your testimony to support a constant rate per piece for letters weighing up 3.5 ounces for Standard Mail A? If your answer is affirmative, please explain how your study meets that objective.

RESPONSE:

(a) Yes. A detailed analysis of costs by shape and ounce increment is presented in USPS LR-I-91 as referred to on page 12 of my testimony.

(b) The data in USPS LR-I-91 currently show the second ounce of "First-Class Single Piece letters-only" costs 13.4 cents more than the first ounce. However, the First-Class Single-Piece window service costs

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF MAJOR MAILERS ASSOCIATION

in USPS LR-I-91 do not match those in USPS LR-I-99. An errata to USPS LR-I-91 will be filed shortly which will show the second ounce of "First-Class Single Piece letters-only" costs 13.1 cents more than the first ounce. Data in USPS LR-I-91 also show the second ounce of "First-Class Presort letters-only" costs 15.1 cents more than the first ounce.

(c) The data in USPS LR-I-92 show the second ounce of Standard Mail (A) Regular letters-only cost 0.4 cent more than the first ounce. Data in USPS LR-I-92 also show the second ounce of Standard Mail (A) ECR letters-only cost 0.7 cent more than the first ounce.

(d) The purpose of my testimony is to prepare and analyze cost data for witness Fronk, the First-Class Mail rate design witness. The evaluation of constant rate per additional ounce is conducted within the rate design analysis.

(e) The purpose of my testimony is to prepare and analyze cost data for witness Moeller, the Standard Mail (A) rate design witness. The evaluation of these data is conducted within the rate design analysis.

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MMA/USPS-T28-2. Please refer to page 2 of your testimony where you state that Sections V through VII present "the results of the relationship between weight and [Test Year unit] cost in First-Class Mail, Standard Mail (A), and Periodicals."

(a) Please confirm that your testimony does not provide the specific impact of weight on cost for First-Class letter-shaped mail. If you cannot confirm, please explain the specific impact of weight on cost, by ounce increment, for letters weighing up to four ounces. Please provide all documents that support your answer.

(b) Please confirm that your testimony does not provide the specific impact of weight on cost for Standard A letter-shaped mail. If you cannot confirm, please explain the specific impact of weight on cost, by ounce increment, for letters weighing up to four ounces. Please provide all documents that support your answer.

RESPONSE:

(a) The purpose of my testimony is to provide cost data to the pricing witness at a level of detail appropriate for rate design. Since First-Class Single-Piece Mail does not have shape-based rates, it was unnecessary to provide shape-specific data in my testimony; however, shape-specific data for First-Class Mail is provided in USPS LR-I-91.

(b) Data by ounce increment and shape for Standard Mail (A) are provided in USPS LR-I-92; however, as I note in my testimony on page 3, these data "are intended to guide rate design by providing a *general* indication of the effect weight has on total volume variable costs. They are not necessarily intended to be an *exact* quantification of costs for every individual weight increment."

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MMA/USPS-T28-3. Please provide the average unit weight for:

(a) a First-Class nonpresorted letter;
(b) a First-Class presorted letter; and
(c) a Standard A Regular Rate letter.

For each of the pieces for which you provide the average unit weight, please provide all documents, or references to the appropriate portions of the USPS' filing in this case, that show the source data used by you to determine the average unit weight.

RESPONSE:

(a) Using the data in USPS LR-I-102, Table 10A, the average weight per piece for First-Class Single Piece letters is 0.48 ounces.

(b) Using the data in USPS LR-I-102, Table 10A, the average weight per piece for First-Class Presort letters is 0.62 ounces.

(c) Using the data in USPS LR-I-102, Table 13, the average weight per piece for Standard Mail (A) Regular letters is 1,126,778/21,223,935*16 = 0.85 ounces.

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MMA/USPS-T28-4. On page 3 of your prepared testimony, you state:

> Isolating the effect of weight on cost is very difficult because weight is rarely the only characteristic that varies between different mail pieces. The shape, origin/destination combination, cube, and level of presorting and dropshipping of mail can affect the cost of mail.

(a) Please explain the extent, if any, to which the Postal Service has tried to isolate the effect of weight on cost since the last rate proceeding.

(b) When did you come to the conclusion stated above?

RESPONSE:

(a) Data are not available to normalize for, among other things, differing mail make-up practices, differing origin/destination characteristics or differing cube. Some data are available to normalize for changing shape-mix and differing levels of dropshipping, presorting and barcoding across weight increments. Thus, weight cannot be completely isolated for. However, the cost studies presented in USPS LR-I-91 through LR-I-93 account for the differences in shape mix, which changes dramatically over weight increments, as shown on pages 15 and 16 of my testimony. Furthermore, the cost study presented in USPS LR-I-93 accounts for the effect of different presorting and prebarcoding levels across weight increments.

(b) My statement is intuitive; it is based on a basic knowledge of postal cost drivers as evidenced to a large degree in rate design. This was evident to me when I began to work on postal costing issues while assisting in the preparation of Docket No. MC95-1.

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MMA/USPS-T28-5. On page 12 of your prepared testimony, you state that for First-Class nonpresorted letters,

> Letter costs rise over the first four ounces before leveling off for pieces over four ounces. This result is consistent with the results of previous engineering studies presented in Docket No. MC95-1 that showed throughput on letter automation equipment declined as weight increased to 4 ounces. (Citation omitted).

(a) Please confirm that your observation is very general in nature and that you cannot conclude directly from your study that letters weighing between one and two ounces cost more to process than letters weighing under one ounce. Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this case, relied upon by you in formulating your response.

(b) Please confirm that your observation is very general in nature and that you cannot conclude directly from your study that letters weighing between two and three ounces cost more to process than letters weighing under two ounces. Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this case, relied upon by you in formulating your response.

(c) Please confirm that the MC95-1 engineering studies to which you refer indicated that throughput rates decrease only gradually as a letter's weight increases to about 2.5 ounces and that throughput rates decrease at a faster rate as a letter's weight increases from 2.5 ounces to 4.5 ounces. Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this or any earlier case, relied upon by you in formulating your response.

(d) Please confirm that the MC95-1 engineering studies to which you refer indicated nothing about how decreased throughput would specifically affect costs. Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this or any earlier case, relied upon by you in formulating your response.

(e) Please confirm that only a small fraction of First-Class letters could be considered "heavy" as that term was used in the MC95-1 engineering studies to which you refer and that such engineering analyses studied test runs made up exclusively of "heavy" letters. Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this or any other case, relied upon by you in formulating your response.

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(f) Please confirm that the MC95-1 engineering studies to which you refer indicated that when "heavier mailpieces" constituting 3% of total pieces were intermixed with typical #10 envelope pieces, then throughput decreased by only 2%. Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this or any earlier case, relied upon by you in formulating your response.

(g) Please confirm that the MC95-1 engineering studies to which you refer studied letters in packets of 1000 pieces that weighed between 2.0 ounces and 3.5 ounces. Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this or any earlier case, relied upon by you in formulating your response.

(h) Please confirm that the MC95-1 engineering studies to which you refer did not study letters that weigh between one and two ounces. Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this or any earlier case, relied upon by you in formulating your response.

RESPONSE:

(a) I confirm that my observations are very general in nature, but the data in LR-I-91 show that First-Class Mail letters between one and two ounces cost more to process than letters weighing under one ounce.

(b) I confirm that my observations are very general in nature, but the data in LR-I-91 show that First-Class Mail letters between two and three ounces cost more to process than letters weighing under two ounces.

(c) "Gradually" is a subjective term. The results of the engineering tests filed in response to MMA/USPS-T2-12 in Docket No. MC95-1 showed the following:

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MMA/USPS-T28-5c (continued).

Summary of EDC's Throughput Testing of Heavier Mailpieces on the Automation Equipment

1.75 oz.	24,710 pieces/hour
2.00	22,640
2.25	22,120
2.50	17,820
2.75	16,910
3.00	15,530
3.25	15,500
3.50	13,380
4.50	10,900

	Heavy-Weight Mail Test				
	ECA	B&H	PB	ECA	BURR
2.00	21,686	16,530	22,523	25,025	29,550
2.25	20,930	15,334	20,393	23,272	24,873
2.50	19,849	10,147	18,886	24,276	23,278
2.75	17,647	9,972	17,800	19,149	21,822
3.00	16,071	9,900	15,652	18,369	18,164
3.25	15,532	9,819	15,393	17,173	16,913
3.50	15,027	7,080	14,258	12,390	17,328

(d) I confirm that the MC95-1 engineering studies do not specifically address costs.

(e) The Heavy-Weight Mail Test tests filed in response to MMA/USPS-T2-12 in Docket No. MC95-1 analyzed letters between 2.0 ounces and 3.5 ounces. Based on the volumes by weight increment presented in USPS LR-I-102, the proportion of letters falling within this range represented 0.9 percent of First-Class Single-Piece letters in FY98 and 0.3 percent of First-Class Presort letters.

(f) Confirmed.

(g) Confirmed for the test entitled "Heavy-Weight Mail Test," the results of which are presented in the response to interrogatory MMA/USPS-T28-5(c) above.

(h) Confirmed. Letters between one and two ounces were not studied.

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MMA/USPS-T28-6. In its R87-1 Opinion and Recommended Decision, the Commission concluded that "letters up to two ounces for the most part can be processed on the new automation [sic] at a cost no higher than a one ounce letter." (Op. R87-1 at 448). In its R94-1 Opinion and Recommended Decision, the Commission stated, "letters processed with automation incur minimal or possibly no extra cost for letters weighing up to three ounces." (Op. R94-1 at V-9).

(a) Is your study in this case intended to respond to the Commission's stated position in the R87-1 and R94-1 proceedings regarding the cost of processing letters up to two ounces?

(b) If your answer to part (a) is yes, do the results of your study support or refute the Commission's stated position in the R87-1 and R94-1 proceedings regarding the cost of processing letters up to two ounces?

(c) If your answer to part (a) is no, has the Postal Service performed any studies on the impact of weight on mail processing costs for letters weighing two ounces or less?

(d) If your answer to part (c) is yes, please provide copies of any such studies.

RESPONSE:

(a) The quoted passages do not appear to me to be a "stated position" of the Commission; rather, they seem to be observations based on data available at that time. Nevertheless, yes, the study in USPS LR-I-91 does address the subject matter of the quoted material from the Commission Opinion in that it develops unit costs for First-Class Mail letters by weight increment.

(b) The study in USPS LR-I-91 presents data that support conclusions that are contrary to those in the passage quoted in this question. See my responses to MMA/USPS-T28-1(b) and MMA/USPS-T28-5(a-b).

(c) N/A

(d) N/A

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MMA/USPS-T28-7. Please refer to the relevant portions of the record in Docket No. R97-1.

(a) Please confirm that in Docket No. R97-1, you and USPS witness Hatfield intended to use the exact same productivities for the same operations in your cost models for Standard Mail (A) and First-Class letters, respectively. If you cannot so confirm, please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in the R97-1 case, relied upon by you in formulating your response.

(b) Assuming your answer to part (a) is affirmative, did you and USPS witness Hatfield assume the exact same productivities, and therefore costs, to process First-Class letters on the one hand, and heavier Standard Mail (A) letters on the other hand? Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in the R97-1 case, relied upon by you in formulating your response.

RESPONSE:

(a) Confirmed.

(b) No. Using the same productivities does not imply that witness Hatfield and I assumed the same costs in Docket No. R97-1. The cost models for First-Class Mail letters used a higher premium pay factor than for Standard Mail (A) letters (see Docket No. R97-1 USPS-T-25 Appendix I page 37 and USPS-T-29 Appendix I page 42). Furthermore, modeled costs were tied to subclass-specific CRA costs pools that were deemed worksharing-related using a proportional factor and a fixed adjustment (see Docket No. R97-1 USPS-T-25 Appendix V and Exhibit USPS-25A and Exhibit USPS-29A). Finally, the models used subclass-specific entry profiles, coverage factors, and accept and upgrade rates resulting in unique mailflows for each subclass of mail (see Docket No. R97-1 USPS-T-25 Appendix I pages 15, 17,19, 22-23, 26-27, 30-31, 33 and 35, and USPS-T-25 Appendix IV and USPS-T-29 Appendix I pages 2, 4, 6, 8, 10, 12-14, 16-18, 20-22, 24-26, 28-30, 32-34, 35-40).

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MMA/USPST28-8. Please refer to LR-I-92, Section 1, page 1 (sic) which is a table entitled "Std. A Regular Letters Test year Unit Costs by Detailed (I/2 ounce) Weight Increments". Please refer also to a corresponding table in LR-I-91 for presorted letters, Section 2, page 1 (sic), which is entitled "Presort Letters Test year Unit Costs by Detailed (I/2 ounce) Weight Increments."

(a) Do you agree that, based on your study, the overall average cost to process each incremental ounce for Standard A Regular letters is virtually zero for between 0.5 and 3.5 ounces? Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this case, relied upon by you in formulating your response.

(b) Do you agree that based on your study, the overall average cost to process each incremental ounce for First Class presort letters increases significantly as weight increases between 0.5 and 3.5 ounces? Please explain any negative response and provide all documents, or references to the appropriate portions of the USPS' filing in this case, relied upon by you in formulating your response.

(c) Please explain the disparity of results exhibited in the overall average costs to process each incremental ounce of First-Class presort letters and Standard A letters.

RESPONSE:

(a) No. The data in USPS LR-I-92, Section 1 page 13 not page 1, estimate that the cost of a 3.5 ounce Standard Mail (A) Regular letter is 17.5 cents and a 0.5 ounce letter is 11.0 cents. This represents a 59% increase, which is not "virtually zero" as this question implies.

(b) The data in USPS LR-I-91, Section 2 page 13 not page 1, estimate the costs of a 0.5 ounce First-Class Presort letter and a 3.5 ounce First-Class Presort letter are 11 cents and 87 cents, respectively; however, there may be a significant component of the difference due to sampling error since there are only 10.25 million pieces in the 3.0 to 3.5 ounce First-Class Presort increment. Thus, while I agree that the difference is large, the entire difference is not necessarily statistically significant.

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Furthermore, the average rate of increase is lower if calculated with either of the adjacent weight increments, particularly the 2.5 to 3.0 ounce increment where the cost is estimated to be 29.8 cents.

(c) Data provided in USPS LR-I-91 Section 2 pages 25-26 and USPS LR-I-92 Section 1 pages 25-26 provide unit costs by weight increments for each of the major components (mail processing, window, delivery, transportation, etc.). Some components, such as transportation, are deemed completely weight-related in these analyses. Transportation costs per pound are four times higher for First-Class Mail Presort letters than for Standard Mail (A) Regular. This compounds the cost differences by ounce increment.

Clearly, the majority of cost differences is mail processing-related. An examination of the data at the cost pool level show that change in unit costs between the first and second ounce is consistently higher for First-Class Presort than for Standard Mail (A) Regular across all major cost pools.

Some of the increases in First-Class Presort mail processing costs by weight increment are due to a premium pay (night and Sunday pay differentials) factor greater than one (1.023) versus a premium pay factor less than one (.961) for Standard Mail (A) Regular. This implies is that, other things held equal, costs for First-Class Mail Presort letter would be 6.5% higher than for Standard Mail (A) Regular letters.

Also, as stated on page 3, lines 21 through 26, of my testimony, the data referenced in this interrogatory do not solely reflect the effect of increasing weight-per-piece on cost, but reflect the cost of all characteristics that may vary as weight increases. There are differences in presorting and barcoding by ounce increment for the two subclasses.

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Standard Mail (A) letters are given rate incentives to dropship, but no data exist to quantify the dropship or origin/destination characteristics of First-Class presort by weight increment. These non-weight related factors may also contribute to the differences in costs by weight increments between the two classes.

Finally, though Standard Mail (A) Regular letters and First-Class Mail Presort letters are not small mail categories, the volumes of heavier-weight pieces are rather small relative to lighter weight pieces in both subclasses. Thus, the usual caveats regarding relatively high sampling errors for small subclasses or mail categories apply (see also my response to MMA/USPS-T28-8b).

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MMA/USPS-T28-9. Please refer to your response to MMA/USPS-T28-1. In that response you note that your study shows that, for certain First-Class letters, letters weighing two ounces cost significantly more to process than letters weighing one ounce or less, but that, for Standard Mail (A) letters, letters weighing two ounces cost about the same to process as letters weighing one ounce or less.

(a) Does your response mean that if two First-Class single piece letters, exactly alike in all respects except that one weighs one ounce and the other weighs two ounces, are mailed at the same time from the same place to the same destination, the two-ounce letter will cost, on average, 13.1 cents more to process than the one-ounce letter? If not, please explain what your response does mean.

(b) Assuming your answer to part (a) is yes, please explain in detail exactly what extra handling operations or other cost incurrence factors cause an additional 13.1 cents to be incurred in processing a First-Class single piece letter weighing two ounces. For each such extra handling operation or other cost incurrence factor, please quantify the additional unit cost involved and provide all documents which support that analysis.

(c) Does your response mean that if two First-Class presorted letters, exactly alike in all respects except that one weighs one ounce and the other weighs two ounces, are mailed at the same time from the same place to the same destination, the two-ounce letter will cost, on average, 15.1 cents more to process than the one-ounce letter? If not, please explain what your response does mean.

(d) Assuming your answer to part (c) is yes, please explain exactly what extra handling operations or other cost incurrence factors cause an additional 15.1 cents to be incurred in processing a First-Class presorted letter weighing two ounces. For each such extra handling operation or other cost incurrence factor, please quantify the additional unit cost involved and provide all documents which support that analysis.

(e) Does your response mean that if two Standard Mail (A) letters, exactly alike in all respects except that one weighs one ounce and the other weighs two ounces, are mailed at the same time from the same place to the same destination, the two-ounce letter will cost, on average, .4 cents more to process than the one-ounce letter? If not, please explain what your response does mean.

(f) Assuming your answer to part (e) is yes, please explain why those same extra handling operations or other cost incurrence factors which cause First-Class letters weighing two ounces to cost so much more to process than letters weighing one ounce have almost no impact on the cost of the second ounce for Standard Mail (A) letters. For each such extra handling operation or other cost incurrence factor, please quantify the additional unit cost involved and provide all documents which support that analysis.

RESPONSE:

a. No. The response to interrogatory MMA/USPS-T28-1(b) means that, according to the study in USPS LR-I-91, the average First-Class Single-Piece letter-shaped

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piece weighing between 1 and 2 ounces will cost 13.1 cents more than the average First-Class Single-Piece letter-shaped piece weighing less than 1 ounce. The cost study reflects all the characteristics associated with the average piece in each weight increment. See also the responses to interrogatories MMA/USPS-T28-4(a) and MMA/USPS-T28-8(c).

b. N/A

c. No. Please see the response to subpart (a).

d. N/A

e. No. Please see the response to subpart (a).

f. N/A

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MMA/USPS-T28-10. Please refer to your response to MMA/USPS-T28-2. In your answer to part (b) of that interrogatory, you state that the costs by ounce increment and shape for Standard Mail (A) "are not necessarily intended to be an exact quantification of costs for every individual weight increment."

(a) Doesn't your testimony give an exact quantification of the average additional cost to process the second ounce of a Standard Mail (A) letter? See your answer to MMA/USPS-T28-1(c). If your answer is no, please explain.

(b) Doesn't your testimony give an exact quantification of the average additional cost to process the second ounce of a First-Class nonpresorted letter? See your answer to MMA/USPS-T28-1(b). If your answer is no, please explain.

(c) Doesn't your testimony give an exact quantification of the average additional cost to process the second ounce of a First-Class presorted letter? See your answer to MMA/USPS-T28-1(b). If your answer is no, please explain.

RESPONSE:

a-c. The cost studies presented in USPS LR-I-91 and LR-I-92 use the best available data and an improved methodology to allocate costs for every major cost segment to weight increment. As noted in the response to interrogatory MMA/USPS-T28-9, "[t]he cost study reflects all the characteristics associated with the average piece in each weight increment." Some weight increments, however, have relatively low volume and therefore have higher coefficients of variation (CVs) associated with those cost estimates. For example, please see witness Ramage's response to interrogatory ANM/USPS-T2-13. Cost estimates with high CVs would fairly not be considered "exact." Moreover, attaching a high degree of confidence to individual estimates for low-volume weight increments could be misleading.

The phrase quoted in this interrogatory was used in the context of explaining that since USPS LR-I-91 and LR-I-92 do not completely isolate for the impact of weight, they do not provide the "specific impact of weight on costs" but rather provide a "general indication of the effect weight has on total volume variable costs."

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MMA/USPS-T28-11. Please refer to your responses to MMA/USPS-T28-4 and 8(c). In those responses, you discuss the difficulties of isolating the effects of weight on cost, noting differences in presorting and barcoding by ounce increment for First-Class and Standard Mail (A).

(a) In your cost studies, did you account for differences in the following factors that might exist among letters of different ounce increments within the same subclass category? If so, how?
   (1) local/nonlocal mix;
   (2) origin/destination pattern;
   (3) degree of presortation;
   (4) prebarcode vs. no prebarcode;
   (5) machinability;
   (6) delivery to p.o. box vs. delivery by carrier; and
   (7) likelihood of being undeliverable-as-addressed;

(b) In deriving your unit costs by weight increment, did you simply add up all the costs incurred and divide by the total originating volume? If not, please explain.

(c) If your answer to part (a) is yes, how do you know that the additional costs incurred were caused solely by the weight of additional ounces from those same pieces?

(d) For each ounce weight increment within First-Class nonpresorted letters (up to 3 ounces), are there differences in cost-causative attributes other than weight (such as, for example, ability to barcode)? If such differences do exist, please explain what they are and quantify how they impact on the cost of processing such pieces.

(e) For each ounce weight increment within First-Class presorted letters (up to 3 ounces), are there differences in cost-causative attributes other than weight (such as, for example, degree of presorting)? If such differences do exist, please explain what they are and quantify how they impact on the cost of processing such pieces.

(f) For each ounce weight increment within Standard Mail (A) letters (up to 3 ounces), are there differences in cost-causative attributes other than weight (such as, for example, degree of presorting)? If such differences do exist, please explain what they are and quantify how they impact on the cost of processing such pieces.

RESPONSE:

(a) No, not in the studies presented in USPS LR-I-91 and LR-I-92. However, data have been provided in response to interrogatory ANM/USPS-T28-8(c) in USPS LR-I-225 and attached to the response to subpart (e) of this interrogatory to facilitate accounting for differences in presorting, prebarcoding and dropshipping.

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(b) It's not quite as "simple" as the interrogatory suggests. In deriving the unit costs by weight increment, Test Year costs for every major component were allocated to individual weight increments according to the methodology described in USPS-T-28 pages 4-10. The sum of these costs were divided by the estimate of TY volume in each weight increment to estimate the TY unit cost.

(c) N/A

(d) Yes. Cost-causative attributes other than weight that may be different in each ounce weight increment (up to 3 ounces) include at least all of the factors listed in subpart (a). Data do not exist to quantify the different proportions of any or all of the factors listed in part (a) by weight increment for nonpresorted First-Class letters or to quantify the impact on the processing cost of such pieces.

(e-f) Yes. Cost-causative attributes other than weight that may be different in each ounce weight increment (up to 3 ounces) include at least all of the factors listed in subpart (a). Data do not exist to quantify the different proportions of any of the factors listed in part (a) by weight increment for presorted First-Class letters or Standard Mail (A) letters or to quantify the impact on the processing cost of such pieces with two exceptions. The degree of presortation and the degree of prebarcoding can be estimated by weight increment for First-Class presort and Standard Mail (A) letters.[1] The impact on the cost of processing these pieces can be found in the testimony of witness Miller (USPS-T-24 Appendix I-1). The differences in local/nonlocal mix can be partially estimated by examining the difference in the degree of dropshipping by weight increment in USPS LR-I-225. The impact on the cost for dropshipping can be found in the testimony of witness Crum (USPS-T-27 Attachment C, Table 1).

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[1] Please see USPS LR-I-225 filed in response to interrogatory ANM/USPs-T28-8(c) for Standard Mail (A). Volumes for First-Class Presort by presort and prebarcode rate category and weight increment are attached.

FY98 First Class Presort Volumes by Rate Category and Weight Increment

Response to MMA/USPS-T28-11

Base Year

	4.0-5.0	5.0-6.0	6.0-7.0	7.0-8.0	8.0-9.0	9/0-10.0	10.0-11.0	Total
1L PR NAUTO	1,974,483	1,008,564	171,227	58,348	34,280	73,969	65,547	4,409,369,344
1L BA AUTO	-	-	-	-	-	-	-	4,594,274,803
1L 3D AUTO	-	-	-	-	-	-	-	19,631,231,887
1L 5D AUTO	-	-	-	-	-	-	-	10,203,173,803
1L CR AUTO	-	-	-	-	-	-	-	1,279,092,457
letter total	1,974,483	1,008,564	171,227	58,348	34,280	73,969	65,547	40,117,142,294
1F PR NAUTO	6,521,435	11,202,120	3,841,955	2,644,303	4,631,784	1,448,973	790,436	238,061,910
1F BA AUTO	2,538,584	2,187,235	1,701,918	1,656,449	1,511,281	1,413,903	858,845	44,490,730
1F 3/5 AUTO	9,475,597	8,408,250	6,038,919	5,006,193	3,980,468	4,012,837	2,355,962	223,752,709
flat total	18,535,616	21,797,605	11,582,791	9,306,944	10,123,533	6,875,713	4,005,244	506,305,349
1P PR NAUTO	171,991	129,955	108,023	134,289	76,745	121,434	58,572	10,804,835
total	20,682,090	22,936,123	11,862,041	9,499,582	10,234,558	7,071,116	4,129,362	40,634,252,478

FY98 First Class Presort Volumes by Rate Category and Weight Increment

Response to MMA/USPS-T28-11

Base Year

	0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	3.0-3.5	3.5-4.0
1L PR NAUTO	2,001,142,334	2,229,705,232	83,957,488	31,489,523	15,336,164	34,227,950	3,278,541	6,845,696
1L BA AUTO	1,968,123,044	2,496,598,604	82,643,070	34,073,348	7,463,534	4,040,667	1,332,536	-
1L 3D AUTO	7,581,175,010	11,694,283,347	193,072,513	127,104,495	20,251,116	12,874,642	2,470,763	-
1L 5D AUTO	3,402,267,707	6,496,219,754	179,824,028	104,667,655	7,292,764	11,898,895	982,999	-
1L CR AUTO	438,888,695	793,061,575	34,533,435	8,739,204	988,679	2,096,199	784,669	-
letter total	15,391,616,790	23,709,868,513	574,030,534	306,074,225	51,332,257	65,138,354	8,849,509	6,845,696
1F PR NAUTO	6,260,079	19,854,667	32,191,984	34,299,796	34,346,651	58,936,597	8,198,926	12,892,202
1F BA AUTO	586,417	2,740,093	6,321,384	8,118,016	4,001,712	7,133,425	1,973,687	1,747,784
1F 3/5 AUTO	3,947,226	34,177,607	42,929,772	42,919,201	20,173,622	23,399,146	9,611,670	7,316,238
flat total	10,793,723	56,772,367	81,443,139	85,337,013	58,521,986	89,469,168	19,784,283	21,956,224
1P PR NAUTO	18,035	1,565,023	857,159	6,098,809	422,447	846,405	82,331	113,616
total	15,402,428,548	23,768,205,903	656,330,833	397,510,046	110,276,689	155,453,927	28,716,123	28,915,536

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF MAJOR MAILERS ASSOCIATION

MMA/USPS-T28-12. Please refer to your response to MMA/USPS-T28-8. There seems to be some confusion about the reference pages referred to in LR-I-91 and LR-I-92. Copies of relevant portions of the appropriate pages MMA intended to refer to are attached.

(a) Do you agree that, according to your study, for First-Class presort letters the average cost to process each incremental ounce appears to increase significantly as the weight of a letter increases from 0.5 and 3.5 ounces? Please note that the unit marginal cost differences are as follows: .5 to 1.0 oz: minus $.02; 1.0 to 1.5 oz: $.153; 1.5 to 2.0 oz: $.018; 2 to 2.5 oz: $.23; 2.5 to 3.0 oz: minus $.193; 3.0 to 3.5 oz: $.572; 3.5 to 4.0 of: $.087.

(b) What causes the phenomenon illustrated by the marginal cost differences shown in part (a) whereby the first half ounce in each whole ounce increment costs far more than the second half ounce in each whole ounce increment?

(c) Do you agree that, according to your study, for Standard Mail (A) Regular letters the average cost to process each incremental ounce appears to be practically non-existent between 0.5 and 3.5 ounces? Please note that the unit marginal cost differences are as follows: .5 to 1.0 oz: minus $.006; 1.0 to 1.5 oz: minus $.001; 1.5 to 2.0 oz: $.027; 2 to 2.5 oz: $.015; 2.5 to 3.0 oz: $.015; 3.0 to 3.5 oz: $.02g; 3.5 to 4.0 oz: $1.024.

(d) Is the relationship shown for Standard Mail (A) Regular letters, whereby the unit costs are approximately the same for all half-ounce weight increments up to 3.5 ounces, consistent with the results of previous engineering studies presented in Docket No. MC95-1 that showed throughput on letter automation equipment declined as weight increases to 4 ounces? Please explain your answer.

(e) In answer to MMA/USPS-T28-6(c) you note that transportation costs per pound are four times higher for First-Class Mail Presort letters than for Standard Mail (A) Regular letters. Please provide the actual transportation costs and the sources therefor that formed the basis for your conclusions.

(f) Please confirm the following data from LR-I-91a and LR-I-92areg. If you cannot confirm, please provide the correct unit cost figures.

Comparison of Unit Costs for First-Class Presort and Std Mail (A) Letters ($)				
	First-Class Presort Letters		Std Mail (A) Regular Letters	
	Unit Cost	Unit Cost	Unit Cost	Unit Cost
	0 to 1	1 to 2	0 to 1	1 to 2
Mail Processing	0.044	0.129	0.059	0.055
Delivery Functions	0.035	0.087	0.035	0.038
Total	0.079	0.216	0.093	0.094
Marginal Increase		0.137		0.0004

(g) As shown in the table in part (f), are the mail processing costs for 1-ounce letters within First-Class presort 1.5 cents less than for 1-ounce letters within Standard Mail (A)? If not, please explain.

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(h) As shown in the table in part (f), are mail processing costs for 2-ounce letters within First-Class presort more than twice the mail processing costs for 2-ounce Standard Mail (A) letters? If not, please explain.

(i) If your answers to parts (g) and (h) are yes, please explain in detail the specific differences in the processing procedures followed by postal employees which causes First-Class Presort letters weighing between one and two ounces to cost more than (1) First-Class Presort letters weighing under 1 ounce, (2) Standard Mail (A) letters weighing up to 1 ounce, and (3) Standard Mail (A) letters weighing between 1 and 2 ounces.

(j) As shown on the table in part (f), are delivery costs for l-ounce letters within First-Class presort and Standard Mail (A) letters virtually the same? If not, please explain.

(k) As shown in the table in part (f), are delivery costs for 2-ounce First-Class presort letters more than twice the delivery costs for 2-ounce Standard Mail (A) letters? If not, please explain.

(l) If your answers to parts (j) and (k) are yes, please explain in detail the specific differences in processing procedures by postal employees which causes First-Class Presort letters weighing between one and two ounces to cost more than (1) First-Class Presort letters weighing under 1 ounce, (2) Standard Mail (A) letters weighing up to 1 ounce, and (3) Standard Mail (A) letters weighing between 1 and 2 ounces.

RESPONSE:

(a). I agree that, according to the data in USPS LR-I-91 (revised 3/1/00), the average cost to process First-Class Presort letters increases from $0.098 for letters weighing less than one ounce to $0.250 for letters weighing between one and two ounces to $0.383 for letters weighing between two and three ounces to $0.870 for letters weighing between 3 and 3.5 ounces.

(b) According to USPS LR-I-91 (revised 3/1/00), the unit cost allocated to each half-ounce increment for First-Class Presort letters are as follows:

0.0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	3.0-3.5
$0.110	$0.090	$0.243	$0.262	$0.491	$0.298	$0.870

Therefore, with the exception of the 2.0-2.5 and 2.5-3.0 increments, the costs of letters within a whole ounce increment are similar, but the difference in costs between whole ounce increments is greater, e.g., the difference between 0.0-0.5 and 0.5-1.0 is 2 cents, but the difference between the average of 0.0-1.0 and 1.0-2.0 is 15 cents. As noted in response to interrogatory MMA/USPS-T28-

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11(e), cost-causative attributes other than weight may be different in each ½-ounce increment.

(c) The numbers speak for themselves. According to the data in USPS LR-I-92, the average cost to process Standard A Regular letters increases from $0.107 for letters weighing less than one ounce to $0.111 for letters weighing between one and two ounces to $0.146 for letters weighing between two and three ounces to $0.175 for letters weighing between 3 and 3.5 ounces.

(d). Increasing costs are consistent with declining throughput.

(e). Test Year transportation costs in cost segment 14 in witness Kashani's Exhibit USPS-14H for First-Class Presort are $398,019,000 and for Standard Mail (A) Regular are $393,934,000. According to USPS LR-I-91, in the TY there are 1,801,587,274 pounds of First-Class Presort letters and $374,682,000 of transportation costs are allocated to letters. According to USPS LR-I-92, in the TY there are 1,373,950,008 pounds of Standard Mail (A) Regular letters and $67,257,000 of transportation costs are allocated to letters. Thus, the average cost per pound for First-Class Presort letters is $0.2079 and the average cost per pound for Standard Mail (A) Regular letters is $0.0490.

(f). Confirmed with the clarification that "Delivery Functions" applies only to City Carriers and does not include the cost of rural carriers.

(g). Yes.

(h). Yes.

(i). The processing procedures for these different categories of mail will vary depending on a number of factors other than just weight, such as those listed in my response to interrogatory MMA/USPS-T28-11.

(j). **Yes.**

(k). **Yes.**

(l). The processing procedures for these different categories of mail will vary depending on a number of factors other than just weight, such as those listed in my response to interrogatory MMA/USPS-T28-11.

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MMA/USPS-T28-13.

(a) Please indicate whether your study utilized the Commission-approved cost methodology, which assumes that labor costs vary 100% with volume, or the Postal Service's proposed cost methodology, which assumes that labor costs do not vary 100% with volume.

(b) If your study did not utilize the Commission-approved cost methodology, please provide the study results utilizing the Commission-approved cost methodology.

RESPONSE:

(a). All cost studies referred to in my testimony use the Postal Service's proposed cost methodology.

(b). Redirected to the Postal Service.

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MMA/USPS-T28-16. Please refer to the mail processing costs derived in library references LR-I-91A, LR-I-91B and LR-I-92 as revised.

(a) For mail processing costs, please confirm the following unit costs computed by dividing your derived mail processing costs by the appropriate volumes for letters. If you cannot confirm, please provide the correct unit cost figure and an explanation of how such unit cost figure is derived.

Unit Mail Processing Costs for Letters (Cents)

	0 to .5	.5 to 1.0	Difference
First-Class Single Piece	8.56	25.05	16.49
First-Class Presort	5.93	3.49	-2.44
Standard Mail (A)	6.15	5.62	-0.53

	.5 to 1.0	1.0 to 1.5	Difference
First-Class Single Piece	25.05	16.24	-8.81
First-Class Presort	3.49	13.16	9.67
Standard Mail (A)	5.62	5.15	-0.47

	1.0 to 1.5	1.5 to 2.0	Difference
First-Class Single Piece	16.24	30.49	14.25
First-Class Presort	13.16	12.49	-0.67
Standard Mail (A)	5.15	6.52	1.37

(b) From the data provided in part (a), please explain as best you can the following:

(1) For First-Class single piece letters, why does it cost three times as much to process a letter weighing between .5 and 1.0 ounces than it does a letter weighing between 0 and .5 ounces, whereas it costs 1/3 less to process a letter weighing between 1.0 and 1.5 ounces than it does a letter weighing between 5 and 1.0 ounces and almost twice the cost to process a letter weighing between 1.5 and 2.0 ounces than to process a letter weighing between 1.0 and 1.5 ounces?

(2) For First-Class presorted letters, why does it cost 40% less to process a letter weighing between .5 and 1.0 ounces than it does a letter weighing between 0 and 5 ounces, whereas it costs almost 4 times to process a letter weighing between 1.0 and 1.5 ounces than it does a letter weighing between .5 and 1.0 ounces and only 5% less to process a letter weighing between 1.5 and 2.0 ounces than it does a letter weighing between 1.0 and 1.5 ounces?

(3) For Standard Mail (A) letters, why does it cost 8% less to process a letter weighing between .5 and 1.0 ounces than it does a letter weighing between 0 and .5 ounces, whereas it costs 7% more to process a letter weighing between 1.0 and 1.5 ounces than it does a letter weighing between .5 and 1.0 ounces, but 25% more to process a letter weighing

between 1.5 and 2.0 ounces than it does a letter weighing between 1.0 and 1.5 ounces?

(4) Why don't the mail processing unit costs increase at anything close to a constant rate as weight increases?

(5) Why do First-Class presorted letters weighing between 0 and .5 ounces cost slightly less to process than Standard Mail (A) letters of the same weight, and First-Class presorted letters weighing between .5 and 1.0 ounces cost almost 40% less to process than Standard Mail (A) letters of the same weight, yet First-Class presorted letters weighing between 1.0 and 1.5 ounces cost about two-and-a-half times as much as Standard Mail (A) letters of the same weight, and First-Class presorted letters weighing between 1.5 and 2.0 ounces cost about twice as much as Standard Mail (A) letters of the same weight?

(6) Why do First-Class single piece letters weighing between 0 and .5 ounces cost 45% more to process than presorted letters of the same weight, yet First-Class single piece letters weighing between 5 and 1.0 ounces cost more than seven times as much as presorted letters of the same weight?

RESPONSE:

a. Confirmed with the clarification that the label Standard Mail (A) only applies to the Regular subclass.

b. (1-3) Please see response to interrogatory MMA/USPS-T28-12(b).

(4) Factors other than weight are reflected in the costs.

(5-6) As stated in response to ABA&NAPM/USPS-T28-2, "[d]ata and analyses are not presently available to explain all of the cost-causative factors which may vary between the subclasses by weight increment." Please also see responses to interrogatories ABA&NAPM/USPS-T28-27, MMA/USPS-T28-8(c), 11(d-f).

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MMA/USPS-T28-17. Please refer to the in-office city delivery costs derived in library references LR-I-91A, LR-I-91B and LR-I-92 as revised.

(a) For in-office city delivery costs, please confirm the following unit costs computed by dividing the sum of your derived city delivery costs by the appropriate volumes for letters. If you cannot confirm, please provide the correct unit cost figures.

In-Office Delivery Costs for Letters (Cents)

	0 to .5	.5 to 1.0	Difference
First-Class Single Piece	1.90	6.96	5.06
First-Class Presort	2.23	1.28	-0.95
Standard Mail (A)	2.48	1.80	-0.67

	.5 to 1.0	1.0 to 1.5	Difference
First-Class Single Piece	6.96	3.19	-3.77
First-Class Presort	1.28	4.55	3.27
Standard Mail (A)	1.80	1.30	-0.51

	1.0 to 1.5	1.5 to 2.0	Difference
First-Class Single Piece	3.19	4.95	1.76
First-Class Presort	4.55	4.83	0.28
Standard Mail (A)	1.30	1.62	0.32

(b) From the data provided in part (a), please explain as best you can the following:

(1) For First-Class single piece letters, why does it cost almost four times as much to process a letter weighing between .5 and 1.0 ounces than it does a letter weighing between 0 and .5 ounces, whereas it costs less than one-half to process a letter weighing between 1.0 and 1.5 ounces than it does a letter weighing between .5 and 1.0 ounces and 50% more to process a letter weighing between 1.5 and 2.0 ounces than it does a letter weighing between 1.0 and 1.5 ounces?

(2) For First-Class presorted letters, why does it cost almost half as much to process a letter weighing between .5 and 1.0 ounces as it does a letter weighing between 0 and .5 ounces, whereas it costs more than three times as much to process a letter weighing between 1.0 and 1.5 ounces as it does a letter weighing between .5 and 1.0 ounces and about the same to process a letter weighing between 1.5 and 2.0 ounces as it does a letter weighing between 1.0 and 1.5 ounces?

(3) For Standard Mail (A) letters, why does it cost about 25% less to process a letter weighing between .5 and 1.0 ounces than it does a letter weighing between 0 and .5 ounces, whereas it costs another 25% less to process a letter weighing between 1.0 and 1.5 ounces than it does a letter weighing between .5 and 1.0 ounces?

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(4) Why don't the in-office delivery unit costs increase at anything close to a constant rate as weight increases?

(5) Why do First-Class presorted letters weighing between 0 and .5 ounces and .5 and 1.0 ounces cost slightly less to process than Standard Mail (A) letters of the same weight brackets, yet First-Class presorted letters weighing between 1.0 and 1.5 ounces and 1.5 and 2.0 ounces cost three times more than Standard Mail (A) letters of the same weight?

(6) Why do First-Class single piece letters weighing between 0 and .5 ounces cost about 25% less than Standard Mail (A) letters of the same weight, yet First-Class single piece letters weighing between .5 and 1.0 ounces cost almost four times as much as Standard Mail (A) letters of the same weight, and First-Class single piece letters weighing between 1.0 and 1.5 ounces cost more than twice as much as Standard Mail (A) letters of the same weight, and First-Class single piece letters weighing between 1.5 and 2.0 ounces cost more than three times as much as Standard Mail (A) letters of the same weight?

(7) What makes Standard Mail (A) so much less expensive to process than First-Class letters, for letters weighing between 1.0 and 2.0 ounces?

RESPONSE:

a. Confirmed with the clarification that the label Standard Mail (A) only applies to the Regular subclass.

b. (1-3, 5-6) Data and analyses are not presently available to explain all of the cost-causative factors influencing delivery costs which may vary between the subclasses by weight increment.

(4) Factors other than weight are reflected in the costs.

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MMA/USPS-T28-18. Please refer to the transportation costs derived in library references LR-I-91A, LR-I-91B and LR-I-92 as revised.

(a) For transportation costs, please confirm the following unit costs computed by dividing the sum of your derived transportation costs by the appropriate volumes for letters. If you cannot confirm, please provide the correct unit cost figures.

Transportation Costs for Letters (Cents)

	0 to .5	.5 to 1.0	Difference
First-Class Single Piece	0.43	0.76	0.33
First-Class Presort	0.46	0.98	0.52
Standard Mail (A)	0.10	0.22	0.12

	.5 to 1.0	1.0 to 1.5	Difference
First-Class Single Piece	0.76	1.51	0.75
First-Class Presort	0.98	1.54	0.56
Standard Mail (A)	0.22	0.37	0.15

	1.0 to 1.5	1.5 to 2.0	Difference
First-Class Single Piece	1.51	2.08	0.57
First-Class Presort	1.54	2.22	0.68
Standard Mail (A)	0.37	0.52	0.15

(b) From the data provided in part (a), please confirm as best you can the following:

(1) Transportation costs consistently increase as weight increases, are approximately the same for First-Class nonpresorted and presorted letters, and are consistently four to five time higher than Standard Mail (A) letters. If you cannot confirm, please explain.

(2) Transportation costs appear to increase as weight increases, and this is a result that could have been anticipated since you used weight and cube as the distribution keys for these transportation costs. If you cannot confirm, please explain.

(3) The other factors that your response to Interrogatory MMA/USPS-T28-11 (a) suggested might impact the derived unit costs in your analysis in fact have absolutely no effect on your derived unit transportation costs.

RESPONSE:

(a) Confirmed.

(b) (1) Confirmed.

(2) Confirmed.

(3) Confirmed. Since transportation costs were allocated on a constant cost per pound (or cost per cubic foot), factors such as local/nonlocal mix and

origin/destination pattern have been controlled for. My response to interrogatory MMA/USPS-T28-11 was referring to total costs, not transportation in particular. Transportation comprises a small percentage of total First-Class and Standard Mail (A) total costs.

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NAA/USPS-T28-1: Please refer to page 5, lines 10-11 of your testimony. Please explain fully how using the CRA methodology is "superior to allocating costs where weight is not known totally on the basis of weight or piece volumes alone."

RESPONSE:

The quoted statement was excerpted from the following passage in USPS-T-28 at page 5, lines 4-11:

> Tallies where weight is not known are distributed in a similar manner as USPS witness Van-Ty-Smith (UPS-T-17) distributes mixed-mail tallies where the subclass is not known. This approach uses information where weight is known within a cost pool, activity code, or subclass to distribute tallies where weight is not known. This represents an improvement over previous methodologies that distributed costs for mail with unknown weight based on the aggregate costs where weight was known. Using the CRA methodology is also superior to allocating costs where weight is not known totally on the basis of weight or piece volumes alone.

It should be clear from the full passage that "CRA methodology" refers to the process, described at page 3 of USPS LR-I-99, of using (where possible) information contained in the activity code, cost pool and/or handling type to determine a weight distribution for the "no-weight" tallies. These data tend to have strong associations with shape, machinability, and other characteristics related to mailpiece weight.

Volume data (pieces and weight) by subclass, weight increment, and cost pool do not exist. Therefore, the main advantage of the CRA-based methodology for distributing no-weight tallies is that it makes use of additional, relevant information for identifying the weight distribution that is not available in the existing RPW-type data on pieces and weight by subclass and weight increment. An additional advantage is that using pieces or weight to distribute no-weight tallies would embody potentially unwarranted assumptions regarding constancy of volume-variable cost per piece or per weight increment. Determining the validity (or lack of validity) of such assumptions is an object of the analysis.

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NAA/USPS-T28-2: Please refer to Library Reference USPS-I-99, textual summary, at page 2. Please indicate whether, when "no weight" tallies are redistributed over all tallies with weight, such redistribution is weighted on a proportional basis by tallies with weight?

RESPONSE:

It should be understood that the use of the term "tallies" in the LR-I-99 text summary specifically means dollar-weighted tallies. Thus, terms such as "redistributed across tallies" (LR-I-99, text summary at page 3, line 5) should be read as "redistributed in proportion to dollar weighted tallies." This is the applicable "proportional basis" of the distribution of no-weight tallies. Note also that the procedures described at pages 2-3 of the LR-I-99 text summary do not include rules whereby no-weight tallies are distributed in proportion to "all tallies with weight."

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NAA/USPS-T28-3: Please refer to Library Reference USPS-I-100, textual summary, at page 1-2.

a. Please explain why data are collected by half-ounce weight increments up to four ounces, but only by full ounce increments between four and 16 ounces.
b. Did you make any specific use in your testimony of the half-ounce increments between one and four ounces. If so, please explain where. If not, please explain why not.

RESPONSE:

a. Redirected to witness Ramage.

b. Yes. Please see Table 3 on page 17 of my testimony. I grouped mail weighing less than 3.0 ounces and less than 3.5 ounces to approximate the cost of piece-rated mail, which weighs less than 3.3 ounces.

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NAA/USPS-T28-4: With reference to the "ECRWSS" marking on Enhanced Carrier Route walk-sequenced saturation mail:

a. When did the Postal Service first allow the "ECRWSS" marking to be used?
b. What other markings has the Postal Service allowed, and for what time periods, for ECR walk-sequenced saturation mail since September 1, 1997?

RESPONSE:

a-b. With the implementation of Docket No. MC95-1, July 1, 1996, the requirement for marking saturation mail was changed to "ECRWSS". To the best of my knowledge, this is the only marking the Postal Service has allowed since September 1, 1997.

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NAA/USPS-T28-5: Please refer to page 8, lines 17-18, of your testimony, where you state that access time costs "should not vary significantly by weight and are therefore distributed on the basis of pieces." Please explain the basis for this statement, and identify any cost study or analysis upon which you rely as support for this statement.

RESPONSE:

It is my opinion that weight, especially in the range of 0 to 16 ounces, should not affect a carrier's walking time spent in deviating from the course of a route to go to and from customer delivery sites and collection boxes, and driving time associated with slowing to serve curbline boxes or deviating to serve collection boxes. Access costs were allocated on the basis of piece in Docket No. R97-1 and I am not aware of any compelling reason to change that assumption. Furthermore, treating Elemental Load as directly proportional to weight should compensate for any extent to which weight may possibly affect Access costs. See also my responses to interrogatories AAPS/USPS-T28-4-5.

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NAA/USPS-T28-6: Please refer to Library Reference USPS-I-92, Section 1, Page 1 of 30, Table 3.

a. Please confirm that Table 3 presents estimated test year unit costs for flats weighing less that 3.0 oz. of $0.2494 and for flats weighing less than 3.5 oz. of $0.2289. If you cannot confirm, please explain why not.

b. Why does the inclusion of flats weighing between 3 and 3.5 ounces reduce the estimated unit cost compared to flats weighing up to 3 ounces?

RESPONSE:

a. Confirmed that Table 3 presents estimated test year unit costs *for Standard Mail (A) Regular* flats weighing less that 3.0 oz. of $0.2494 and costs *for Standard Mail (A) Regular* flats weighing less than 3.5 oz. of $0.2289.

b. The estimated cost of Standard Mail (A) Regular flats in the 3.0 to 3.5 ounce increment in USPS LR-I-92, Section 1 page 16, is $0.161, which is lower than the average cost of Standard Mail (A) Regular flats weighing less than 3.0 ounces. Including this mail pulls down the average, especially in light of the significant volume in this increment.

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NAA/USPS-T28-7 Please refer to page 8, lines 27-28, of your testimony, at which you state, in connection with attributing elemental load costs: "If weight is used as a distribution key, costs will double as weight doubles. This is not necessarily the case for load time."

a. Please provide your basis for stating that it "is not necessarily the case" that elemental load costs double as weight doubles."
b. Is it possible that elemental load costs do double as weight doubles? If your answer is negative, please explain why not.

RESPONSE:

a-b. Elemental load costs were treated as proportional to pieces in Docket No. R97-1. In this proceeding, elemental load costs are treated as proportional to weight. My testimony on page 8 explains the rationale of this change as follows: "[s]ince flats and parcels cost more to load than letters, and flats and parcels are heavier on average than letters, it seems reasonable that heavier pieces of the same shape may cost more to load than lighter pieces of the same shape." Allocating elemental load costs on the basis of weight, though most likely overstating the relationship, should tend to offset any possible understatement of allocating route and access costs on the basis of piece. I am not aware of any study of the impact of weight on carrier street costs that would provide a better basis for allocating these costs. I am not aware of quantitative studies suggesting it is possible that elemental load costs double as weight doubles.

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NAA/USPS-T28-8 Please refer to page 16, Figure 3, of your testimony. Please state whether Table 3 refers to all commercial Standard (A) mail, or merely the Standard (A) Regular subclass.

RESPONSE:

Figure 3 on page 16 of my testimony refers to the Standard Mail (A) Regular (non-ECR) subclass. *Table 3* on page 17 of my testimony contains data for all four subclasses of Standard Mail (A).

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NAA/USPS-T28-9: Please refer to page 17, Table 3, of your testimony.

a. Please confirm that Table 3 indicates that Standard (A) ECR letters weighing less than 3 ounces have higher estimated test year unit costs than the corresponding letters in the nonprofit ECR subclass. If you cannot confirm, please explain why not.

b. Please confirm that Table 3 indicates that Standard (A) ECR letters weighing less than 3.5 ounces have higher estimated test year unit costs than the corresponding letters in the nonprofit ECR subclass. If you cannot confirm, please explain why not.

c. Please confirm that Table 3 indicates that Standard (A) ECR flats weighing less than 3 ounces have lower estimated test year unit costs than the corresponding flats in the nonprofit ECR subclass. If you cannot confirm, please explain why not.

d. Please confirm that Table 3 indicates that Standard (A) ECR letters weighing less than 3.5 ounces have lower estimated test year unit costs than the corresponding flats in the nonprofit ECR subclass. If you cannot confirm, please explain why not.

e. Please identify every reason why the commercial ECR letters have higher estimated test year unit costs than the nonprofit ECR letters, but commercial ECR flats have lower estimated test year unit costs than the corresponding nonprofit ECR flats.

RESPONSE:

a. Confirmed.

b. Confirmed.

c. Confirmed.

d. Confirmed that ECR *letters* weighing less than 3.5 ounce have lower estimated test year unit costs than 3.5 ounce *flats* in the NPECR subclass. I also confirm that Table 3 indicates that Standard Mail (A) ECR *flats* weighing less than 3.5 ounces have lower estimated test year unit costs than the corresponding flats in the Nonprofit ECR subclass.

e. Although I have not studied this issue and cannot provide an exhaustive list of reasons, I note that ECR flats are more heavily dropshipped than NPECR flats as seen in the profile of pounds below based on data in USPS LR-I-96.

ECR	No dropshipping	DBMC	DSCF	DDU
Basic	6%	21%	71%	2%
Saturation/HD	2%	2%	29%	68%
Total	4%	12%	52%	32%

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NPECR	No dropshipping	DBMC	DSCF	DDU
Basic	22%	26%	50%	2%
Saturation/HD	11%	1%	55%	33%
Total	18%	18%	51%	13%

Since the estimates in Table 3 of my testimony represent the average cost of Standard Mail (A), one would expect categories with proportionately more dropshipping to have lower costs. Please see my response to interrogatory ANM/USPS-T2-19(b) for a discussion of cost causative differences between ECR and NPECR letters.

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NAA/USPS-T28-10: Please refer to page 17, Table 3, of your testimony.

a. Please confirm that Table 3 indicates that Standard (A) ECR letters weighing less than 3 ounces have higher estimated test year unit costs than Standard (A) ECR flats in the same weight range. If you cannot confirm, please explain why not.
b. Please confirm that Table 3 indicates that Standard (A) nonprofit ECR letters weighing less than 3.0 ounces have lower estimated test year unit costs than Standard (A) nonprofit ECR flats in the same weight range. If you cannot confirm, please explain why not.
c. Please confirm that Table 3 indicates that Standard (A) ECR letters weighing less than 3.5 ounces have higher estimated test year unit costs than Standard (A) ECR flats in the same weight range. If you cannot confirm, please explain why not.
d. Please confirm that Table 3 indicates that Standard (A) nonprofit ECR letters weighing less than 3.5 ounces have lower estimated test year unit costs than Standard (A) nonprofit ECR flats in the same weight range. If you cannot confirm, please explain why not.
e. Please identify every reason why the commercial ECR letters in (a) and (c) have higher estimated test year unit costs than the corresponding flats, while the nonprofit ECR letters in the same weight ranges have lower estimated test year unit costs than the corresponding nonprofit ECR flats.

RESPONSE:

a. Confirmed.

b. Confirmed.

c. Confirmed.

d. Confirmed.

e. Although I have not studied this issue and cannot provide an exhaustive list of reasons, I note that given similar degrees of worksharing, one would expect letters to have a lower cost than flats as is the case in NPECR. However, ECR flats are more heavily worksharing (*i.e.*, more presorted and more deeply dropshipped) than ECR letters, thereby providing a possible explanation as to why ECR flats have a lower average cost than ECR letters. Comparisons of the degree of dropshipping can also be made with the data provided in response to interrogatories ANM/USPS-T2-19(b) and NAA/USPS-T28-9(e).

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NAA/USPS-T28-11: Please refer to USPS-LR-I-92, Section 2, worksheet labeled "Std. A ECR All Shapes Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments."

a. In Line 7 ("delivery in-office (6.2) 6.1"), costs are allocated according to proportions in Line 6 ("delivery in-office (6.1) tally").
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
b. In Line 8 ("del. route (7.1) piece"), costs are allocated according to proportions in Line 1 ("volume").
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
c. In line 9 ("del. access (7.2) piece"), costs are allocated according to proportions in line 1 ("volume").
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
d. In Line 11 ("del. support (7.4) sum 6&7"), costs are allocated according to the proportions of the sum of Lines 10, 9, 8, and 6.
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
e. In Line 12 ("vehicle service (8) cube"), costs are allocated according to the proportions in Line 3 ("cubic feet").
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
f. In Line 14 ("air/water trans. (14) weight"), costs are allocated according to weight.
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
g. In Line 16 ("Other weight"), costs are allocated according to weight.
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.

RESPONSE:

a. (i.) Please see USPS LR-I-1 "Summary Description of USPS Development of Costs By Segments and Components, FY1998" page 6-3 Section 6.2.1. In-office support costs account for 3.5% of total ECR costs.

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(ii). N/A

b. (i.) Even though according to USPS LR-I-1 page 7-4 Section 7.1.4 "[v]olume variable routine looping/dismount costs are distributed to classes and subclasses of mail on the basis of the estimated weight of mail carried on routine loops/dismounts, as determined from CCS and RPW," these costs have been allocated on the basis of pieces in the weight study library references. However, the testimony acknowledges that to the extent these costs are weight related, the overstatement of costs due to weight because of the assumption that elemental load costs are directly proportional to weight should compensate for this. Route costs account for 2.1% of total ECR costs.

(ii) N/A

c. (i.) Please see USPS LR-I-1 page 7-6 Section 7.2.4. Access costs account for 2.0% of total ECR costs.

(ii) N/A

d. (i.) Please see USPS LR-I-1 page 7-9 Section 7.5.4. Street support costs account for 8.0% of total ECR costs.

(ii) N/A

e. (i.) Please see USPS LR-I-1 page 8-3 Section 8.1.4. See also the response to interrogatory ADVO/USPS-T28-4a. Vehicle Service Driver costs account for 3.0% of total ECR costs.

(ii) N/A

f. (i.) Please see USPS LR-I-1 pages 14-2 and 14-7 Sections 14.1.1.1 and 14.1.4.1 respectively. See also the response to interrogatory ADVO/USPS-T28-4b. Air and water transportation costs account for 0.1% of total ECR costs.

(ii) N/A

g. (i.) Other costs consist primarily of postmaster and claims and inquiry and related indirect costs such as employee labor relations, time and attendance, space, and benefits, as well as stamps and dispenser costs. They also may include training, international mail supplies, and indemnities. USPS LR-I-1 page 1-2 Section 1.1.4 notes that postmaster costs are distributed on the basis of

revenue relationships and page 16-2 Section 16.1.4 notes that stamps and dispenser costs are distributed in proportion of window service costs for stamp sales. Weight was chosen to counter the claim that the study was understating the impact of weight. An alternative approach would have been to allocate "other" costs in the same proportion as total costs minus "other." "Other" costs account for 1.2% of total ECR costs.

(ii) N/A

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NAA/USPS-T28-12: Please refer to USPS-LR-I-92, Section 2, worksheet labeled "Std. A ECR Letters Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments."

a. In Line 10 ("elem. Load (7.3) shape&wt"), costs are allocated according to proportions in Line 2 ("weight").
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
b. In Line 13 ("delivery rural (10) shape&pc"), costs are allocated according to Line 1 ("volume").
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.
c. In Line 15 ("hwy/rail trans. (14) cube"), costs are allocated according to cubic feet.
   i. Please provide the basis for this allocation rule.
   ii. If you employ a different allocation rule for letters, flats, and parcels, please provide the basis for this distinction.

RESPONSE:

a. (i-ii.) Even though according to USPS LR-I-1 page 7-8 Section 7.3.4 "[v]olume variable costs for letter route load time at customer delivery points are distributed . . . on the basis of proportion of pieces," these costs have been allocated on the basis of weight in the weight study library references as explained in USPS-T-28 pages 8-9. Elemental load costs account for 22.2% of total ECR costs.

b. (i-ii.) Please see USPS-T-28 page 9 Section IV.C.5. Rural carrier costs account for 18.4% of total ECR costs.

c. (i-ii.) Please see response to interrogatory ADVO/USPS-T28-4b. Highway and rail transportation costs account for 2.5% of total ECR costs.

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NAA/USPS-T28-13: Please refer to USPS-LR-I-92, Section 2, worksheet labeled "Std. A ECR All Shapes Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments." On page 2, you provide the following regression labeled "Pound Rated Mail" (workbook LR92bECR.xls):

$$y = 0.0247x - 0.0495$$

a. Please confirm that x is the average weight in each weight increment and that all observations in the 3.0 to 3.5 ounce weight increment are pound-rated.
b. If you are unable to confirm (a) above, please provide the correct definitions of x and y and the observations of data used in the regression.
c. Please provide the basis for the cited equation being a reliable basis for ascertaining the effect of weight on unit costs, including measures of statistical confidence in the individual observed values of y, x, and the estimated coefficients.
d. Please explain in detail the significance you attach to the estimated coefficients.
e. Please explain what significance you attach to the increase in unit costs for the 15 to 16 ounce increment.
f. Please confirm that deleting the observation for the 3.0 to 3.5 ounce weight increment from the data used in the regression produces the following:

$$y = 0.0265x - 0.0708$$

g. Please explain what significance you attach to the result described in (f.) above.

RESPONSE:

a. The equation cited above appears on page 11 of Section 2 in USPS LR-I-92 (or the 47th page of the library reference.) For the purpose of this graph, "x" represents ounce per piece.

b. "y" represents the unit cost for a piece with "x" weight per piece.

c-d. This equation has not been represented to be a basis for ascertaining the effect of weight on unit cost and has not been used as such in the Postal Service's case. It is the output of the Excel model that calculates a trendline giving each data point equal weight instead of volume weighting the data. According to the EXCEL function LINEST, the standard error values for the slope, intercept, and y estimate are 0.006, 0.062, and 0.092, respectively. An analysis of pound-rated ECR mail also appears on page 13 of Section 2 in USPS LR-I-92 "Std. A ECR All

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Shapes Test Year Pound-Rated Unit Costs by Combined Weight Increments." Here, the data points are more evenly weighted and the equation is y=0.0176x-0.0048.

e. There are 13,060,565 pieces in the 15-16 ounce increment out of 33,630,517,437, or 0.04% of the volume. Its significance should reflect its relative portion of the total. Also, transportation costs have been allocated on the basis of pounds implicitly assuming equal transportation cost per pound in every weight increment. However, higher weight per piece results in higher avoided transportation cost per piece due to dropshipping. Thus, even with a similar dropship profile per weight increment, higher weight-per-piece pieces have lower transportation costs per piece and this implies that the true cost of heavier weight-per-piece pieces is overstated.

f. Confirmed for the data on page 11 of Section 2 in USPS LR-I-92. Removing the observation for the 3.0 to 3.5 ounce weight increment on page 13 of Section 2 in USPS LR-I-92 results in the equation y=0.0175x - 0.0035.

g. Please see the response to subparts (c-d).

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NAA/USPS-T28-14: Please refer to USPS-LR-I-92, Section 1, worksheet titled "3CREG all (detailed)." There you provide the following regression labeled "Std. A Regular All Shapes Pound Rated" (workbook LR92aREG.xls):

$$y = 0.0628x - 0.133$$

a. Please confirm that x is the average weight in each weight increment and that you assume that no observations in the 3.0 to 3.5 ounce weight increment are pound-rated.
b. If you are unable to confirm (a), please provide the correct definitions of x and y and the observations of data used in the regression.
c. Please provide the basis for the cited equation being a reliable basis for ascertaining the effect of weight on unit costs, including measures of statistical confidence in the individual observed values of y, x and the estimated coefficients.
d. Please explain in detail the significance you attach to the estimated coefficients.
e. Please explain the significance you attach to the increase in unit costs for the 15 to 16 ounce weight increment.
f. Please explain why the pound-rated regression for Regular excludes the 3.0 to 3.5 ounce category while the pound-rated regression for ECR includes the 3.0 to 3.5 ounce category.

RESPONSE:

a. Confirmed.

b. N/A

c-d. This equation has not been represented to be a basis for ascertaining the effect of weight on unit cost and has not been used as such in the Postal Service's case. It is the output of the Excel model that calculates a trendline giving each data point equal weight instead of volume weighting the data. According to the EXCEL function LINEST, the standard error values for the slope, intercept, and y estimate are 0.013, 0.135, and 0.178, respectively.

e. There are 57,681,913 pieces in the 15-16 ounce increment out of 42,783,773,194, or 0.13% of the volume. Its significance should reflect its relative portion of the total. Also, please see the response to NAA/USPS-T28-13(e).

f. The trendlines for pound-rated mail shown in USPS LR-I-92 were not intended to be used in any analysis. If I had intended to use regressions to analyze the cost of pound-rated mail, I would volume weighted the data and presented two

separate regressions with both 3.0 and 3.5 ounces used as breakpoints as is done in Table 3.

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NAA/USPS-T28-15. Please refer to your direct testimony, USPS-T-28, page 3, lines 3-4, where you state that your testimony draws from library references LR-I-91 through LR-I-102. Your direct testimony reproduces from the library references regressions of the effect on unit costs of weight for certain categories of mail. However, the library references include regressions of the effect on unit cost of weight for only certain types of mail.

a. Is it possible to draw an inference of your belief in the reliability of the regressions from the fact that regressions were run for only certain types of mail?

b. If so, please explain why. If not, please explain the rationale for the disparate treatment.

RESPONSE:

a-b. The regressions produced by Excel in library references USPS LR-I-91 and 92 were not relied upon by the Postal Service because each data point was given equal weight, and were not weighted by volume. Therefore, tables presented in my testimony either had the Excel-produced trendline deleted or separately plotted the line produced by a regression generated by SAS software.[1] The numerous regression lines contained in the analyses presented in USPS LR-I-91 and 92 were not intended to be used for any purpose.

[1] The regression lines shown in Tables 4a and 4b were derived by the SAS program documented in USPS LR-I-94.

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NAA/USPS-T28-16. Please refer to your Errata to USPS-T-28, pages 11 and 14. Prior to your Errata, these appeared to be identical to pages found in LR-I-91.

a. Do the revisions contained in your Errata also require revisions to LR-I-91?

b. If so, please provide an Errata revising all necessary pages of the library references you relied upon.

RESPONSE:

a-b. Yes. Errata to LR-I-91 were also filed on 3/1/00 which, among other things, corrected the title to Table 2 in Section 2 of USPS LR-I-91.

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NAA/USPS-T28-17. Please refer to Library Reference LR-I-92, Section 3. page 11 of 29 and Section 4, page 11 of 29. These pages do not contain regressions of unit cost on weight for pound-rated non-profit and non- profit ECR similar to those found in Section 1, page 11 of 31 (Standard Mail (A) Regular) and Section 2, page 11 of 31 (Standard Mail (A) ECR).

a. Do you believe the regressions for pound rated Standard (A) Regular and ECR are reliable measures of the effect of weight on costs? Please provide all statistical measures of reliability on which you base your answer.

b. Do you believe the excluded regressions to be unreliable? Please provide all statistical measures upon which you rely.

RESPONSE:

a. Please see my responses to interrogatories NAA/USPS-T28-13(c-d) and –14(c-d), VP-CW/USPS-T28-19(b), -20(b), -22(b) and –23(b).

b. Please see my response to interrogatory NAA/USPS-T28-15. For clarification, these pages do not contain a separate graph of pound-rated ECR pieces, which is the primary reason they do not contain a regression.

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NAA/USPS-T28-18. Please refer to Witness Moeller's response to NAA/USPS-T-35-21.

a. Please provide all data necessary to make your cost data compatible with the before and after rates cost data employed by Witness Moeller in calculating his before and after rates cost coverage for ECR Mail.

b. What adjustments, if any, need to be made to your calculated average cost/piece and regression equations to make them consistent with the test year cost data used by Witness Moeller?

RESPONSE:

a-b. Typically, the Postal Service has only provided TYBR unit cost estimates to support rate design because of an infinite loop created by costs, which affect rates, which affect (TYAR) volumes, which creates new TYAR costs, which affect rates, etc. Adjustments to the total cost of ECR mail are made in USPS LR-I-97 using TY before rates unit costs to account for the volume mix changes between rate categories in TY after rates. The costs presented in the attachment present TYAR costs (including final adjustments and the contingency) for Standard Mail (A) ECR by detailed weight increment using TYAR volumes and implied weight. The assumptions made in developing these costs are described below.

In order to tie to the TYAR costs presented in witness Kashani's Exhibit (USPS-14K) in the same way costs were developed for TYBR, witness Smith's (USPS-T-21) work in developing piggybacks and costs by shape would need to be repeated. The analysis in USPS LR-I-94 would then need to incorporate these factors and this output would need to be incorporated in USPS LR-I-92. One would not expect the unit volume variable costs for TYBR and TYAR for homogeneous categories to be remarkably different. Therefore, TYBR unit costs by shape and ounce increment for mail processing, city in-office and window service have been used as a proxy for TYAR unit costs in the attachment to this interrogatory. All other cost components were developed in the same manner as TYBR.

The distribution of pieces to weight increment between before rates and after rates does not change because the BY distribution is used for both cases. The

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TYAR forecast of shape was incorporated into the volumes and weight by weight increment in the attachment.

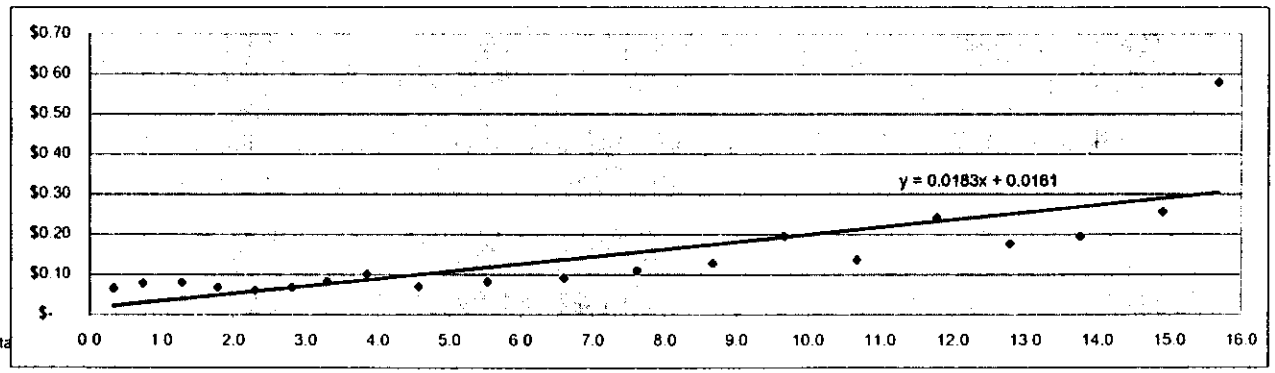
Std. A ECR All Shapes Test Year (AFTER RATES) Unit Costs by Detailed (1/2 ounce) Weight Increments

	0 to .5	.5 to 1.0	1.0 to 1.5	1.5 to 2	2 to 2.5	2.5 to 3	3 to 3.5	3.5 to 4	4 to 5	5 to 6	6 to 7	7 to 8
[1]volume	5,367,957,486	4,872,697,238	2,688,412,046	2,882,544,772	3,704,808,016	3,105,799,113	2,007,142,373	1,682,637,044	3,258,[illegible]	1,468,448,525	765,164,083	406,925,761
[2]pounds	111,060,725	224,443,519	215,473,747	332,445,910	531,971,724	444,819,474	412,735,528	404,567,469	927,844,[illegible]	507,643,692	315,336,835	193,533,512
[3]cubic feet (weight/density)	4,098,457	8,967,721	9,476,500	15,464,215	24,909,389	25,596,078	19,891,992	19,527,987	44,945,[illegible]	24,609,784	15,279,206	9,391,911
	1.72											
[4]total mp (3.1) tally	75,172	97,057	58,281	36,188	29,737	29,566	34,072	41,376	20,040	12,187	7,307	7,342
[5]window service (3.2) tally	2,343	2,033	1,100	1,095	1,353	1,268	730	614	1,179	532	277	147
[6]delivery in-office (6.1) tally	92,209	82,327	41,263	38,574	30,671	28,637	24,963	33,038	21,648	12,981	6,105	4,055
[7]delivery in-office (6.2) 6.1	18,481	16,501	8,274	7,731	6,147	5,740	5,003	6,622	4,339	2,602	1,224	813
[8]del. route (7.1) piece	8,539	7,751	4,277	4,744	5,893	4,940	3,193	2,677	5,177	2,336	1,217	647
[9]del. access (7.2) piece	8,196	7,440	4,105	4,554	5,657	4,742	3,065	2,569	4,969	2,242	1,168	621
[10]elem. load (7.3)shape&wt	34,699	56,275	36,892	42,010	59,640	58,869	40,783	33,969	73,267	39,998	24,779	15,290
[11]del. support (7.4) sum6&7	26,145	27,993	15,755	16,360	18,541	17,690	13,106	13,151	19,123	10,476	6,056	3,752
[12]vehicle service (8) cube	1,279	2,798	2,957	4,825	7,772	7,987	6,207	6,093	14,024	7,679	4,768	2,931
[13]delivery rural (10)shape&pc	84,634	72,799	37,263	39,253	48,336	40,384	25,570	21,306	41,033	18,503	9,645	5,124
[14]air/water trans. (14) weight	31	62	59	92	147	150	114	112	256	140	87	53
[15]hwy/rail trans. (14)cube	1,037	2,270	2,399	3,914	6,305	6,479	5,035	4,943	11,377	6,229	3,867	2,377
[16]Other weight	1,056	2,133	2,048	3,160	5,056	5,179	3,923	3,845	8,819	4,825	2,997	1,840
[17]Total Cost	353,820	377,438	214,694	202,500	225,256	211,631	165,762	170,314	225,249	120,730	69,496	44,993
[18]Total Unit Cost	$ 0.066	$ 0.077	$ 0.080	$ 0.068	$ 0.061	$ 0.068	$ 0.083	$ 0.101	$ 0.069	$ 0.082	$ 0.091	$ 0.111
Marginal Cost Difference		$ 0.012	$ 0.002	$ (0.012)	$ (0.007)	$ 0.007	$ 0.014	$ 0.019	$ (0.032)	$ 0.013	$ 0.009	$ 0.020

unit cost < 3.0 ounces	$ 0.0698	unit cost < 3.5 ounces	$ 0.0708
unit cost > 3.0 ounces	$ 0.0877	unit cost > 3.5 ounces	$ 0.0890

[illegible]
Linked to tally analysis
[illegible]
C/S&C data (USPS-T-14)
piggys (USPS-T-21 Attach 11)
check

1-2: USPS LR-I-102
3: density (ft^3/lb)* Weight
4: USPS LR-I-94
5: USPS LR-I-99
6: USPS LR-I-100
7: =[6]by oz/[6]total*[7]total
8&9: =[1]by oz/[1]total*[8&9]total
10&13: sum of shapes
11: =SUM([6]:[10]by oz)/SUM([6]:[10]tota
12&15: =[3]by oz/[3]total*[12&15]total
14&16: =[2]by oz/[2]total*[14&16]total



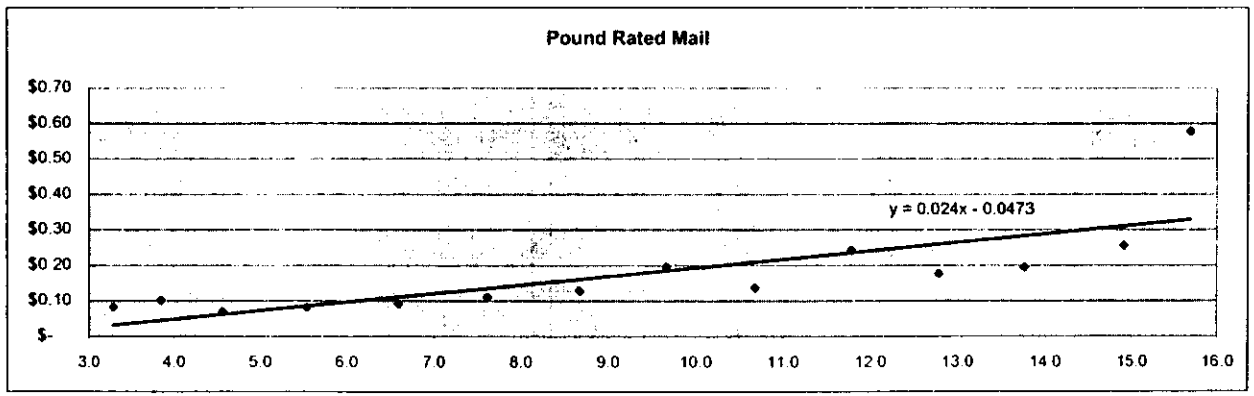
Std. A ECR All Shapes Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments (continued)

	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16+	Total	Unit Cost (cents)	CRA No Piggy		Piggys/ density
[1]volume	220,517,148	88,322,859	51,451,642	37,014,240	35,223,930	27,820,215	19,799,831	14,292,366	32,828,211,129				
[2]pounds	119,436,424	52,142,980	31,361,183	27,262,180	28,197,544	23,925,313	17,917,348	14,011,793	55,058,783,143				
[3]cubic feet (weight/density)	5,807,033	2,544,299	2,841,592	1,325,964	1,370,230	1,166,173	851,114	682,108	238,550,890				21.21
											vol var cost	+fin adj.* contingency	
[4]total mp (3.1) tally	3,777	4,961	1,978	2,791	1,192	478	1,543	5,687	470,731	1.43	292,894	300,211	1.568
[5]window service (3.2) tally	80	31	30	13	13	10	7	5	12,859	0.04	8,599	8,814	1.459
[6]delivery in-office (6.1) tally	3,784	2,466	464	1,412	489	921	476	350	426,832	1.30	303,733	311,329	1.371
[7]delivery in-office (6.2) 6.1	754	494	93	283	98	185	95	70	85,548	0.26	60,876	62,398	1.371
[8]del. route (7.1) piece	351	137	130	59	56	44	30	23	52,220	0.16	37,160	38,089	1.371
[9]del. access (7.2) piece	337	132	124	57	54	42	29	22	50,124	0.15	35,668	36,560	1.371
[10]elem. load (7.3)shape&wt	9,523	4,328	4,330	2,190	2,275	1,953	1,390	1,127	543,588	1.66	386,816	396,490	1.371
[11]del. support (7.4) sum6&7	2,544	1,286	919	677	523	539	350	277	195,262	0.59	138,948	142,423	1.371
[12]vehicle service (8) cube	1,812	795	824	414	428	364	266	213	74,435	0.23	47,740	48,938	1.521
[13]delivery rural (10)shape&pc	2,774	1,083	1,025	485	443	349	237	180	450,405	1.37	353,228	362,062	1.244
[14]air/water trans. (14) weight	33	14	15	8	8	7	5	4	1,395	0.00	1,361	1,395	1.000
[15]hwy/rail trans. (14)cube	1,470	645	669	338	347	295	215	173	60,382	0.18	58,907	60,382	1.000
[16]Other weight	1,135	496	517	259	268	227	166	133	48,083	0.15			
[17]Total Cost	28,353	16,868	11,117	8,963	6,193	5,415	4,809	8,263	2,471,864	7.59	2,398,626	2,471,864	
[18]Total Unit Cost	$ 0.129	$ 0.195	$ 0.136	$ 0.242	$ 0.176	$ 0.195	$ 0.256	$ 0.578	$ 0.075				
Marginal Cost Difference	$ 0.018	$ 0.067	$ (0.059)	$ 0.106	$ (0.066)	$ 0.019	$ 0.061	$ 0.322					

unit cost < 3.0 ounces
unit cost > 3.0 ounces

[redacted]
Linked to tally analysis
[redacted]
C/S&C data (USPS-T-14)
piggys (USPS-T-21 Attach 11)
check

1-2: USPS LR-I-102
3: density (ft^3/lb)* Weight
4: USPS LR-I-94
5: USPS LR-I-99
6: USPS LR-I-100
7: =[6]by oz/[6]total*[7]total
8&9: =[1]by oz/[1]total*[8&9]total
10&13: sum of shapes
11: =SUM([6]:[10]by oz)/SUM([6]
12&15: =[3]by oz/[3]total*[12&15]
14&16: =[2]by oz/[2]total*[14&16]



RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
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NAA/USPS-T28-19. Please refer to LR-I-91, Section 1, pages 1 and 11 of 34. You did not provide a regression of unit cost on weight for the first data set ("costs by ounce increment") but you did provide such a regression for the second data set ("detailed (1/2 ounce) weight increment") for first class single piece mail. Please explain why you provided a regression for one but not the other.

RESPONSE:

Please see my response to interrogatory NAA/USPS-T28-15. The "first data set" (costs by ounce increment) was used in my testimony while the "second data set" ("detailed (1/2 ounce) weight increment") was only provided as supplemental information in the library reference. It was not intended for use in support of the USPS Request.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

NAA/USPS-T28-20. Please refer to LR-I-91, Section 1, pages 11 and 13 of 34, which present regressions of unit costs on weight for first class single piece all shape mail. Do you believe these regressions are reliable measures of the effect of weight on unit costs? Please explain the basis for your answer.

RESPONSE:

Please see my response to interrogatory NAA/USPS-T28-17(a).

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

NAA/USPS-T28-21. Please refer to LR-I-91, Section 2, pages 1 and 10 of 30. You do not provide a regression of unit cost on weight for the first data set ("costs by ounce increment"), but you do provide a regression for the second data set ("unit costs by detailed (l/2 ounce) weight increments") for first class presort. Please explain why you provide only the one regression.

RESPONSE:

Please see my response to NAA/USPS-T28-19.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

NAA/USPS-T28-22. Please refer to the chart entitled "Std. A ECR All Shapes Test Year Unit Costs by Detailed (I/2 ounce) Weight Increments" in LR-I-92. Section 2.

a. For mail processing costs (cost segment 3.1) please indicate for each ½ ounce weight increment, the number of IOCS tallies underlying the costs shown.

b. Please also indicate whether any IOCS tallies were included which could not be specifically categorized by weight increment, i.e. "weightless" tallies.

c. What is the minimum number of tallies needed for a reliable estimate of costs within a single ½ ounce cell? What is the maximum variance that is acceptable for an estimate to be considered reliable?

d. Please confirm that the IOCS mail processing tallies which you used for this study have a field which indicates whether the clerk or mailhandler tallied was handling (i) a piece of mail, (ii) an item, or (iii) a container. If you do not confirm, please provide a list showing all information contained on IOCS mail processing tallies for this study.

e. Assuming that information described in preceding part c is available, please provide a breakdown of the mail processing tallies in each ½ ounce increment showing whether the person tallied was handling (i) a piece, (ii) an item, or (iii) a container.

RESPONSE:

a. Please see the attached table for the direct tally records (and dollar weighted tallies) by ounce increment and handling type (per subpart (e)).

b. Assuming that the term "included" in the question means included in the table provided in response to subpart (a), the "weightless" tallies are provided in a separate category. For a discussion of the treatment of such tallies in my analysis, please see the response to interrogatory VP-CW/USPS-T28-26(b) and the portions of my testimony and library references cited therein.

c. It is my understanding that, as a general matter, a minimum number of tallies is not necessarily required to determine a "reliable" estimate of costs for an arbitrary weight increment "cell." For instance, in some cases, the absence of tallies in a cell may provide a reliable estimate of zero, or nearly zero, volume-variable cost for the cell.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

It is also my understanding that with regard to variance, it is presumed that the question intends to measure the sampling variance relative to the size of the estimate. For example, the estimated standard deviation (i.e., square root variance) of $22.659 million reported by witness Ramage for the First-Class Single Piece mail processing volume-variable cost (see USPS-T-2 at page 8) suggests that the corresponding point estimate is not subject to a great deal of sampling variation. By contast, for another subclass, such as Classroom Periodicals, a standard deviation of $22.659 million would have a much different implication for the cost estimate. That said, the maximum acceptable variance will depend on the use to which the estimate is put. The maximum acceptable variance could be relatively low if a downstream analysis is sensitive to the value of the point estimate. On the other hand, if the key requirement is that the cost estimates be statistically unbiased, the maximum acceptable variance will tend to be relatively high. Since the pricing witnesses do not use the individual estimates of the costs by weight increment, the variance of these estimates in and of themselves is not as important.

d. Confirmed. It is my understanding that the IOCS field F9213 indicates whether an employee handling mail at the time of the observation was handling a single piece of mail, an item, or a container.

e. Please see the response to subpart (a).

Response NAA/USPS-T28-22
Parts a) and e)

BY98 IOCS Direct Tally Record Counts
Standard A Commercial Rate ECR Mail - All Mail Processing (Cost Segment 3.1) for Clerks/Mailhandlers

	Weight Increment (ounces)																						
Handling Category	< 0.5 oz	.05 - 1 oz	1 - 1.5 oz	1.5 - 2 oz	2 - 2.5 oz	2.5 - 3 oz	3 - 3.5 oz	3.5 - 4 oz	5 oz	6 oz	7 oz	8 oz	9 oz	10 oz	11 oz	12 oz	13 oz	14 oz	15 oz	16 oz	> 16 oz	No Wgt	Total
Piece	193	203	106	62	39	39	47	65	23	17	14	10	4	7	2	5	2	2	3	5	0	0	848
Direct Item	160	217	135	102	78	65	77	94	47	30	14	16	7	7	4	6	3	0	2	15	0	36	1,115
Direct Container	95	380	79	1	4	67	187	112	2	1	0	0	1	0	0	0	0	0	0	88	0	0	1,016
Total	448	800	320	165	121	171	311	271	72	48	28	26	12	14	6	11	5	2	5	108	0	36	2,979

BY98 IOCS Direct Tally Dollar Weights (000) - IOCS Field F9250
Standard A Commercial Rate ECR Mail - All Mail Processing (Cost Segment 3.1) for Clerks/Mailhandlers

	Weight Increment (ounces)																					
Handling Categor	< 0.5 oz	.05 - 1 oz	1 - 1.5 oz	1.5 - 2 oz	2 - 2.5 oz	2.5 - 3 oz	3 - 3.5 oz	3.5 - 4 oz	5 oz	6 oz	7 oz	8 oz	9 oz	10 oz	11 oz	12 oz	13 oz	14 oz	15 oz	16 oz	> 16 oz	No Wgt	Total
Piece	14,810	15,327	8,598	4,681	2,840	3,269	4,192	5,301	2,082	1,041	1,105	1,006	653	660	102	294	136	119	380	485	0	0	67,080
Direct Item	12,091	16,015	11,219	7,090	5,341	5,287	6,222	6,810	3,753	2,287	1,044	944	456	521	369	355	199	0	167	1,135	0	1,610	82,914
Direct Container	196	1,031	319	56	196	359	319	211	118	78	0	0	47	0	0	0	0	0	0	88	0	0	3,017
Total	27,096	32,373	20,136	11,826	8,377	8,916	10,733	12,322	5,953	3,406	2,149	1,949	1,155	1,181	471	649	336	119	546	1,708	0	1,610	153,011

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

NAA/USPS-T28-23. Please refer to the chart entitled "Std. A ECR All Shapes Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments" in LR-I-92. Section 2.

a. For city carrier street labor costs (cost segment 7) please indicate for each ½ ounce weight increment, the number of recorded observations underlying the costs shown.

b. Please also indicate whether any recorded observations were included which could not be specifically categorized by weight increment, i.e. "weightless" observations.

c. What is the minimum number of tallies needed for a reliable estimate of costs within a single 1/2 ounce cell? What is the maximum variance that is acceptable for an estimate to be considered reliable?

d. Please confirm that the city carrier street labor cost observations which you used for this study have a field which indicates whether the clerk or mailhandler tallied was handling (i) a piece of mail, (ii) an item, or (iii) a container. If you do not confirm, please provide a list showing all information contained on city carrier street labor cost observations for this study.

e. Assuming that information described in preceding part c is available, please provide a breakdown of the city carrier street labor cost observations in each % ounce increment showing whether the person tallied was handling (i) a piece, (ii) an item, or (iii) a container.

RESPONSE:

a. The city carrier street (C/S 7) data (e.g., the City Carrier System, or CCCS data used to distribute certain C/S 7 costs to subclass) do not identify weight of the sampled pieces as well as subclass; consequently, it is not possible to provide the number of observations for each ½ ounce increment. For details of CCCS, please see the testimony of witness Harahush (USPS-T-3). I describe the methods I use to distribute C/S 7 costs to weight increment at pages 8-9 of my testimony.

b. Please see the response to part subpart (a).

c. Please see the response to interrogatory NAA/USPS-T28-22(c).

d. Not confirmed. Please see the testimony of witness Harahush (USPS-T-3) and the related library references LR-I-16, LR-I-18, LR-I-19, and LR-I-20.

e. Not applicable.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

NAA/USPS-T28-24. Please refer to the chart entitled "Std. A ECR All Shapes Test Year Unit Costs by Detailed (I/2 ounce) Weight Increments" in LR-I-92, Section 2.

a. Please confirm, for comparison purposes, that for Standard A ECR, this chart corresponds to the First-Class Single-Piece and First-Class Presort charts contained on pages 11 and 14 of your testimony.
b. If you cannot so confirm, please provide a citation to the Standard A ECR chart which, for comparison purposes, is equivalent to the First-Class Single-Piece and First-Class Presort charts contained on pages 11 and 14 of your testimony.

RESPONSE:

a-b. Not confirmed. The chart in LR-I-92, Section 2 referred to in this question is by detailed (1/2 ounce) weight increments while those charts contained on pages 11 and 14 of my testimony are by whole ounce increments. The charts on page 10 of USPS LR-I-91 Sections 1 and 2 contain costs by ½ ounce weight increments for First-Class Mail Single-Piece and Presort. The most equivalent Standard A ECR chart to the First-Class Single-Piece and First-Class Presort charts contained on pages 11 and 14 of my testimony is on page 12 in USPS LR-I-92 Section 2 entitled " Std. A ECR All Shapes Test Year Unit Costs by Combined Weight Increments" where the data are aggregated by the following nine weight increments: 0 to 1, 1 to 2, 2 to 3, 3 to 5, 5 to 7, 7 to 9, 9 to 11, 11 to 13 and over 13 ounces.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

NAA/USPS-T28-25. Please refer to the FY98 IOCS data (LR-I-12) and your library references LR-I-99, LR-I-100, and LR-I-101.

a. Please confirm that the FY98 IOCS data contain records for more than 820,000 tallies.
b. Please confirm that approximately 349,000 tallies are not dollar-weighted.
c. Please explain the basis by which you allocated these non dollar-weighted tallies.
d. What percentage of the non-dollar-weighted tallies have activity codes associated with "Leave."
e. Please identify the number of tallies without dollar-weights identified in (b) that are re-distributed to each of the First Class, Standard (A) Regular, and Standard (A) Regular ECR categories.
f. If tallies from (b) are re-distributed. please identify the proportion of these tallies that contained a weight in pounds or ounces, and describe the basis on which they were assigned to a weight increment.

RESPONSE:

a. Confirmed. It is my understanding that the FY98 IOCS data file contains 821,609 total records.
b. Confirmed. It is my understanding that the FY98 IOCS data file contains 349,135 records that have been assigned a dollar weight of zero.
c. Since there is zero dollar weight for the tallies referenced in subpart (b), there is nothing to "allocate" and, hence, no basis for the non-existent allocation.
d. If the question's use of the term "leave" is intended to refer to activity codes 9010 (annual leave), 9020 (sick leave), 9040 (military leave), 9050 (other paid leave), 9060 (jury duty/court leave), and 9110 (leave without pay), then it is my understanding that there are 116,320 records, or 33.3% of the tallies referenced in subpart (b), that have "leave" activity codes.
e. Zero. Please see the response to subpart (c).
f. Not applicable.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA

NAA/USPS-T28-26. Please refer to your testimony at page 28, lines 8-14, where you state that "costs per pound for non-transportation savings calculated by USPS witness Crum (USPS-T-21) are multiplied by the pounds by shape and rate category entered at each destination (Origin, DBMC, DSCF and DDU) as reported in FY98 Billing Determinants (USPS-LR-I-125) to compute the total average dropship savings per piece. These dropship savings are added to the mail processing costs on page 17 of USPS LR-I-96 so that the effect of finer depth of sort can be calculated in the absence of dropshipping."

a. Please confirm that the mail processing costs to which dropship adjustments are being added are Test Year costs.

b. Please confirm that Witness Crum's costs per pound for non-transportation savings are reported as Test Year data.

c. Please confirm that Witness Crum's TY cost per pound estimates are multiplied by FY98 pounds by shape and rate category to calculate dropship adjustment costs.

d. Please confirm whether the FY98 data on pounds by shape and rate category from LR-I-96 correspond to the BY data on pounds from LR-I-92, and explain any discrepancies.

RESPONSE:

a. Confirmed.

b. Confirmed. See page 6 lines 13-16 of USPS-T-27.

c. Confirmed. It is my understanding the dropship profile is assumed to be the same in the test year as it is in the base year.

d. Data by rate category are not presented in USPS LR-I-92. The data in USPS LR-I-96 use billing determinant data while USPS LR-I-92 uses PERMIT mailing statement data. Please see my response to interrogatory ADVO/USPS-T28-1.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-1. Please refer to your testimony at page 5, lines 13-24, where you describe your analysis of mail processing cost segment 3.1.

a. Did you conduct any weight-related analysis for any individual MODS cost pools, or for any subsets of MODS cost pools within segment 3.1? If so, please provide and explain the results of those analyses.
b. Do you have any *a priori* theories or expectations about how weight would affect the various MODS cost pools, such as platform and acceptance? If so, please state how you would expect weight to affect the cost of various operations within cost segment 3.1.
c. For any individual MODS operations, such as platform work, did you conduct any inter-class analyses that compared the effect of weight on cost? For instance, did you attempt to analyze and compare the effect of weight on platform cost for First-Class Mail, Periodicals, and Standard A Mail? If so, please provide all such studies. If not, please explain why you did not attempt any such comparative analyses.

RESPONSE:

(a). The mail processing weight-related analysis was conducted at the cost pool level, consistent with how USPS witness Van-Ty-Smith allocates costs to shape. Total costs by weight increment and cost pool can be found in USPS LR-I-94.

(b). Since weight is related to cube and more cube implies more containers, it is expected that weight would affect container-related operations such as platform and other allied operations; however, a doubling of cube does not necessarily mean a doubling of containers. Also, I was aware of the Docket No. MC95-1 engineering studies referred to in the interrogatory MMA/USPS-T28-5; therefore, I expected weight may influence letter automation cost pools.

(c) No. Please see my response to interrogatory VP-CW/USPS-T28-2.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-2. Based on your analysis of the effect of weight on cost, what are the principal MODS cost pools, or activities that are most affected by weight? If your answer varies by class or subclass of mail, please so indicate and explain, to the extent that you are able, why this is so.

RESPONSE:

I have not analyzed the effect of weight on costs on a cost pool basis. Appropriate volume data to unitize cost pool costs are not available. Even if cost pool-specific volumes were available, differing degrees of worksharing and other mail characteristics by ounce increment would affect each cost pool differently, and that would make such an analysis meaningless.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-3. Please refer to Table 1 at page 11 of your testimony.

a. Do the data in the first three rows reflect volume, pounds and cubic feet for the Test Year? If not, what time period do they represent?
b. Please provide specific citations to the page(s) and table(s) in USPS-LR-I-91 which support each entry in the first three rows of Table 1.
c. For the various points plotted in the diagram at the bottom of page 11, did you compute a regression line similar to that which you computed for Tables 4a and 4b?
d. If so, please provide the intercept and slope.
e. If not, please provide a detailed explanation of why you did not do so.

RESPONSE:

(a). Data in the first three rows are Base Year volumes, weight and cubic feet inflated by a Test Year to Base Year volume ratio. This is consistent with volume, weight and cubic feet distribution assumptions in the roll-forward in witness Kashani's testimony (USPS-T-14).

(b). First-Class Single-Piece Base Year volume and weight data is converted to Test Year volume and weight on pages 8 and 9 of Section 1 in USPS LR-I-91. First-Class Single-Piece Test Year cubic feet are calculated and distributed to weight increment on pages 10 and 11 of Section 1 in USPS LR-I-91.

(c). No, not with final data.

(d). N/A

(e). This type of analysis was not required by the First-Class rate design witness.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-4. At page 10 of your testimony (lines 24-26), you state that "[t]he total costs for pieces in excess of the first ounce cost are divided these [sic] by 'postage ounces,' i.e., the total number of additional ounces purchased." The footnote explains that postage ounces differ from actual ounces because weight is rounded up to the next ounce in calculating rates.

a. To the extent that weight causes an increase in cost, is it actual weight or "postage" weight that causes the increase in cost? Please explain the cost driver and the causal relationship as you perceive it.
b. For the data in Table 1, did you compute the incremental cost divided by the incremental number of actual ounces? If so, please provide this datum. If not, why not?

RESPONSE:

(a) To the extent weight causes an increase in costs, actual weight, not "postage" weight would be the driver. "Postage" weight is used for rate design purposes.

(b) This number can be computed by dividing the "cost of pieces in excess of first ounce cost" by the number of pounds in weight increments "1 to 2," "2 to 3"..."10 to 11+" which results in $0.1043.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-5. At page 13 (lines 16-17), your testimony states that "there are 7.337 billion pieces weighing more than one ounce in First-Class Mail Single-Piece in the TY. . . "

a. What is the source of the 7.337 billion pieces referred to here?
b. Please reconcile the 7.337 billion pieces referred to here with the data shown in row 1 of Table 1. That is, total volume of 53.214 billion less 45.917 pieces that weigh between 0-1 ounce leaves 7.297 billion pieces weighing more than one ounce.

RESPONSE:

(a-b) The number should be 7.297 billion. Please see errata filed on 3/1/00.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-6. Your Table 1 shows that the total volume of Single-Piece First-Class Mail as 45.917 billion pieces.

a. What is the total cost of these 45.917 billion pieces?
b. The cost of pieces in excess of one ounce ($2,236,175,478) represents what percent of that total cost?

RESPONSE:

Table 1 shows the total volume of First-Class Mail Single-Piece is 53.214 billion pieces and the volume of First-Class Mail Single-Piece weighing less than one ounce is 45.917 billion.

(a) The total cost of First-Class Mail Single-Piece is $13.003 billion (see errata filed on 3/1/00). The total cost of First-Class Mail Single-Piece weighing less than one ounce is $9.285 billion (see errata filed on 3/1/00).

(b) The cost of First-Class Mail Single-Piece pieces in excess of one ounce ($2,236,175,478) divided by the total cost of $13.003 billion is 17.2%.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-7. Footnote 5 on page 12 states that "[t]he estimated unit cost of a Single-Piece flat weighing less than one ounce is 94 cents." On page 13 (lines 2-3), you state that "lightweight flats appear to be consistently more costly to handle than the average weight flat. . ."

a. For your estimated cost of a one-ounce flat (94 cents), did you compute or develop any statistical measure of the reliability of that estimate, such as standard deviation, coefficient of variation, etc.? If so, please provide each such measure, and provide the range at the 95 percent confidence level. If not, please explain why not and state how much credibility and weight can be given to your estimated cost by the Commission.
b. How many direct IOCS tallies did you have for First-Class flats weighing less than one ounce? In what MODS cost pools or operations were those tallies observed?
c. Can lightweight (under one ounce) flats be sorted on the FSM 1000?
d. Are lightweight (under one ounce) First-Class flats systematically segregated from other heavier flats and sent to manual processing?
e. Aside from IOCS tally data described in your testimony, can you offer any explanation for the high cost of flats weighing less than one ounce compared to heavier-weight flats?

RESPONSE:

(a). I did not compute any estimates of statistical reliability for costs by shape; however, see witness Ramage's response to interrogatory ANM/USPS-T2-13 for estimates of statistical reliability for costs presented in Table 1.

(b). There were 1,299 mail processing tallies and 232 city carrier in-office tallies for First-Class Single-Piece Flats weighing less than one ounce. There were 271 mail processing tallies and 70 city carrier in-office tallies for First-Class Presort Flats weighing less than one ounce. The cost pools in which these tallies were observed can be determined by examining the data contained in the file "LR99SEC5DIR.xls" in USPS LR-I-99 "Underlying Mail Processing and Window Cost Data for Weight Studies." Direct reweighted tallies are presented by cost pool, shape and weight increment.

(c). It is my understanding that Operations has had success with flimsy flats. The minimum thickness for flats at least 5" long is .009", which could conceivably include those under one-ounce.

(d). Pieces that are just over 6 1/8" in height are technically flats even though to some they may look like letters. It is my understanding that these pieces tend to be

pulled out of the letter mail stream and are sent to the manual flats cases. Since these pieces are not as large as typical flats, they sometimes are sent to the letter case. This is the only instance I am aware of where flats may be segregated and sent to manual processing.

(e). Please see my testimony page 12 lines 19-20.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-8. At page 13 (lines 17-18), you state that "there are only 1.649 billion pieces weighing more than one ounce in First-Class Mail Presort in the TY."

a. What is the source of the 1.649 billion pieces referred to here?
b. Please reconcile this number with the data shown in the first row of Table 2 on page 14. That is, total volume of 47.012 billion less 45.353 billion pieces weighing between 0-1 ounce leaves 1.659 billion pieces weighing more than one ounce.

RESPONSE:

(a-b). Please see errata filed on 3/1/00. The correct number is 1.695 billion pieces. The total number of First-Class Presort pieces, 47,047,898,126, less the number of pieces between 0 and 1 ounce, 45,353,264,962, is 1,694,633,164.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

Revised 4/11/00

VP-CW/USPS-T28-9. Please refer to Table 2 at page 14 of your testimony.

a. Do the data in the first three rows reflect volume, pounds and cubic feet for the Test Year? If not, what time period do they represent?
a. Please provide specific citations to the page(s) and table(s) in USPS-LR-I-91 which support each entry in the first three rows of Table 2.
b. For the points plotted in the diagram at the bottom of the page, did you compute a regression line similar to that which you computed for Tables 4a and 4b?
c. If so, please provide the intercept and slope.
e. If not, please explain why not.

RESPONSE:

(a). Data in the first three rows are Base Year volumes, weight and cubic feet inflated by a Test Year to Base Year volume ratio. This is consistent with volume, weight and cubic feet distribution assumptions in the roll-forward in witness Kashani's testimony (USPS-T-14).

(b). First-Class Presort Base Year volume and weight data are converted to Test Year volume and weight on pages 8 and 9 of Section 2 in USPS LR-I-91. First-Class Mail Presort Test Year cubic feet data are calculated and distributed to weight increment on pages 10 and 11 of Section 2 in USPS LR-I-91.

(c). No, not with final data.

(d). N/A

(e). This type of analysis was not required by the First-Class rate design witness.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-10. For First-Class Presort, did you compute the actual number of incremental pounds (and ounces) from the data in Table 2?

a. If so, please provide that datum, along with the incremental cost per actual ounce.
b. If not, why not?

RESPONSE:

(a-b) This number can be computed by dividing the "cost of pieces in excess of first ounce cost" by the number of pounds in weight increments "1 to 2," "2 to 3"..."10 to 11+" which results in $0.1154.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-11. Your Table 2 shows that the total volume of Presort First-Class Mail amounted to 45.353 billion pieces weighing between 0 to 1 ounce.

a. What is the total cost of these 45.353 billion pieces?
b. The incremental cost of pieces in excess of one ounce ($388,874,405) represents what percent of that total cost?

RESPONSE:

Please see errata filed on 3/1/00. Table 2 shows the total volume of First-Class Mail Presort is 47.048 billion pieces and the volume of First-Class Mail Single-Piece weighing less than one ounce is 45.353 billion.

(a) The total cost of First-Class Mail Presort is $5.104 billion (see errata filed on 3/1/00). The total cost of First-Class Mail Single-Piece weighing less than one ounce is $4.545 billion.

(b) The cost of First-Class Mail Presort pieces in excess of one ounce, $389,997,819 (see errata filed on 3/1/00), divided by the total cost of $5.104 billion, is 7.6%.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-12. At page 15 (lines 9-10), you state that "the overall pattern for Presort parcels appears to be similar to that of Single-Piece parcels."

a. To what "pattern" are you referring? To the distribution by weight shown in the bottom row of Figures 1 and 2? Otherwise, please provide a specific citation and also explain what you mean by "overall."

b. Footnote 8 at page 12 states that "[t]he estimated unit cost of a Single-Piece parcel weighing less than one ounce is $1.89." Is this also the case for Presort parcels, and is this part of the "overall pattern" to which you refer? If not, please explain.

RESPONSE:

(a). This passage refers to the distribution of costs for parcel by weight shown on page 21 in Section 1 and 2 of USPS LR-I-91. The pattern is similar though the level is different.

(b). The estimated unit cost of a First-Class Mail Presort parcel is $6.523, which is higher than the costs in the higher weight increments, thus forming the u-shaped pattern to which I was referring.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-13. At page 13 (lines 18-20), you state that "The First-Class Mail Presort data therefore do not appear as stable as the First-Class Single-Piece data in the heavier ounce increments." Did you compute any statistical measures of reliability (such as standard deviation or coefficient of variation) for the cost estimates at each weight increment? If so, please provide such measures. If not, please explain why not and state how much credibility and weight can be given to your cost estimates by the Commission.

RESPONSE:

I did not compute any statistical measures of reliability for the cost estimates at each weight increment; however, please see witness Ramage's response to interrogatory ANM/USPS-T2-13 for calculation of coefficients of variation associated with the weight increment cost estimates presented in Table 2 of my testimony.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-14. Please refer to Figures 1, 2 and 3 at pages 12, 15 and 16, respectively. For each figure, please provide specific references to where the data can be found in USPS-LR-I-102 that support each entry in your Figures 1, 2 and 3.

RESPONSE:

The entries in Figure 1 are supported by the data in Section 1 of USPS LR-I-91 pages 8 and 9 under the heading "Data for USPS-T-28, Figure 1." These data refer back to USPS LR-I-102 Table 10. The entries in Figure 2 are supported by the data in Section 2 of USPS LR-I-91 page 8 and 9 under the heading "Data for USPS-T-28, Figure 2." These data refer back to USPS LR-I-102 Table 10. The entries in Figure 3 are supported by the data in USPS LR-I-92 page 8 under the heading "Data for USPS-T-28, Figure 3." These data refer back to USPS LR-I-102 Table 13.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP-CW/USPS-T28-15.

a. When estimating the weight-cost relationship for First-Class Mail, why did you use TY estimated volumes and costs, rather than actual volumes and costs in Base Year 1998?
b. Does the use of estimated volumes and costs, rather than actual volumes and costs, increase the uncertainty and unreliability of the weight-cost relationships that you finally develop?
c. Please explain why estimated TY data are better than actual data for the purpose of developing the weight-cost relationship.

RESPONSE:

a. Test Year estimated volumes and costs were used for the convenience of the First-Class Mail rate design witness.

b-c. No. The base year costs and volumes formed the basis of the calculations for the TY estimates, which were rolled forward in a manner consistent with the presentation of costs in witness Kashani's testimony (USPS-T-14) and used by the rate design witness.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-16.
Please refer to Table 1 (Revised 3/1/00) at page 11 of your testimony, where you provide the estimated total unit cost for each of the 11 individual one-ounce weight ranges for First-Class Single-Piece Mail.

a. For each ounce increment, and for the portion of cost shown in the first three rows consisting of (i) all mail processing, (ii) window service, and (iii) delivery in-office (6.1), please provide the total number of tallies that you used to develop the cost estimates shown in the first three cost-estimate rows in Table 1 (Revised 3/1/00).

b. For the total tallies which you provide for each ounce increment in response to preceding part a, please show the total broken down into (i) direct individual piece handling tallies, (ii) direct tallies handling more than one piece of mail (*e.g.*, items or containers), (iii) mixed mail tallies, (iv) handling empty equipment tallies, (v) not handling tallies (break, etc.), and (vi) other (please specify).

RESPONSE:

a. In the attached table(s), the unweighted and dollar weighted IOCS direct tallies for Single-Piece by weight increment are provided. Please note that mixed-mail and not-handling tallies are not uniquely associated with subclasses of mail and/or weight increments; therefore, it is my understanding that it is not possible to provide a meaningful count of tallies at the requested level of detail.

b. In the attached table(s), the direct tallies have been separated into tallies in which the sampled employee was observed handling a single piece of mail and tallies in which the employee was observed handling multiple pieces of mail, item(s), or container(s).

Part a)
BY98 IOCS Direct Tally Record Counts - Clerks and Mailhandlers First-Class Mail, Single-Piece
Total Direct Tally Records

	Weight Increment (ounces)												
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	24,905	4,884	2,278	1,590	624	427	296	285	261	184	106	171	36,011
Window Service (3.2)	295	122	81	69	40	26	14	15	12	10	11	2	697
City Carrier In-Office (6.1	11,599	1,319	458	316	144	84	52	54	38	23	20	3	14,110

Part b)
BY98 IOCS Direct Tally Counts - Clerks and Mailhandlers First-Class Mail, Single-Piece
Direct Tally Record Count, Employee Handling Single Piece of Mail

	Weight Increment (ounces)												
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	19,190	4,078	1,906	1,398	538	377	264	258	182	167	98	0	28,456
Window Service (3.2)	261	115	79	67	40	26	14	15	12	9	11	0	649
City Carrier In-Office (6.1	10,043	1,137	400	278	127	72	47	50	34	18	16	0	12,222

Part b)
BY98 IOCS Direct Tally Counts - Clerks and Mailhandlers First-Class Mail, Single-Piece
Direct Tally Record Count, Employee Handling Multiple Pieces of Mail, Item, or Container

	Weight Increment (ounces)												
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	5,715	806	372	192	86	50	32	27	79	17	8	171	7,555
Window Service (3.2)	34	7	2	2	0	0	0	0	0	1	0	2	48
City Carrier In-Office (6.1	1,556	182	58	38	17	12	5	4	4	5	4	3	1,888

Part a)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers First-Class Mail, Single-Piece
Total Dollar Weighted Direct Tallies ($000)

	Weight Increment (ounces)												
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	1,848,489	353,743	167,712	116,907	47,169	33,030	21,625	19,723	13,496	12,544	7,310	5,849	2,647,596
Window Service (3.2)	28,607	11,716	7,169	6,391	3,375	2,132	1,311	1,114	954	868	1,155	104	64,894
City Carrier In-Office (6.1)	809,252	87,540	30,896	21,362	9,666	5,431	3,236	3,708	2,437	1,502	1,357	68	976,454

Part b)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers First-Class Mail, Single-Piece
Dollar Weighted Direct Tallies ($000), Employee Handling Single Piece of Mail

	Weight Increment (ounces)												
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	1,472,281	302,571	140,085	102,266	40,720	28,968	19,228	17,617	12,479	11,569	6,864	0	2,154,647
Window Service (3.2)	25,338	11,031	7,019	6,244	3,375	2,132	1,311	1,114	954	806	1,155	0	60,480
City Carrier In-Office (6.1)	697,735	75,049	26,920	18,609	8,630	4,673	2,939	3,299	2,221	1,112	1,121	0	842,307

Part b)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers First-Class Mail, Single-Piece
Dollar Weighted Direct Tallies ($000), Employee Handling Multiple Pieces of Mail, Item, or Container

	Weight Increment (ounces)												
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	376,209	51,172	27,627	14,641	6,449	4,062	2,397	2,106	1,017	975	446	5,849	492,949
Window Service (3.2)	3,268	685	150	146	0	0	0	0	0	62	0	104	4,415
City Carrier In-Office (6.1)	111,517	12,491	3,976	2,753	1,036	758	297	408	216	390	236	68	134,147

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-17. Please refer to Table 2 (Revised 3/1/00) at page 14 of your testimony, where you provide the estimated total unit cost for each of the 11 individual one-ounce weight ranges for First-Class Presort Mail.

a. For each ounce increment, and for the portion of cost shown in the first three rows consisting of (i) all mail processing, (ii) window service, and (iii) delivery in-office (6.1), please provide the total number of tallies that you used to develop the cost estimates shown in the first three cost-estimate rows in Table 2 (Revised 3/1/00).

b. For the total tallies which you provide for each ounce increment in response to preceding part a, please show the total broken down into (i) direct individual piece handling tallies, (ii) direct tallies handling more than one piece of mail (e.g., items or containers), (iii) mixed mail tallies, (iv) handling empty equipment tallies, (v) not handling tallies (break, etc.), and (vi) other (please specify).

RESPONSE:

a. In the attached table(s), the unweighted and dollar weighted IOCS direct tallies for Presort by weight increment are provided. Please note that mixed-mail and not-handling tallies are not uniquely associated with subclasses of mail and/or weight increments; therefore, it is my understanding that it is not possible to provide a meaningful count of tallies at the requested level of detail.

b. In the attached table(s), the direct tallies have been separated into tallies in which the sampled employee was observed handling a single piece of mail and tallies in which the employee was observed handling multiple pieces of mail, item(s), or container(s).

Part a)
BY98 IOCS Direct Tally Record Counts - Clerks and Mailhandlers First-Class Mail Presort
Total Direct Tally Records

Cost Segment	Weight Increment (ounces) 0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	7,229	712	424	160	36	32	11	11	6	10	7	71	8,709
Window Service (3.2)	41	4	0	0	2	0	0	0	0	0	0	3	50
City Carrier In-Office (6.1)	5,775	454	84	41	13	8	6	7	2	2	2	0	6,394

Part b)
BY98 IOCS Direct Tally Counts - Clerks and Mailhandlers First-Class Mail Presort
Direct Tally Record Count, Employee Handling Single Piece of Mail

Cost Segment	Weight Increment (ounces) 0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	5,084	456	191	129	29	29	8	10	5	10	6	0	5,957
Window Service (3.2)	31	4	0	0	2	0	0	0	0	0	0	0	37
City Carrier In-Office (6.1)	4,879	395	75	35	12	8	6	7	1	2	2	0	5,422

Part b)
BY98 IOCS Direct Tally Counts - Clerks and Mailhandlers First-Class Mail, Single-Piece
Direct Tally Record Count, Employee Handling Multiple Pieces of Mail, Item, or Container

Cost Segment	Weight Increment (ounces) 0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	2,145	256	233	31	7	3	3	1	1	0	1	71	2,752
Window Service (3.2)	10	0	0	0	0	0	0	0	0	0	0	3	13
City Carrier In-Office (6.1)	896	59	9	6	1	0	0	0	1	0	0	0	972

Part a)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers First-Class Mail Presort
Total Dollar Weighted Direct Tallies ($000)

	Weight Increment (ounces)												
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	546,075	46,977	17,403	12,611	2,909	2,930	670	740	392	1,132	395	2,073	634,307
Window Service (3.2)	4,283	395	0	0	124	0	0	0	0	0	0	142	4,944
City Carrier In-Office (6.1)	390,610	29,374	5,681	2,657	806	670	339	487	131	123	151	0	431,031

Part b)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers First-Class Mail Presort
Dollar Weighted Direct Tallies ($000), Employee Handling Single Piece of Mail

	Weight Increment (ounces)												
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	400,853	34,989	13,711	10,346	2,365	2,752	495	669	337	1,132	338	0	467,987
Window Service (3.2)	3,567	395	0	0	124	0	0	0	0	0	0	0	4,086
City Carrier In-Office (6.1)	327,689	25,058	5,101	2,300	673	670	339	487	56	123	151	0	362,647

Part b)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers First-Class Mail Presort
Dollar Weighted Direct Tallies ($000), Employee Handling Multiple Pieces of Mail, Item, or Container

	Weight Increment (ounces)												
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - 11	No Wgt	Total
All Mail Processing (3.1)	145,221	11,988	3,693	2,265	544	178	175	71	55	0	57	2,073	166,320
Window Service (3.2)	716	0	0	0	0	0	0	0	0	0	0	142	858
City Carrier In-Office (6.1)	62,921	4,317	581	358	133	0	0	0	75	0	0	0	68,384

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-18. At page 9 (ll. 12-14) of your testimony, you state "Since rural carriers are compensated on the basis of shape and not weight, costs are first distributed to shape and then to weight increment on the basis of pieces."

a. Please provide a detailed explanation of the last step; i.e., the distribution to weight increment on the basis of pieces. In particular, please explain what (piece) data (and from what source) are used to distribute costs to weight increment.

b. Also, please explain how the distribution by pieces distinguishes between the weight-cost relationship and the piece-cost relationship.

RESPONSE:

a. The ratio of volumes by weight increment to the total volume is multiplied by the total rural carrier costs. Volumes by weight increment are found in USPS LR-I-102.

b. Weight is not a driver of rural carrier costs. Rural carriers are compensated based on shape and the number of pieces. To the extent there are proportionately more flats or parcels in heavier weight increments, heavier pieces will have higher unit rural carrier costs.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-19. Please refer to USPS-LR-I-92, Section 1, pages 10 and 12. On each page there appears a scatter diagram with the identical title: "Std. A Regular All Shapes." On page 10, the diagram contains a regression line with the following equation:

$$y = 0.0481x + 0.0312$$

On page 12, the diagram contains a regression line with the following equation:

$$y = 0.0412x + 0.0588$$

a. Please explain the difference between these two regression diagrams and equations with identical titles.
b. In your opinion, which of these two regression equations best represents the weight-cost relationship for Standard A Regular All Shapes?

RESPONSE:

a. The equation on page 10 is the result of a trendline analysis in EXCEL for Standard Mail (A) Regular All Shapes unit costs by ½ ounce increment. The equation on page 12 is the result of a trendline analysis in EXCEL for Standard Mail (A) Regular All Shapes unit costs by combined ounce increment (0-1 oz., 1-2 oz., 2-3 oz., 3-5 oz., 5-7 oz., 7-9 oz., 9-11 oz., 11-13 oz., 13+ oz.).

b. The equation on page 12 is more useful than the one on page 10, because combining ounce increments represents an attempt to give each data point more equal weight. The best equation to represent the weight-cost relationship for Standard Mail (A) Regular All Shapes would be one where each data point was weighted by the volume of mail in each weight increment. Therefore, neither equation cited in this interrogatory was relied upon by the Postal Service.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-20. Please refer to USPS-LR-I-92, Section 1, pages 11 and 12. On each page there appears a scatter diagram with the identical title: "Std. A Regular All Shapes Pound-Rated." On page 11, the diagram contains a regression line with the following equation:

$$y = 0.0628x - 0.133$$

On page 12, the diagram contains a regression line with the following equation:

$$y = 0.0524x - 0.0594$$

a. Please explain the difference between these two regression diagrams and equations with identical titles.

b. In your opinion, which of these two regression equations best represents the weight-cost relationship for Standard A Regular All Shapes Pound-Rated?

RESPONSE:

a. The equation on page 11 is the result of a trendline analysis in EXCEL for data points by detailed ounce increments greater than 3.5 ounces. The equation on page 12 is the result of a trendline analysis in EXCEL for data points greater than 3.0 ounces by combined ounce increment (0-1 oz., 1-2 oz., 2-3 oz., 3-5 oz., 5-7 oz., 7-9 oz., 9-11 oz., 11-13 oz., 13+ oz.).

b. Neither of these two regression equations best represents the weight-cost relationship for Standard A Regular All Shapes Pound-Rated neither of the equations are weighted by volume and because pound-rated mail weighs over 3.3 ounces, not 3.0 or 3.5 ounces.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-21. Please refer to USPS-LR-I-92, Section 2, pages 10 and 12. On these two pages appear three scatter diagrams with no titles. Please indicate the appropriate title for each of these three diagrams.

RESPONSE:

The scatter diagram on page 10 of USPS-LR-I-92, Section 2 graphically represents the TY unit cost of Standard Mail (A) ECR by detailed (1/2 ounce) increments and the resulting non-volume weighted least squares fit linear trendline produced by EXCEL. The top scatter diagram on page 12 of USPS-LR-I-92, Section 2 graphically represents the TY unit cost of Standard Mail (A) ECR by combined weight increments (0-1 oz., 1-2 oz., 2-3 oz., 3-5 oz., 5-7 oz., 7-9 oz., 9-11 oz., 11-13 oz., 13+ oz.) and the resulting non-volume weighted least squares fit linear trendline produced by EXCEL. The bottom scatter diagram on page 12 of USPS-LR-I-92, Section 2 graphically represents the TY unit cost of Standard Mail (A) ECR by combined weight increments and the resulting non-volume weighted least squares fit linear trendline produced by EXCEL for pieces weighing more than 3 ounces. This is a rough approximation of pound-rated mail.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-22. Please refer to USPS-LR-I-92, Section 2, pages 10 and 12. On page 10, the diagram contains a regression line with the following equation:

$$y = 0.0192x + 0.0126$$

On page 12, the first diagram contains a regression line with the following equation:

$$y = 0.0161x + 0.0257$$

a. Please explain the difference between these two regression diagrams and equations. That is, what does each represent?

b. In your opinion, which of these two regression equations best represents the weight-cost relationship for Standard A ECR Mail?

RESPONSE:

a. The equation on page 10 is the result of a trendline analysis in EXCEL for Standard Mail (A) ECR All Shapes unit costs by ½ ounce increment. The equation on page 12 is the result of a trendline analysis in EXCEL for Standard Mail (A) ECR All Shapes unit costs by combined ounce increment (0-1 oz., 1-2 oz., 2-3 oz., 3-5 oz., 5-7 oz., 7-9 oz., 9-11 oz., 11-13 oz., 13+ oz.).

b. The equation on page 12 is more useful than the one on page 10, because combining ounce increments represents an attempt to give each data point more equal weight. The best equation to represent the weight-cost relationship for Standard Mail (A) ECR All Shapes would be one where each data point was weighted by the volume of mail in each weight increment. Therefore, neither equation cited in this interrogatory was relied upon by the Postal Service.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-23. Please refer to USPS-LR-I-92, Section 2, pages 11 and 12. On page 11 there appears a scatter diagram with the title, "Pound Rated Mail," which presumably refers to all Standard A ECR Pound-Rated Mail (since the title of Section 2 is "Standard Mail (A) ECR"). On page 11, the diagram contains a regression line with the following equation:

$$y = 0.0247x - 0.0495$$

On page 12, the second (untitled) diagram contains a regression line with the following equation:

$$y = 0.0214x - 0.0312$$

a. Please explain the difference between these two regression diagrams and equations.

b. In your opinion, which of these two regression equations, if either, best represents the weight-cost relationship for Standard A ECR Pound-Rated Mail?

RESPONSE:

a. The equation on page 11 is the result of a trendline analysis in EXCEL for data points by detailed ounce increments greater than 3.0 ounces. The equation on page 12 is the result of a trendline analysis in EXCEL for data points greater than 3.0 ounces by combined ounce increments (0-1 oz., 1-2 oz., 2-3 oz., 3-5 oz., 5-7 oz., 7-9 oz., 9-11 oz., 11-13 oz., 13+ oz.).

b. If one were to use mail weighing more than 3.0 ounces as a proxy for pound rated mail, the equation on page 12 is more useful than the one on page 10, because combining ounce increments represents an attempt to give each data point more equal weight. The best equation to represent the weight-cost relationship for Standard Mail (A) ECR Pound-Rated Mail would be one for mail weighing more than 3.3 ounces and each data point was weighted by the volume of mail in each weight increment. Thus, neither equation cited in this interrogatory was relied upon by the Postal Service.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-24. Please refer to USPS-LR-I-92, Section 2, page 12, where you have combined and reduced the weight increments for Standard A ECR Mail to a total of nine.

a. For each of the nine weight increments shown on page 12, and for the portion of cost shown in the first three rows consisting of (i) all mail processing, (ii) window service, and (iii) delivery in-office (6.1), please provide the total number of tallies that you used to develop the cost estimates shown in the first three cost-estimate rows.

b. For the total tallies which you provide for each ounce increment in response to preceding part a, please show the total broken down into (i) direct individual piece handling tallies, (ii) direct tallies handling more than one piece of mail (e.g., items or containers), (iii) mixed mail tallies, (iv) handling empty equipment tallies, (v) not handling tallies (break, etc.), and (vi) other (please specify).

RESPONSE:

a. In the attached table(s), the unweighted and dollar weighted IOCS direct tallies for Standard Mail (A) ECR by weight increment are provided. Please note that mixed-mail and not-handling tallies are not uniquely associated with subclasses of mail and/or weight increments; therefore, it is my understanding that it is not possible to provide a meaningful count of tallies at the requested level of detail.

b. In the attached table(s), the direct tallies have been separated into tallies in which the sampled employee was observed handling a single piece of mail and tallies in which the employee was observed handling multiple pieces of mail, item(s), or container(s).

Part a)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers Standard Mail (A) ECR
Total Dollar Weighted Direct Tallies ($000)

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 7	7 - 9	9 - 11	11 - 13	> 13	No Wgt	Total
All Mail Processing (3.1)	59,469	31,962	17,293	29,008	5,554	3,105	1,652	985	2,373	1,610	153,011
Window Service (3.2)	278	48	62	0	0	0	0	0	0	0	388
City Carrier In-Office (6.1)	117,647	46,810	33,878	43,972	10,406	4,204	1,613	1,049	960	0	260,541

Part b)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers Standard Mail (A) ECR
Dollar Weighted Direct Tallies ($000), Employee Handling Single Piece of Mail

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 7	7 - 9	9 - 11	11 - 13	> 13	No Wgt	Total
All Mail Processing (3.1)	30,136	13,279	6,110	11,575	2,146	1,658	762	430	984	0	67,080
Window Service (3.2)	0	48	62	0	0	0	0	0	0	0	109
City Carrier In-Office (6.1)	94,278	36,176	24,915	31,853	7,489	3,274	1,130	771	780	0	200,667

Part b)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers Standard Mail (A) ECR
Dollar Weighted Direct Tallies ($000), Employee Handling Multiple Pieces of Mail, Item, or Container

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 7	7 - 9	9 - 11	11 - 13	> 13	No Wgt	Total
All Mail Processing (3.1)	29,333	18,683	11,183	17,433	3,408	1,446	890	554	1,389	1,610	85,931
Window Service (3.2)	278	0	0	0	0	0	0	0	0	0	278
City Carrier In-Office (6.1)	23,369	10,634	8,963	12,119	2,917	930	483	278	180	0	59,874

Part a)
BY98 IOCS Direct Tally Record Counts - Clerks and Mailhandlers Standard Mail (A) ECR
Total Direct Tally Records

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 7	7 - 9	9 - 11	11 - 13	> 13	No Wgt	Total
All Mail Processing (3.1)	1,248	485	292	654	76	38	20	16	115	36	2,979
Window Service (3.2)	3	1	1	0	0	0	0	0	0	0	5
City Carrier In-Office (6.1	1,744	704	498	629	143	53	24	11	15	0	3,821

Part b)
BY98 IOCS Direct Tally Counts - Clerks and Mailhandlers Standard Mail (A) ECR
Direct Tally Record Count, Employee Handling Single Piece of Mail

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 7	7 - 9	9 - 11	11 - 13	> 13	No Wgt	Total
All Mail Processing (3.1)	396	168	78	135	31	14	9	7	10	0	848
Window Service (3.2)	0	1	1	0	0	0	0	0	0	0	2
City Carrier In-Office (6.1	1,401	554	373	464	101	39	17	7	12	0	2,968

Part b)
BY98 IOCS Direct Tally Counts - Clerks and Mailhandlers Standard Mail (A) ECR
Direct Tally Record Count, Employee Handling Multiple Pieces of Mail, Item, or Container

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 7	7 - 9	9 - 11	11 - 13	> 13	No Wgt	Total
All Mail Processing (3.1)	852	317	214	519	45	24	11	9	105	36	2,131
Window Service (3.2)	3	0	0	0	0	0	0	0	0	0	3
City Carrier In-Office (6.1	343	150	125	165	42	14	7	4	3	0	853

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-25. Please refer to Table 4a at page 19a of your testimony, where you provide the estimated total unit cost for each of nine weight ranges for Regular and Nonprofit Periodicals Combined.

a. For the weight ranges shown in Table 4a, and for the portion of cost shown in the first three rows consisting of (i) all mail processing, (ii) window service, and (iii) delivery in-office (6.1), please provide the total number of tallies that you used to develop the cost estimates shown in the first three cost-estimate rows in Table 4a.

b. For the total tallies which you provide for each individual weight range in response to preceding part a, please show the total broken down into (i) direct individual piece handling tallies, (ii) direct tallies handling more than one piece of mail (e.g., items or containers), (iii) mixed mail tallies, (iv) handling empty equipment tallies, (v) not handling tallies (break, etc.), and (vi) other (please specify).

RESPONSE:

a. In the attached table(s), the unweighted and dollar weighted IOCS direct tallies for Regular and Nonprofit Periodicals Combined by weight increment are provided. Please note that mixed-mail and not-handling tallies are not uniquely associated with subclasses of mail and/or weight increments, therefore it is my understanding that it is not possible to provide a meaningful count of tallies at the requested level of detail.

b. In the attached table(s), the direct tallies have been separated into tallies in which the sampled employee was observed handling a single piece of mail and tallies in which the employee was observed handling multiple pieces of mail, item(s), or container(s).

Part a)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers Periodicals Regular and Nonprofit
Total Dollar Weighted Direct Tallies ($000)

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 6	6-7	7-9	9-13	> 13	No Wgt	Total
All Mail Processing (3.1)	13,555	29,150	31,051	81,881	32,801	22,128	40,538	35,946	46,704	7,778	341,533
Window Service (3.2)	0	374	85	396	62	126	160	126	59	0	1,389
City Carrier In-Office (6.1)	6,609	15,326	12,861	37,750	17,305	14,904	19,702	15,986	12,989	0	153,432

Part b)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers Periodicals Regular and Nonprofit
Dollar Weighted Direct Tallies ($000), Employee Handling Single Piece of Mail

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 6	6-7	7-9	9-13	> 13	No Wgt	Total
All Mail Processing (3.1)	10,073	20,514	21,262	54,020	21,718	14,467	25,192	22,688	25,727	0	215,663
Window Service (3.2)	0	374	85	396	62	126	160	126	59	0	1,389
City Carrier In-Office (6.1)	5,854	12,993	10,981	30,824	13,688	10,763	15,991	12,741	10,740	0	124,575

Part b)
BY98 IOCS Dollar Weighted Direct Tallies (F9250) - Clerks and Mailhandlers Periodicals Regular and Nonprofit
Dollar Weighted Direct Tallies ($000), Employee Handling Multiple Pieces of Mail, Item, or Container

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 6	6-7	7-9	9-13	> 13	No Wgt	Total
All Mail Processing (3.1)	3,482	8,636	9,789	27,861	11,083	7,661	15,347	13,258	20,977	7,778	125,871
Window Service (3.2)	0	0	0	0	0	0	0	0	0	0	0
City Carrier In-Office (6.1)	755	2,333	1,880	6,926	3,617	4,142	3,711	3,245	2,249	0	28,857

Part a)
BY98 IOCS Direct Tally Record Counts - Clerks and Mailhandlers Periodicals Regular and Nonprofit
Total Direct Tally Records

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 6	6-7	7-9	9-13	> 13	No Wgt	Total
All Mail Processing (3.1)	372	934	396	1,453	422	521	528	552	612	340	6,130
Window Service (3.2)	0	2	1	3	1	1	3	2	1	0	14
City Carrier In-Office (6.1	107	232	193	571	249	202	292	244	199	0	2,289

Part b)
BY98 IOCS Direct Tally Counts - Clerks and Mailhandlers Periodicals Regular and Nonprofit
Direct Tally Record Count, Employee Handling Single Piece of Mail

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 6	6-7	7-9	9-13	> 13	No Wgt	Total
All Mail Processing (3.1)	139	264	258	702	265	179	320	292	329	0	2,748
Window Service (3.2)	0	2	1	3	1	1	3	2	1	0	14
City Carrier In-Office (6.1	95	200	164	467	198	148	241	192	169	0	1,874

Part b)
BY98 IOCS Direct Tally Counts - Clerks and Mailhandlers Periodicals Regular and Nonprofit
Direct Tally Record Count, Employee Handling Multiple Pieces of Mail, Item, or Container

	Weight Increment (ounces)										
Cost Segment	0 - 1	1 - 2	2 - 3	3 - 5	5 - 6	6-7	7-9	9-13	> 13	No Wgt	Total
All Mail Processing (3.1)	233	670	138	751	157	342	208	260	283	340	3,382
Window Service (3.2)	0	0	0	0	0	0	0	0	0	0	0
City Carrier In-Office (6.1	12	32	29	104	51	54	51	52	30	0	415

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO
INTERROGATORIES OF VAL-PAK AND CAROL WRIGHT PROMOTIONS

VP/USPS-T28-26. For the studies which you conducted to determine the weight-cost relationship for First-Class, Periodicals and Standard A Mail, as described in your testimony at pages 10-19, please provide the following information:

a. How did you treat "handling empty equipment" tallies? If you treated them differently for the different classes of mail, please specify and explain.

b. How did you treat tallies such as bundle, item, or container, that indicated that the clerk or mailhandler tallied was handling more than one piece of the same class of mail? Please indicate whether you (i) disregarded or omitted such tallies altogether from your analysis, (ii) used the weight of the top piece if such weight was recorded, (iii) prorated the cost associated with the tally over all direct single piece tallies, and/or (iv) did something else (please specify).

c. How did you treat mixed mail tallies in your analysis? Please indicate whether you (i) disregarded or omitted such tallies altogether from your analysis, (ii) used the weight (and subclass) of the top piece if such weight was recorded, (iii) prorated the cost associated with the tally over all direct single piece tallies, and/or (iv) did something else (please specify).

RESPONSE:

a. I use the same treatment of "handling empty equipment" tallies as witnesses Van-Ty-Smith (mail processing and window service) and witness Ramage (city carrier in-office). See USPS-T-28 at pages 5-7. My understanding is that the method for treating these tallies does not vary by subclass of mail.

b. Assuming that by "treat" you mean "identify a weight increment," if the tally is a direct tally (of identical mail or subject to the "top piece rule"), the weight increment is based upon the recorded weight of the piece used by the data collector to respond to IOCS question 23 if such data are available. If there is a subclass but no question 23 weight data, the tally is distributed to weight increment using the procedure described at pages 2-4 of the text accompanying LR-I-99 and at pages 2-3 of LR-I-100. If there is no subclass information (i.e., the tally represents mixed-mail), the tally is distributed to subclass and weight increment using the same mixed-mail methods employed for development of the CRA volume-variable costs. See also USPS-T-28 at pages 5-7.

c. See the response to part (b).

CHAIRMAN GLEIMAN: Is there any other designated written cross examination? Mr. McLaughlin?

Mr. McLAUGHLIN: Mr. Chairman, we would like to, on behalf of ADVO, designate ADVO/USPS T-28-13, and I have already provided two copies of that to the witness. I believe those also have an errata to them.

CHAIRMAN GLEIMAN: Ms. Daniel, with respect to the additional written cross examination from ADVO, have you reviewed the material, and is there a correction, and, if so, could you identify what the correction is?

THE WITNESS: Yes. I would like to change the title on the page 8 of the Attachment. I'd like to change All Shapes to HD/Sat Flats.

CHAIRMAN GLEIMAN: Mr. Reporter, did you get it?

[Court Reporter confers with witness.]

CHAIRMAN GLEIMAN: Okay, any other changes?

THE WITNESS: No, sir.

CHAIRMAN GLEIMAN: That being the case, counsel, if you haven't already done so, if you could provide two copies to the Reporter, and I'll directed that the corrected additional designated written cross examination of the witness be received into evidence and transcribed into the record, thank you.

[Additional Designated Written Cross Examination of Sharon Daniel,

ADVO T-28-13, was received into evidence and transcribed into the record.]

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T28-13. Please provide the data in LR-92, Section 2, pages 14-15 (ECR letters) and 17-18 (ECR flats), disaggregated by density level for (i) basic and (ii) high-density/saturation mail.

RESPONSE:
Please see attachment.

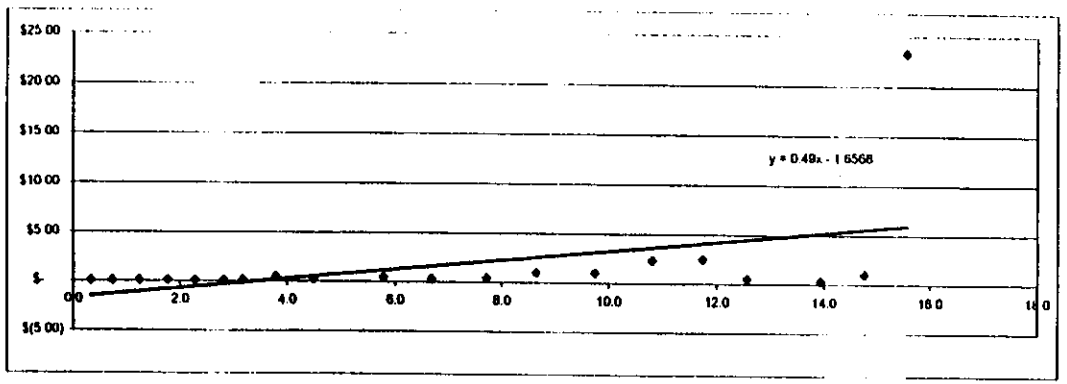
Std. A ECR Basic Letters Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments

	0 to .5	.5 to 1.0	1.0 to 1.5	1.5 to 2	2 to 2.5	2.5 to 3	3 to 3.5	3.5 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9
lume	4,812,962,948	3,013,738,003	877,412,377	342,515,856	280,383,097	287,519,057	108,704,250	7,722,794	4,654,331	2,251,138	1,656,741	214,988	50,042
ounds	99,499,483	137,268,033	67,545,696	37,883,721	39,985,119	50,614,100	21,532,956	1,826,875	1,305,531	813,994	691,601	103,668	27,023
bic feel (weight/density)	3,501,037	4,829,980	2,376,696	1,332,995	1,406,936	1,780,932	757,669	64,281	45,937	28,642	24,342	3,648	951
lal mp (3.1) tally	62,366	72,064	24,077	8,511	7,268	6,256	4,856	1,843	329	329	301	52	40
ndow service (3.2) tally	2,140	1,356	328	130	105	107	41	6	2	1	1	0	0
elivery in-office (6.1) tally	63,896	48,215	9,363	5,788	4,404	4,101	1,837	999	170	301	0	0	0
elivery in-office (6.2) 6.1	12,805	9,662	1,876	1,160	883	822	368	200	34	60	0	0	0
l route (7.1) piece	7,470	4,677	1,362	532	435	446	169	12	7	3	3	0	0
l access (7.2) piece	7,004	4,386	1,277	498	408	418	158	11	7	3	2	0	0
lem load (7.3)shape&wt	27,327	37,699	18,551	10,404	10,982	13,901	5,914	502	359	224	190	28	7
el support (7.4) sum6&7	19,238	17,287	5,561	3,135	2,954	3,434	1,470	277	99	97	35	5	1
ehicle service (8) cube	1,159	1,599	787	441	466	590	251	21	15	9	8	1	0
elivery rural (10)shape&pc	66,733	41,786	12,165	4,749	3,868	3,986	1,507	107	65	31	23	3	1
ir/water trans. (14) weight	29	40	20	11	12	15	6	1	0	0	0	0	0
wy/rail trans. (14)cube	940	1,297	638	358	378	478	204	17	12	8	7	1	0
)ther weight	627	865	426	239	252	319	136	12	8	5	4	1	0
otal Cost	271,732	240,935	76,431	35,956	32,433	34,874	16,917	4,008	1,107	1,072	574	92	50
otal Unit Cost	$ 0.056	$ 0.080	$ 0.087	$ 0.105	$ 0.116	$ 0.121	$ 0.156	$ 0.519	$ 0.238	$ 0.476	$ 0.346	$ 0.430	$ 1.000
inal Cost Difference		$ 0.023	$ 0.007	$ 0.018	$ 0.011	$ 0.006	$ 0.034	$ 0.363	$ (0.281)	$ 0.238	$ (0.130)	$ 0.084	$ 0.570

unit cost < 3.0 ounces	$ 0.0720	unit cost < 3.5 ounces	$ 0.0729
unit cost > 3.0 ounces	$ 0.1922	unit cost > 3.5 ounces	$ 0.4302

d to volumes/pounds
d to tally analysis
ulations
dist key/density
k

USPS LR-I-102
nsity (ft³/lb)* Weight
SPS LR-I-94
SPS LR-I-99
SPS LR-I-100
5]by oz/[6]total*[7]total
=[1]by oz/[1]total*[6&9]total
3 [10&13]total*distribution key*[2]by oz/[2]total
SUM([6] [10]by oz)/SUM([6] [10]total)*[11]total
5. =[3]by oz/[3]total*[12&15]total
6: =[2]by oz/[2]total*[14&16]total
SUM([4]:[16])
17]/[1]*1000



	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16+	Total	Unit Cost (cents)	Dist. Key/ density
olume	76,797	29,241	3,686	26,406	17,462	15,182	4,271	9,739,958,667		
ounds	46,767	19,732	2,704	20,735	15,211	14,013	4,154	459,221,315		
ubic feet (weight/density)	1,646	694	95	730	535	493	146	16,158,385		28.42 USPS-LR-MCR-13 Supplement
tal mp (3.1) tally	60	62	8	6	0	10	98	188,535	1.936	Tally
ndow service (3.2) tally	0	0	0	0	0	0	0	4,215	0.043	Tally
elivery in-office (6.1) tally	0	0	0	0	0	0	0	139,076	1.428	Tally
elivery in-office (6.2) 6.1	0	0	0	0	0	0	0	27,871	0.286	6.1
el. route (7.1) piece	0	0	0	0	0	0	0	15,116	0.155	4/volume
el. access (7.2) piece	0	0	0	0	0	0	0	14,174	0.146	5/volume
elem. load (7.3)shape&wt	13	5	1	6	4	4	1	126,121	1.295	23.21%
del. support (7.4) sum6&7	2	1	0	1	1	1	0	53,600	0.550	6.1 - 7.3
vehicle service (8) cube	1	0	0	0	0	0	0	5,350	0.055	cube
delivery rural (10)shape&pc	1	0	0	0	0	0	0	135,046	1.387	30.00%
air/water trans. (14) weight	0	0	0	0	0	0	0	133	0.001	weight
hwy/rail trans. (14)cube	0	0	0	0	0	0	0	4,340	0.045	cube
Other weight	0	0	0	0	0	0	0	2,895	0.030	weight
Total Cost	78	69	9	14	6	15	99	716,472	7.356	
Total Unit Cost	$ 1.014	$ 2.362	$ 2.500	$ 0.524	$ 0.325	$ 1.008	$ 23.277	$ 0.074		
ginal Cost Difference	$ 0.015	$ 1.348	$ 0.138	$ (1.976)	$ (0.199)	$ 0.683	$ 22.269			

unit cost < 3.0 ounces
unit cost > 3.0 ounces

ed to volumes/pounds
ed to tally analysis
ulations
l dist. key/density
ck

USPS LR-I-102
ensity (ft³/lb)' Weight
ISPS LR-I-94
ISPS LR-I-99
ISPS LR-I-100
|6]by oz/[6]total'|7|total
=[1]by oz/[1|total'[8&9|total
13: |10&13|total'distribution
=SUM([6]:[10]by oz)/SUM([6
15: =|3]by oz/|3]total'|12&15
16: =|2]by oz/|2]total'|14&16
=SUM([4]:[16])
|17)/[1]'1000

Std. A ECR HD-Sat Letters Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments

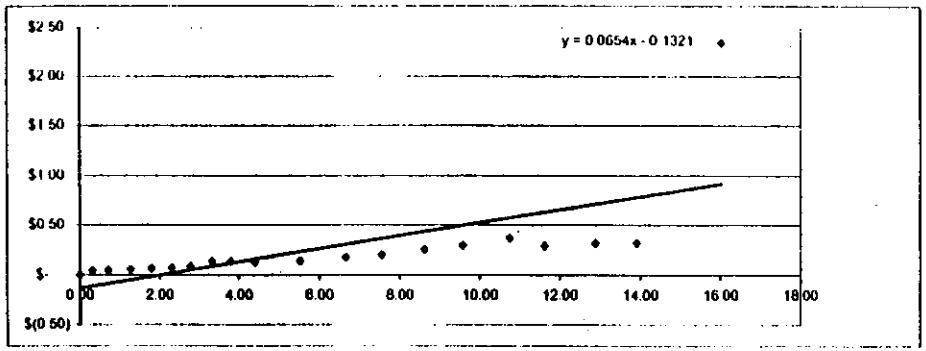
	0 to 5	5 to 1 0	1 0 to 1 5	1 5 to 2	2 to 2 5	2 5 to 3	3 to 3 5	3 5 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10
{1}volume	1,189,774,919	1,015,230,568	330,648,635	294,569,750	311,704,179	155,119,271	41,200,045	35,837,586	10,654,919	1,689,035	574,979	480,307	128,723	125,564
{2}pounds	22,719,013	44,694,110	26,027,648	32,903,686	44,813,276	26,809,054	8,537,968	8,483,092	2,932,989	583,811	239,563	226,455	69,279	75,135
{3}cubic feet (weight/density	709,402	1,572,629	915,822	1,157,765	1,576,822	943,316	300,421	298,490	103,202	20,542	8,430	7,968	2,438	2,644
{4}total mp (3 1) tally	4,037	9,175	2,871	848	1,055	486	1,444	162	9	2	8	8	6	9
{5}window service (3 2) tally	444	379	123	110	116	58	15	13	4	1	0	0	0	0
{6}delivery in-office (6 1) tally	16,322	5,535	1,598	2,183	808	1,072	399	760	84	0	0	0	0	0
{7}delivery in-office (6 2) 6 1	3,271	1,109	320	437	162	215	80	152	17	0	0	0	0	0
{8}del route (7 1) piece	1,847	1,576	513	457	484	241	64	56	17	3	1	1	0	0
{9}del access (7 2) piece	1,731	1,477	481	429	454	226	60	52	16	2	1	1	0	0
{10}elem load (7 3)shape&w	6,240	12,275	7,148	9,037	12,308	7,363	2,345	2,330	806	160	66	62	19	21
{11}del support (7 4) sum6&	4,758	3,797	1,773	2,203	2,558	1,620	522	582	168	30	12	12	4	4
{12}vehicle service (8) cube	265	621	303	383	522	312	99	99	34	7	3	3	1	1
{13}delivery rural (10)shape8	11,540	9,847	3,207	2,857	3,023	1,505	400	348	103	16	6	5	1	1
{14}air/water trans (14) weig	7	13	8	10	13	8	2	2	1	0	0	0	0	0
{15}hwy/rail trans (14)cube	215	422	246	311	424	253	81	80	28	6	2	2	1	1
{16}Other weight	143	282	164	207	283	169	54	53	18	4	2	1	0	0
{17}Total Cost	50,819	46,408	18,756	19,473	22,208	13,527	5,566	4,689	1,304	231	100	95	32	37
{18}Total Unit Cost	$ 0 043	$ 0 046	$ 0 057	$ 0 066	$ 0 071	$ 0 087	$ 0 135	$ 0 131	$ 0 122	$ 0 137	$ 0 174	$ 0 197	$ 0 252	$ 0 293
Marginal Cost Difference		$ 0 003	$ 0 011	$ 0 009	$ 0 005	$ 0 016	$ 0 048	$ (0 004)	$ (0 008)	$ 0 014	$ 0 037	$ 0 023	$ 0 055	$ 0 042

unit cost < 3 0 ounces $ 0 0519
unit cost > 3 0 ounces $ 0 1337

unit cost < 3 5 ounces $ 0 0529
unit cost > 3 5 ounces $ 0.1325

Linked to volumes/pounds
Linked to tally analysis
calculations
input dist key/density
check

1-2 USPS LR-I-102
3 density (ft³/lb)* Weight
4 USPS LR-I-94
5 USPS LR-I-99
6 USPS LR-I-100
7 =[6]by oz/[6]total*[7]total
8&9 =[1]by oz/[1]total*8&9[total
10&13. [10&13]total*distribution key*[2]by oz/[2]total
11. =SUM([6]:[10]by oz)/SUM([6]:[10]total)*[11]total
12&15. =[3]by oz/[3]total*[12&15]total
14&16. =[2]by oz/[2]total*[14&16]total
17. =SUM([4]:[16])
18. [17]/[1]*1000



	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16+	Total	Unit Cost (cents)	Dist Key/ density	
[1]volume	90,503	53,812	66,382	45,882	0	6,981	3,388,002,941			
[2]pounds	60,771	39,090	53,472	39,905	0	6,992	219,315,328			
[3]cubic feet (weight/density	2,138	1,375	1,881	1,404	0	246	7,716,938			
							23,875,322		28 42 USPS-LR-MCR-13 Supplement	
[4]total mp (3 1) tally	11	1	1	0	2	14	20,150	0 595	Tally	208,686
[5]window service (3 2) tally	0	0	0	0	0	0	1,265	0 037	Tally	5,480
[6]delivery in-office (6 1) tally	0	0	0	0	0	0	28,761	0 849	Tally	167,837
[7]delivery in-office (6 2) 6 1	0	0	0	0	0	0	5,764	0 170	6 1	33,635
[8]del route (7 1) piece	0	0	0	0	0	0	5,258	0 155	Volume	20,374
[9]del access (7 2) piece	0	0	0	0	0	0	4,930	0 146	Volume	19,104
[10]elem load (7 3)shape&w	17	11	15	11	0	2	60,233	1 778	11 09%	186,354
[11]del support (7 4) sum6&	3	2	3	2	0	0	18,052	0 533	6 1 - 7.3	71,652
[12]vehicle service (8) cube	1	0	1	0	0	0	2,555	0 075	cube	7,905
[13]delivery rural (10)shape&	1	1	1	0	0	0	32,861	0 970	7 30%	167,907
[14]air/water trans. (14) weig	0	0	0	0	0	0	64	0 002	weight	197
[15]hwy/rail trans (14)cube	1	0	1	0	0	0	2,073	0 061	cube	6,413
[16]Other weight	0	0	0	0	0	0	1,383	0 041	weight	4,278
[17]Total Cost	33	16	21	15	2	16	183,348	5 412		899,820
[18]Total Unit Cost	$ 0 367	$ 0 290	$ 0 318	$ 0 320	#DIV/0!	$ 2.346	$ 0 054			
Marginal Cost Difference	$ 0 074	$ (0 077)	$ 0 028	$ 0 002	#DIV/0!	#DIV/0!				

unit cost < 3 0 ounces
unit cost > 3 0 ounces

Linked to volumes/pounds
Linked to tally analysis
calculations
input dist key/dunsity
check

1 2 USPS LR-I-102
3 density (ft³/lb)' Weight
4 USPS LR-I 04
5 USPS LR-I-00
6 USPS LR-I-100
7 =[6]by oz/[6]otal*[7]otal
8&9 =[1]by oz/[1]otal'[8&9]t
10&13 [10&13]otal*distribut
11 =SUM([6]:[10]by oz)/SUM
12&15 =[3]by oz/[3]otal*[12
14&16 =[2]by oz/[2]otal*[14
17 =SUM([4]:[16])
18 [17]/[1]*1000

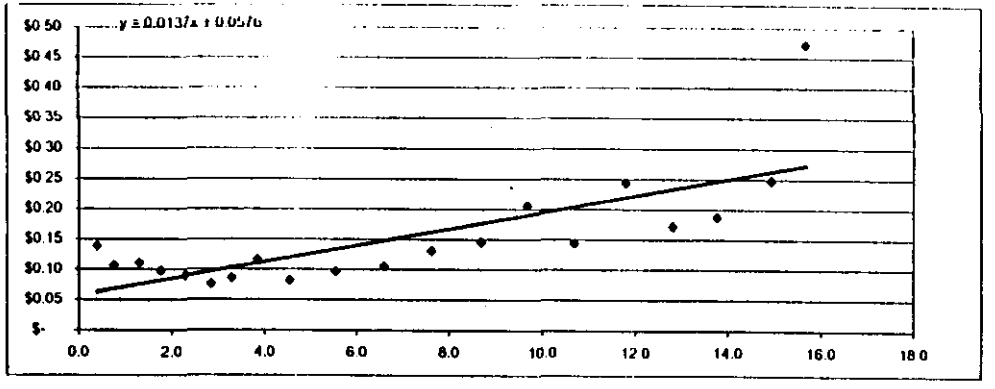
Std. A ECR Basic Flats Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments

	0 to .5	.5 to 1.0	1.0 to 1.5	1.5 to 2	2 to 2.5	2.5 to 3	3 to 3.5	3.5 to 4	4 to 5	5 to 6	6 to 7	7 to 8
[1]volume	261,831,375	794,436,068	776,389,514	906,794,126	902,615,206	1,358,871,762	1,355,641,698	1,032,574,627	1,739,488,568	770,518,705	432,474,833	231,969,483
[2]pounds	7,101,100	38,054,900	63,608,413	100,669,632	129,828,978	241,735,757	279,500,434	248,131,026	494,227,266	266,767,543	178,213,596	110,538,609
[3]cubic feet (weight/density)	343,879	1,842,852	3,080,311	4,875,043	6,287,118	11,706,332	13,535,130	12,016,030	23,933,524	12,918,525	8,630,198	5,352,959
[4]total mp (3.1) tally	13,137	21,678	26,722	21,732	18,108	18,206	23,571	31,192	16,087	9,241	5,726	6,374
[5]window service (3.2) tally	98	278	362	317	315	593	474	362	608	269	151	81
[6]delivery in-office (6.1) tally	13,422	28,529	23,505	23,597	17,925	15,664	17,876	24,032	16,063	9,654	5,031	3,278
[7]delivery in-office (6.2) 6.1	2,690	5,717	4,710	4,729	3,592	3,139	3,582	4,816	3,219	1,935	1,008	657
[8]del. route (7.1) piece	437	1,233	1,205	1,407	1,401	2,109	2,104	1,603	2,700	1,196	671	360
[9]del. access (7.2) piece	410	1,156	1,130	1,320	1,313	1,977	1,973	1,503	2,531	1,121	629	338
[10]elem. load (7.3)shape&wt	552	2,958	4,943	7,824	10,090	18,787	21,722	19,284	38,410	20,732	13,850	8,591
[11]del. support (7.4) sum6&7	2,698	6,166	5,603	6,215	5,593	7,014	7,949	8,449	10,867	5,952	3,673	2,287
[12]vehicle service (8) cube	114	610	1,020	1,614	2,082	3,876	4,481	3,978	7,924	4,277	2,857	1,772
[13]delivery rural (10)shape&t	5,559	15,671	15,315	17,888	17,805	26,805	26,742	20,369	34,314	15,199	8,531	4,576
[14]air/water trans. (14) weigh	2	11	18	29	38	70	81	72	143	77	52	32
[15]hwy/rail trans. (14)cube	92	495	827	1,309	1,689	3,144	3,635	3,227	6,428	3,470	2,318	1,438
[16]Other weight	45	240	401	635	819	1,524	1,762	1,564	3,116	1,682	1,124	697
[17]Total Cost	39,257	84,741	85,762	88,616	80,769	102,909	115,954	120,451	142,410	74,806	45,622	30,481
[18]Total Unit Cost	$ 0.139	$ 0.107	$ 0.110	$ 0.098	$ 0.089	$ 0.076	$ 0.086	$ 0.117	$ 0.082	$ 0.097	$ 0.105	$ 0.131
Marginal Cost Difference		$ (0.033)	$ 0.004	$ (0.013)	$ (0.008)	$ (0.014)	$ 0.010	$ 0.031	$ (0.035)	$ 0.015	$ 0.008	$ 0.026

unit cost < 3.0 ounces	$ 0.0960	unit cost < 3.5 ounces	$ 0.0938
unit cost > 3.0 ounces	$ 0.1007	unit cost > 3.5 ounces	$ 0.1051

Linked to volumes/pounds
Linked to tally analysis
calculations
input dist. key/density
check

1-2 USPS LR-I-102
3 density (ft³/lb)* Weight
4 USPS LR-I-94
5 USPS LR-I-99
6 USPS LR-I-100
7 =[6]by oz/[6]total*[7]total
8&9: =[1]by oz/[1]total*[8&9]total
10&13: [10&13]total*distribution key*[2]by oz/[2]total
11: =SUM([6]:[10]by oz)/SUM([6]:[10]total)*[11]total
12&15: =[3]by oz/[3]total*[12&15]total
14&16: =[2]by oz/[2]total*[14&16]total
17 =SUM([4]:[16])
18: [17]/[1]*1000



	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16+	Total	Unit Cost (cents)	Dist Key/ density
[1]volume	140,449,769	60,192,554	62,458,797	27,250,171	28,674,901	22,945,456	16,022,185	11,998,586	10,953,598,385		
[2]pounds	76,294,092	36,418,414	41,683,572	20,083,072	22,942,317	19,741,455	14,941,871	11,758,266	2,402,240,313		
[3]cubic feet (weight/density)	3,694,629	1,763,604	2,018,575	972,546	1,111,008	956,003	723,577	569,408	116,331,250		20 65
[4]total mp (3.1) tally	3,077	3,822	1,660	1,817	737	111	1,101	3,537	227,636	2.078	Tally
[5]window service (3.2) tally	49	21	22	10	10	8	6	4	4,038	0.037	Tally
[6]delivery in-office (6.1) tally	3,200	1,813	413	1,171	436	820	424	253	207,106	1.891	Tally
[7]delivery in-office (6.2) 6.1	641	363	83	235	87	164	85	51	41,504	0.379	6 1
[8]del. route (7.1) piece	218	93	97	42	45	36	25	19	17,000	0.155	Volume
[9]del. access (7.2) piece	204	88	91	40	42	33	23	17	15,940	0.146	Volume
[10]elem. load (7.3)shape&wt	5,929	2,830	3,240	1,561	1,783	1,534	1,161	914	186,695	1.704	34 36%
[11]del. support (7.4) sum6&7	1,739	878	699	512	420	441	297	219	77,671	0.709	6 1 - 7 3
[12]vehicle service (8) cube	1,223	584	668	322	368	317	240	189	38,515	0.352	cube
[13]delivery rural (10)shape&]	2,771	1,187	1,232	538	566	453	316	237	216,074	1.973	48 00%
[14]air/water trans. (14) weigh	22	11	12	6	7	6	4	3	697	0.006	weight
[15]hwy/rail trans. (14)cube	992	474	542	261	298	257	194	153	31,246	0.285	cube
[16]Other weight	481	230	263	127	145	124	94	74	15,146	0.138	weight
[17]Total Cost	20,546	12,395	9,022	6,640	4,942	4,304	3,970	5,670	1,079,267	9.853	
[18]Total Unit Cost	$ 0.146	$ 0.206	$ 0.144	$ 0.244	$ 0.172	$ 0.188	$ 0.248	$ 0.473	$ 0.099		
Marginal Cost Difference	$ 0.015	$ 0.060	$ (0.061)	$ 0.099	$ (0.071)	$ 0.015	$ 0.060	$ 0.225			

unit cost < 3.0 ounces
unit cost > 3.0 ounces

Linked to volumes/pounds
Linked to tally analysis
calculations
input dist key/density
check

1-2 USPS LR-I-102
3 density (ft³/lb)* Weight
4. USPS LR-I-94
5 USPS LR-I-99
6. USPS LR-I-100
7. =[6]by oz/[6]total*[7]total
8&9 =[1]by oz/[1]total*[8&9]to
10&13: [10&13]total*distributic
11. =SUM([6] [10]by oz)/SUM(
12&15. =[3]by oz/[3]total*[12&
14&16. =[2]by oz/[2]total*[14&
17 =SUM([4] [16])
18. [17]/[1]*1000

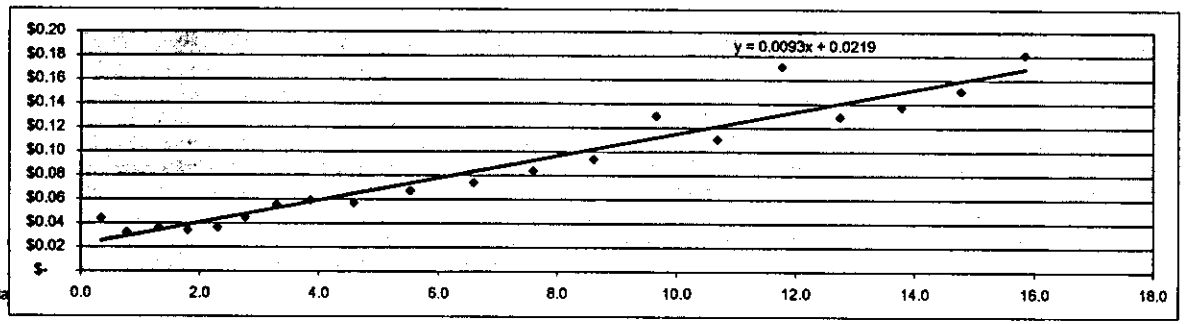
Std. A ECR HD-Sat Flats Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments

	0 to .5	5 to 1.0	1.0 to 1.5	1.5 to 2	2 to 2.5	2.5 to 3	3 to 3.5	3.5 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9
[1]volume	283,123,478	743,713,655	802,841,764	1,344,441,430	2,050,654,709	1,157,115,210	355,621,432	470,694,844	1,219,703,944	566,554,283	264,348,317	138,631,018	60,278,983
[2]pounds	6,015,953	35,410,643	65,340,381	150,581,250	294,440,252	199,908,350	73,150,004	113,485,797	349,679,716	195,499,614	108,978,034	65,749,495	32,457,108
[3]cubic feet (weight/density)	291,329	1,714,801	3,164,183	7,292,070	14,258,608	9,680,792	3,542,373	5,495,680	16,933,642	9,467,294	5,277,387	3,183,995	1,571,773
[4]total mp (3.1) tally	2,265	3,163	4,055	2,839	1,682	2,069	1,522	713	1,006	837	236	12	13
[5]window service (3.2) tally	99	260	280	470	716	404	124	164	426	198	92	48	21
[6]delivery in-office (6.1) tally	4,466	5,354	4,668	4,463	4,965	5,636	2,558	3,792	2,571	1,607	295	333	152
[7]delivery in-office (6.2) 6.1	895	1,073	935	894	995	1,129	513	760	515	322	59	67	31
[8]del. route (7.1) piece	439	1,154	1,246	2,087	3,183	1,796	552	731	1,893	879	410	215	94
[9]del. access (7.2) piece	412	1,062	1,168	1,956	2,984	1,684	518	685	1,775	824	385	202	88
[10]elem. load (7.3)shape&wt	566	3,333	6,150	14,172	27,712	18,815	6,885	10,681	32,911	18,400	10,257	6,188	3,055
[11]del. support (7.4) sum6&7	1,071	1,988	2,408	4,128	7,070	5,084	1,913	2,892	7,126	3,952	2,065	1,263	617
[12]vehicle service (8) cube	96	568	1,048	2,414	4,721	3,205	1,173	1,820	5,606	3,134	1,747	1,054	520
[13]delivery rural (10)shape&pc	1,972	5,180	5,591	9,363	14,282	8,059	2,477	3,278	8,495	3,946	1,841	965	420
[14]air/water trans. (14) weight	2	10	19	44	85	58	21	33	101	57	32	19	9
[15]hwy/rail trans. (14)cube	78	461	850	1,959	3,830	2,600	951	1,476	4,548	2,543	1,417	855	422
[16]Other weight	38	223	412	949	1,856	1,260	461	715	2,205	1,233	687	415	205
[17]Total Cost	12,400	23,849	28,832	45,739	74,081	51,799	19,667	27,740	69,179	37,931	19,524	11,636	5,646
[18]Total Unit Cost	$ 0.044	$ 0.032	$ 0.036	$ 0.034	$ 0.036	$ 0.045	$ 0.055	$ 0.059	$ 0.057	$ 0.067	$ 0.074	$ 0.084	$ 0.094
Marginal Cost Difference		$ (0.012)	$ 0.004	$ (0.002)	$ 0.002	$ 0.009	$ 0.011	$ 0.004	$ (0.002)	$ 0.010	$ 0.007	$ 0.010	$ 0.010

unit cost < 3.0 ounces $ 0.0371
unit cost > 3.0 ounces $ 0.0632
unit cost < 3.5 ounces $ 0.0381
unit cost > 3.5 ounces $ 0.0642

Linked to volumes/pounds
Linked to tally analysis calculations
C/S&C data (USPS-T-14)
piggys (USPS-T-21 Attach 11)
check

1-2: USPS LR-I-102
3: density (ft^3/lb)* Weight
4: USPS LR-I-94
5: USPS LR-I-99
6: USPS LR-I-100
7: =[6]by oz/[6]total*[7]total
8&9: =[1]by oz/[1]total*[8&9]total
10&13: sum of shapes
11: =SUM([6]:[10]by oz)/SUM([6]:[10]tota
12&15: =[3]by oz/[3]total*[12&15]total
14&16: =[2]by oz/[2]total*[14&16]total



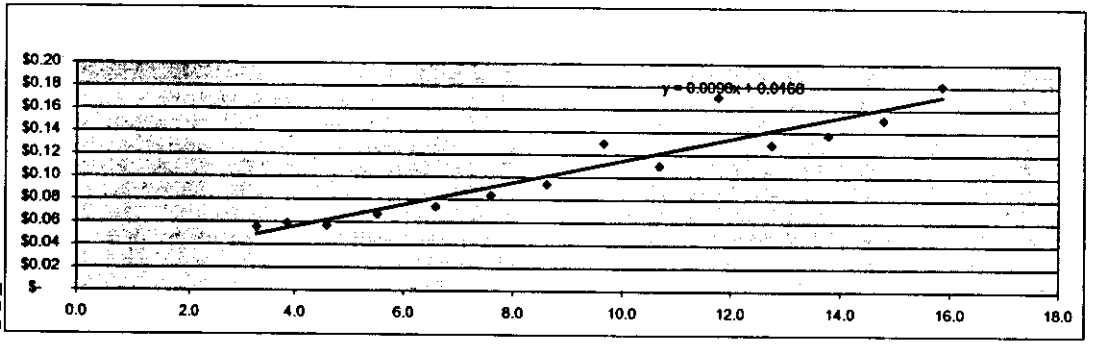
Std. A ECR ~~All Shapes~~ HD-S&T FlaTS Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments (continued)

	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16+	Total	Unit Cost (cents)	Dist. Key/ density
[1]volume	17,961,674	11,692,878	6,398,757	3,311,646	2,292,320	1,099,502	999,600	9,501,479,446		
[2]pounds	10,837,820	7,800,955	4,702,453	2,637,858	1,973,974	1,015,593	989,710	1,720,654,959		
[3]cubic feet (weight/density)	524,834	377,770	227,722	127,741	95,592	49,181	47,928	83,324,695		20.65
[4]total mp (3.1) tally	15	14	332	4	0	5	25	20,806	0.22	Tally
[5]window service (3.2) tally	6	4	2	1	1	0	0	3,319	0.03	Tally
[6]delivery in-office (6.1) tally	381	0	0	0	0	0	0	41,243	0.43	Tally
[7]delivery in-office (6.2) 6.1	76	0	0	0	0	0	0	8,265	0.09	6.1
[8]del. route (7.1) piece	28	18	10	5	4	2	2	14,746	0.16	Volume
[9]del. access (7.2) piece	26	17	9	5	3	2	1	13,827	0.15	Volume
[10]elem. load (7.3)shape&wt	1,020	734	443	248	186	96	93	161,944	1.70	29.81%
[11]del. support (7.4) sum6&7	265	140	84	47	35	18	18	42,183	0.44	6.1 - 7.3
[12]vehicle service (8) cube	174	125	75	42	32	16	16	27,587	0.29	cube
[13]delivery rural (10)shape&pc	125	81	45	23	16	8	7	66,173	0.70	14.70%
[14]air/water trans. (14) weight	3	2	1	1	1	0	0	499	0.01	weight
[15]hwy/rail trans. (14)cube	141	101	61	34	26	13	13	22,380	0.24	cube
[16]Other weight	68	49	30	17	12	6	6	10,848	0.11	weight
[17]Total Cost	2,329	1,287	1,093	427	315	166	181	433,820	4.57	
[18]Total Unit Cost	$ 0.130	$ 0.110	$ 0.171	$ 0.129	$ 0.137	$ 0.151	$ 0.181	$ 0.046		
Marginal Cost Difference	$ 0.036	$ (0.020)	$ 0.061	$ (0.042)	$ 0.008	$ 0.014	$ 0.030			

unit cost < 3.0 ounces
unit cost > 3.0 ounces

Linked to volumes/pounds
Linked to tally analysis
calculations
C/S&C data (USPS-T-14)
piggys (USPS-T-21 Attach 11)
check

1-2: USPS LR-I-102
3: density (ft³/lb)* Weight
4: USPS LR-I-94
5: USPS LR-I-99
6: USPS LR-I-100
7: =[6]by oz/[6]total*[7]total
8&9: =[1]by oz/[1]total*[8&9]total
10&13: sum of shapes
11: =SUM([6]:[10]by oz)/SUM([6]:
12&15: =[3]by oz/[3]total*[12&15]t
14&16: =[2]by oz/[2]total*[14&16]t



CHAIRMAN GLEIMAN: Mr. Hall?

MR. HALL: Thank you, Chairman Gleiman. I have tried to use the available time during the fire drill to isolate only the additional items that I need to have designated, but just to be sure that I'm correct, let me go ahead and indicate all of the items, and then I'll tell you which ones.

CHAIRMAN GLEIMAN: Two questions: The first is, when you made reference to a fire drill, you weren't talking about rate case proceedings, of course.

[Laughter.]

MR. HALL: Of course not.

CHAIRMAN GLEIMAN: And the second question is, could you please identify who you are representing, since it's your first time today, and the Reporter would need to know that.

MR. HALL: Yes, Michael W. Hall, on behalf of Major Mailers Association.

CHAIRMAN GLEIMAN: Please proceed.

MR. HALL: Yes, the additional interrogatory answers that we would like to designate as written cross examination are ABA and NAPM/USPS-T28-14, 15, 29, and 30.

And based upon my review of the Commission's list of designations by Major Mailers and other parties, I believe that leaves only Item No. 14 that isn't already

covered by other parties' designations.

In addition, for MMA, I have MMA/USPS-T28-14, 16, 17, 18, and 19, all of which were received after we had made our original designations.

And based upon my review, again, of the Commission's list of designations, I believe all that we need to add are Numbers 14 and 19.

I have two copies of each of those documents for the Reporter.

CHAIRMAN GLEIMAN: Mr. Hall, if you could please show them first to the witness?

MR. HALL: I'd be happy to.

CHAIRMAN GLEIMAN: Do I understand correctly that we're talking about three interrogatories, ABP and NAM-14 and MMA-14 and 19?

MR. HALL: That's correct.

THE WITNESS: My records show they were designated by MOAA, if someone would like to check.

[Pause.]

CHAIRMAN GLEIMAN: We can just go off the record for a moment here for a second so we can check.

[Recess.]

CHAIRMAN GLEIMAN: Mr. Hall, Ms. Daniel, have you sorted these out?

THE WITNESS: Yes.

CHAIRMAN GLEIMAN: We are still working with those three.

Ms. Daniel, you have review the three additional interrogatories in question?

THE WITNESS: Yes, I have.

CHAIRMAN GLEIMAN: And if those questions were asked today, your answers would be the same?

THE WITNESS: Yes, they would.

CHAIRMAN GLEIMAN: Thank you. Mr. Hall has provided two copies of the additional cross-examination to the court reporter and I will direct that that material be entered into evidence and transcribed into the record at this point.

[Additional Designation of Written Cross-Examination of Sharon Daniel, ABA & NAPM/USPS-T28-14, MMA/USPS-T28-14, and MMA/USPS-T28-19 were received into evidence and transcribed into the record.]

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF AMERICAN BANKERS ASSOCIATION AND NATIONAL ASSOCIATION OF PRESORT MAILERS

ABA&NAPM/USPS-T28-14. In his testimony, USPS witness Miller reduces mail processing costs by eliminating from the R97-1 procedure certain cost pools which he claims are not worksharing related. In his "First - Class Letters Summary" table (See Miller's Appendix I at page I-I), this procedure appears as column (2), "Mail Proc Work-Sharing Related Unit Cost". He then labels column (3) Delivery Work-Sharing Related Unit Cost.

a. In your estimation of delivery costs in R2000-1, have you adjusted R97-1 USPS witness Hume's delivery cost methodology by eliminating any cost pools from CRA cost segments 6, 7 and 10 which he included in R97-1?

b. Is witness Miller's terminology from his column (3) label something which he has concluded independent from your work, namely that all your reported unit delivery costs are worksharing related?

c. Please confirm that in your view all the delivery unit costs you report are "work-sharing related".

RESPONSE:

a. There are no "cost pools" in delivery.

b. First, the question incorrectly concludes that all of my reported unit delivery costs are workingsharing related. In fact, only cost segments 6.1, 6.2, a portion of 7.4 and 10 are affected by worksharing. All other city carrier street costs (cost segments 7.1, 7.2, and 7.3) have been added on a constant, per-piece basis which does not affect differentials. Witness Miller's column 3 is based on the output of USPS LR-I-95, which is summarized in Table 5 of my testimony. Delivery unit cost differentials for letters (and separately for cards) in each subclass presented in witness Miller's column (3) are due to the percentages of pieces which have been delivery point sequenced (DPSed), which vary by rate category. These percentages are calculated by witness Miller using his mailflow models which he also uses to measure worksharing-related savings. The percent of pieces which are DPSed is affected by presorting and prebarcoding.

c. Not confirmed. See response to subpart (b).

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF MAJOR MAILERS ASSOCIATION

MMA/USPS-T28-14. Please refer to your responses to MMA/USPS-T28-9-12. In those responses you discuss the impact of factors other than weight that affect your derived unit costs by weight increment for First-Class Single Piece, Presorted, and Standard Mail (A) letters. Specifically, you state that "[t]he cost study reflects all the characteristics associated with the average piece in each weight increment", and that your studies do not provide the "specific impact of weight on costs" but rather provide a "general indication of the effect weight has on total volume variable costs". You further note that "[C]ost-causative attributes other than weight that may be different in each ounce weight increment (up to 3 ounces) include at least all the factors listed in subpart (a)" of MMA/USPS/T29-11.

(a) Please confirm that as part of your analysis, some of the costs, specifically those reflecting elementary load, air/water transportation, and "other weight", were directly distributed to weight increments on the basis of weight. If you cannot confirm, please explain how such costs were distributed to weight increments.

(b) Please confirm that as part of your analysis, those costs reflecting delivery support were directly distributed to weight increments on the basis of other cost categories, of which a portion were distributed to weight increments on the basis of weight. If you cannot confirm, please explain how such costs were distributed to weight increments.

(c) Please confirm that as part of your analysis, some of the costs, specifically those reflecting vehicle service and highway/rail transportation, were directly distributed to weight increments on the basis of cube. If you cannot confirm, please explain how such costs were distributed to weight increments.

(d) Please confirm that weight and cube are directly related such that as cube increases, weight generally increases. See your response to Interrogatory VP-CW/USPS-T28-1.

(e). Please confirm that the costs for those categories mentioned in parts (a), and (c) not only must increase with weight, based on your methodology, but will increase at a fairly constant rate as weight increases. (That is, the marginal increase from each one-half weight increment to the next must be roughly the same.) If you cannot confirm, please explain why costs that are distributed to weight increments on the basis of weight would not increase at a somewhat constant rate across those weight increments, as weight increases.

(f) Do you agree that each of the other factors that impact your derived unit costs by weight increment for letters, as referred to in your response to MMA/USPS-T28-11 (a), affect the following individual cost elements differently? If not, please explain.

(1) mail processing;
(2) window service;
(3) delivery in-office:
(4) delivery route;
(5) deliver access;
(6) elementary load:
(7) delivery support;
(8) vehicle service;

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF MAJOR MAILERS ASSOCIATION

(9) rural delivery;
(10) air/water transportation;
(11) highway/rail transpiration [sic]; and
(12) other weight.

(g) For each of the factors that impact your derived unit costs by weight increment for letters, please indicate roughly how each one affects each of the individual cost elements referred to in part (f). For example, prebarcoding might affect mail processing costs, but would not affect window service, delivery or transportation costs. If you believe there is no effect, please so indicate and explain why.

(h) What costs are included in your last category listed in part (f), "other weight"?

RESPONSE:

a. Confirmed, with the exception that elemental load costs were first distributed to shape and then were distributed on the basis of weight.

b. Confirmed.

c. Confirmed.

d. Confirmed for letters and flats containing paper-based contents.

e. Confirmed.

f. To the extent that the cost elements may be affected, they are probably affected differently. Please see response to subpart (g).

g. I have not explicitly studied how the factors listed in MMA/USPS-T28-11 impact costs by the variouscost elements listed in subpart (f); however, generally, I would expect that:

- local/nonlocal mix may affect (1) mail processing, (8) vehicle service and all transportation (10 and 11)
- origin/destination pattern may affect (1) mail processing, (8) vehicle service and all transportation (10 and 11)
- degree of presortation may affect (1) mail processing, (3) delivery in-office to the extent that presortation affects the percent DPS and (7) delivery support which is a function of the amount of delivery in-office
- prebarcode vs. no prebarcode may affect (1) mail processing, (3) delivery in-office to the extent that barcoding affects the percent DPS and (7) delivery support which is a function of the amount of delivery in-office

- machinability may affect (1) mail processing, (3) delivery in-office (6) elemental load and (7) delivery support which is a function of the amount of other delivery costs
- delivery to P.O. Box vs. delivery by carrier may affect (1) mail processing, all delivery functions, both city and rural (3-7 and 9), and vehicle service (8)
- likelihood of being undeliverable-as-addressed my affect (1) mail processing, (3) delivery in-office and (7) delivery support

It is not clear how these factors may affect (2) window or (12) "other" costs

h. See response to interrogatory ABA&NAPM/USPS-T28-10. "Other" costs consist primarily of postmaster and claims and inquiry and related indirect costs such as employee labor relations, time and attendance, space, and benefits, as well as stamps and dispenser costs. They also may include training, international mail supplies, and indemnities. The word "weight" appears after the word "other" to denote how the costs were distributed.

RESPONSE OF U.S. POSTAL SERVICE WITNESS DANIEL TO INTERROGATORIES OF MAJOR MAILERS ASSOCIATION

MMA/USPS-T28-19. Please refer to your response to Interrogatory MMA/USPS-T28-11 (e) and (f). There you state, in part, that "[t]he impact on the cost of processing these [First-Class and Standard Mail (A)] pieces can be found in the testimony of witness Miller (USPS-T-24 Appendix I-I)."

(a) Please explain exactly what you mean in terms of the "impact on the cost of processing" as it relates to USPS witness Miller's testimony.

(b) Did you mean to imply that USPS witness Miller provides the "impact on the cost of processing" of First-Class presort letters by weight increment? Please explain.

RESPONSE:

(a) Witness Miller calculates the impact on the cost of processing presorted and prebarcoded pieces.

(b) No.

CHAIRMAN GLEIMAN: Is there any other additional cross-examination?

[No response.]

CHAIRMAN GLEIMAN: If there is none, that moves us to oral cross-examination. Six participants have indicated that they wish to cross-examine this witness. ADVO, American Bankers Association/National Association of Presort Mailers, the Mail Order Association of America, Major Mailers Association, and the Newspaper Association of America, and ValPak, Carol Wright.

Are there any other parties who wish to cross-examine?

[No response.]

CHAIRMAN GLEIMAN: If not, then counsel for ADVO, would you please begin?

CROSS-EXAMINATION

BY MR. McLAUGHLIN:

Q Good morning, Ms. Daniel.

A Good morning.

Q I would like to first refer you to your response to ADVO Interrogatory 8. And this interrogatory shows a graph that reproduces the unit cost by ounce increment for ECR mail from your Library Reference, is that correct?

A That's correct.

Q When you look at this, and the straight line you

show there is a linear regression line, is that correct, that is generated by an Excel spreadsheet formula?

A Yes, it is.

Q When you look at the data points, and the line as well, is there any data point that jumps out at you?

A The data point in the 15 to 16 ounce increment.

Q With the exception of that data point, do the rest of the data points appear to follow in a similar general pattern?

A Generally.

Q And I believe you indicated in a response to a part of that interrogatory that that last ounce increment represents a fraction of 1 percent of ECR volume, is that correct?

A That is my recollection.

Q And, so, a number like that could be anomalous either because, for example, the RPW might not sample that volume fully enough, so it may understate the volume, or it could be that the IOCS might have some observations of some unusual mail flowing through that could have an affect there of increasing those costs, is that correct?

A I wouldn't agree with your characterization of RPW not sampling that mail.

Q Okay. I would like to have you turn to your response to Interrogatory Number 12, ADVO 12. Now, the

graph you have there, I take it is the same graph as on ADVO Interrogatory 8, other than its scale, except that you have plotted another regression line, is that correct?

A That's correct.

Q And just for clarification on that, the more steeply sloped line there is the regression that is shown on your response to ADVO Interrogatory 8?

A That's correct.

Q Which includes all data points?

A Equally weighted.

Q Right. Equally weighted. And the less steeply sloped regression line is one which is based on all data points except for that final 16 ounce data point?

A That's correct.

Q And those are also equally weighted among those data points?

A That's correct.

Q Okay. Now, I would like to refer you to your response to ADVO Interrogatory 10 where you did an adjustment for work sharing differences in the unit cost analysis. Correct me if I am wrong, is what you have done here is basically to normalize for work sharing characteristics by selecting the average mix of work sharing characteristics and applying that to all data points?

A That is a fair characterization.

Q Okay. So it was a normalization process, is that right?

A Yes, sir.

Q And another way of doing it, an alternate way of adjusting for work sharing would be to, say, calculate a cost that is for mail that has -- that is totally work-shared, drop-shipped to a destination delivery unit, for example?

A That would be another way.

Q And then comparing that to mail that had no drop shipment, for example?

A Right.

Q So these data points here represent sort of a normal or kind of an average work sharing differential, is that correct?

A Not differential.

Q Not differential, it is -- they are normalized to have a consistent work sharing makeup that is based on the average subclass?

A Yes.

Q Workshare. Now, I would like to refer you to your response to ADVO Interrogatory 13 which we just designated this morning. Now, in this interrogatory response, you have broken out those unit costs by ounce increment according to shape, is that correct?

A According to shape and whether it is basic or high density and saturation.

Q Right. Now, Chairman Gleiman was asking Mr. Ramage earlier about a question on the IOCS and RPW treatment of letters and flats. If you -- it would be possible to redo this analysis and for everything above 3.5 ounces, to treat any letters as flats, to throw them into the flat category, that could be done, couldn't it?

A You could do that using the all shapes data. I did not provide that in this response, but the way the Library References were originally structured, I did provide all shapes, so you could look at all shapes over 3.5 ounces.

Q Well, and in addition -- yeah, okay. Right. So that would, the all shapes over 3.5 ounces would be, in essence, the average of the letters plus the flats over 3.5 ounces?

A And parcels.

Q And parcels, okay.

Now, just to try to get some idea of what effect that would have without actually running the numbers, could you take a look at page 1 of the attachment to your response to ADVO Interrogatory 13? And that represents ECR Basic letters, is that correct?

A That's correct.

Q Okay. I would like to refer you to the ounce

increment for the 3.5 to 4 ounce increment, do you see that?

A Yes, sir.

Q That would be above the break point, is that correct?

A Yes, sir.

Q And the volume shown there is about 7.7 million pieces, is that correct?

A That is correct.

Q Now, could you turn to page 5 of that same response, which is ECR Basic flats? In that same 3.5 to 4 ounce increment, do you see the volume there of ECR flats is more than 1 billion pieces of mail?

A Yes, sir.

Q Do you think that combining letters and flats, combining a data set that has 7 million letters which a data set that includes over a billion flats, would that have any measurable effect, in your view, on the resulting unit cost compared to the cost for the flats alone?

A Not much.

Q And, likewise, if you looked at all the ounce increments out to 16 ounces and compared the letter volumes versus the flat volumes for each increment, do you think you would find that the letter volumes are a small fraction of the flat volumes?

A Yes.

Q Would the same be true if you were to compare saturation letters versus saturation flats? We could go through it if you want to, but --

A I suspect it would, that letters would be a small fraction.

Q This is all over the break point, correct? Without --

A Correct.

Q So you would not expect that making an adjustment where you treated letters over the break point as being flats, for purposes of your analysis, would have any real meaningful effect on the results you have shown for the flat type mail?

A No.

Again, we have presented all shapes so that one could do that on average.

Q Okay, so there are not all shapes, so that -- okay, right, I understand that.

MR. McLAUGHLIN: That's all I have, Mr. Chairman.

CHAIRMAN GLEIMAN: The next party to cross examine is American Bankers Association, National Association of Presort Mailers.

MR. WARDEN: I am Irving Warden, representing American Bankers Association, National Association of Presort Mailers.

CROSS EXAMINATION

BY MR. WARDEN:

Q Ms. Daniel, please refer to your response to the ABA and NAPM Interrogatory Number 41.

A I'm sorry, could you say that number again?

COMMISSIONER LeBLANC: Mr. Warden, you're trailing off. Can you just kind of pull it in.

MR. WARDEN: Thank you.

COMMISSIONER GOLDWAY: What was that again?

MR. WARDEN: Forty-one.

COMMISSIONER GOLDWAY: Thank you.

[Pause.]

BY MR. WARDEN:

Q And also to Table 1 of your testimony.

[Pause.]

You have referred in your interrogatory responses to a 22-cent cost figure for the First Class single-piece mail.

And in Table -- in Table labeled Marginal Cost Difference, first, I want to make sure we understand here -- there's -- the first point entered in that tick graph is 20 cents; is that -- am I looking at something different here?

Are those the same things?

A Right. The cost of mail in the zero-to-one-ounce increment, the average unit cost is 20 cents.

Q And what do you have -- what's the 22 cents then in your response?

A The 22 cents is the difference between the mail and the one-to-two-ounce increment, which is roughly 43 cents, minus the cost of mail in the zero-to-one-ounce increment, which is 20 cents, for a difference of about 22 cents.

Q So is it rounding that makes it 22 cents instead of 23 from 20 to 43?

A Yes, it's rounding.

Q Now, in your testimony, I believe you've established, is it correct, that the average weight of letters in the zero-to-one-ounce range is about four-tenths of an ounce?

[Pause.]

A I'm going to check that.

Q Okay.

[Pause.]

If you can check the one-to-two-ounce at the same time for the next question.

A If you've done the math, I'll take it, subject to check.

Q Now, so the 20-cent figure you got, that would be the figure for the average letter in the zero-to-one-ounce category, right?

A That's correct.

Q So that would not necessarily be the cost of a letter that weighed one ounce?

A No, probably .4, on average.

Q What I mean is, the .4 would not -- if you had one of those at the very top of that category, the measurement you've given of the 20 cents would not be for the top of the letter, but for the average letter in that category?

A Twenty cents is for the average letter in that category.

Q Now, if we look at letters in the one-to-two-ounce range, and I believe that you've stated that's about 1.45, I believe, for the average weight, that -- now when you have the 43 cent cost figure for the average letter, that includes a cost of an entire first ounce, plus whatever is in the one-to-two-ounce category for the average letter in he one-to-two-ounce; is that correct?

A The total cost of mail weighing between one-to-two-ounce -- the total average cost of mail~~ing~~ weighing between one to two ounces, so it would be the entire cost of that mail, including the first ounce.

Q Thank you. So some of the -- can you -- do you know, have you measured what portion of the cost of the one-to-two-ounce letters is associated with the first full ounce of each letter, each of those letters?

A The way I have measured the cost, or the way it's here in the testimony, so there wasn't a way for me to measure the cost of an exactly one-ounce piece.

Q Or exactly the first ounce of a piece over one ounce; is that what you're saying?

A Correct.

Q If you could measure it, would you respect to be above the 20 cents you have for the average piece below once ounce? If you could measure the cost of the first full ounce of the above one-ounce piece, would you expect that to be above the cost of a group that averages only four-tenths of an ounce?

A I suspect that it would.

Q Now your 43 cent figure for the between one and two ounces, is that really the marginal cost of the second ounce or is the total cost of a piece between one and two ounces?

A It is the total volume variable cost.

Q Okay. On your Interrogatory 39 is your response indicated as redirected. Do you know to whom it was redirected?

A I don't know if it has been decided whether the Postal Service will be answering that or whether a witness will be answering that.

Q In the interrogatory there may have been some

confusion in the part that was written in Number 39 where it says redirected. It talks in the second line about sample data that do exhibit heteroskedasticity. I believe the original interrogatory said "do not exhibit heteroskedasticity" -- do you know if that is an issue in the redirection of the question?

A No, the issue is I am not prepared to discuss heteroskedasticity.

Q I wish I could pronounce it.

[Laughter.]

BY MR. WARDEN:

Q In response to Interrogatory Number 42, you say the numbers speak for themselves. Now the first part of that interrogatory talks about r-squared values and your response seems clear there, but in the second part of the interrogatory, talking about your Table 1, there is a question about outliers, and I want to make sure that we understand the response as it relates to that.

Do you believe that your data that is discussed there between 3 and 4 ounces, do you believe that would be an outlier or that the data you used to generate it would be? This is in Table 1.

A I was looking for a particular passage in my testimony. I can't find it so I don't know if it is there still where I mention that there tends to be a blip around

the 4-ounce increment and that therefore combining ounce increments might be a better way to analyze that data.

Q A better way than what you did or you did it because it was a better way?

A I am suggesting that you wouldn't want to use any one particular ounce increment to draw a conclusion, that combining ounce increments in situations like that may be a better way to look at the data.

Q Now if this data were called outliers if that is appropriate or were did appear to be something that might affect the results, is that why you were saying it should be combined?

A Well, the way the Postal Service has used the data in this case is by combining large groupings of the cost by ounce increment.

Q In doing statistical estimation, would data of that type often be excluded from your results?

A I don't think so. I think that we can include it, giving it it's proper weight. There is not a whole lot of mail in that ounce increment and combining it with adjacent ounce increments or just collapsing it as we have done in this case, it's still valid. It just needs to be given its appropriate weight.

Q And these data were included as I believe in cost basis, which Witness Fronk relied on, is that correct?

A Correct, with its appropriate weight.

Q Now, in your response to our Interrogatory Number 9 --

[Pause.]

In Section B, in the last sentence, which ends that weight study -- as I understand it, you're saying that the weight studies are based on a national sample of all operations over the course of a year.

Now, I'm not quite sure I understand what you mean by all operations in response to your category. What were you talking about when you said all operations?

A I believe I had all mail processing operations in mind for this particular sentence.

Q And that would be all operations nationwide, in the Postal Service?

A Yes, sir.

Q Okay.

[Pause.]

Now, in response to ABP Interrogatory Number 17.

A ABP?

Q Yes. It's not one of those which was designated -- well, then disregard that.

[Pause.]

In general, then, on your all operations, how was it decided, the number of tallies that would be taken?

A I used the in-office cost system. That's what Witness Ramage just testified to.

Q Right.

A They determine how many samples are taken.

Q So it wasn't something you were involved in?

A No.

Q In your response to ABA Interrogatory Number 12 --

[Pause.]

And also be referring to Table 1 of your testimony at the same time.

[Pause.]

We had asked a question that used a phrase, erratic nature of your First Class single-piece weight data, and you had responded that you thought it was not erratic.

Now, looking at several things here, the First Class single-piece datapoints on your table appear to be -- look like a series of waves; would you agree to that?

A No.

Q Okay. Now, do you agree that the costs in what's labeled as marginal cost difference, increased to the fourth ounce and decrease, start to rise again, going to the seventh ounce decrease on the -- and then rise again, and then decrease; is that correct?

A That's correct.

Q Can you explain this pattern of the rising and

falling costs as we go to heavier categories?

A In response to MMA Number 8, Parts B and C, I discuss some of the reasons.

Q And generally what would those reasons be?

A Well, part of it could be due to sampling error. Part of it is because this represents the average cost of all shapes.

And we're not holding all other characteristics constant. So the difference in the mix of mail in each of these ounce increments could be different, and could be responsible for these costs.

Q Are there any other things that you can think of that might help explain that pattern?

A No.

Q Thank you. Now, in reference to your response to our Interrogatory Number 14, in Number A, we had asked about cost pools, and you said there are no cost pools.

Well, in your testimony and analysis, have you eliminated any of the cost elements that were in USPS Witness Hume's delivery cost methodology in R97-1?

A No, I'm using total delivery costs, the costs in Cost Segment 6-1, 6-2, 7-1, 7-2, 7-3, 7-4, and 10.

Q Okay, and are those the same that were used in R97?

A That's my general understanding.

Q Now, in response to -- in your response to Number 15, Interrogatory Number 15, and looking at your Table 7 in your testimony, which you -- I'm trying to understand this a little better.

CHAIRMAN GLEIMAN: Mr. Warden, can you pull the mike a little bit closer.

BY MR. WARDEN:

Q Looking at your Table Number 7, which you have referred to in your response which is on page 29, when you said Table 7, did you mean Table 5? Table 7 appears to be all Standard-A Mail.

A Yes, sir, I meant Table 5.

Q Thank you. Now, looking at Table 5, there is no delivery unit cost estimate, is it correct, for bulk metered mail?

A That's correct.

Q Did you make an assumptions about the delivery costs of bulk metered mail?

A I didn't estimate the cost of bulk metered mail.

Q And so none of your estimates would apply to that?

A I believe maybe a proxy could be drawn from some of my estimates.

Q What proxy are you talking about?

A Well, I believe Witness Miller used one of these costs in his testimony.

Q But none of these were developed as a bulk metered mail cost then?

A No, sir.

Q Okay, thank you. In your responses to our Interrogatories 22 and 23, and in 23, you refer to 22, so basically it's just 22.

Is the -- do your answers essentially say that other factors besides weight may be influencing the cost data?

A Yes.

Q Okay, now, in some senses, is your model of cost to weight, is that a simple regression analysis where there is one dependent variable, cost, and one independent variable, weight?

A What do you mean by my model?

Q Well, let's say in your approach to this, the analysis you used to get the data that you produced, was that a simple regression analysis?

A No, sir, I didn't use regression to get the underlying data points.

Q Then what would you characterize what you used?

A Well, I used data from the in-office cost system to get the mail processing and window and in-office delivery. I allocated those costs to ounce increment. I also allocated the costs for ~~city streets~~ city street, vehicle service,

transportation and so forth, back to ounce increment based on various distribution keys.

Q And how would you characterize, what would you call that type of analysis?

A Generically, maybe a distribution key analysis.

Q So you did not use a regression analysis at all then?

A No, sir.

Q So this is consistent with, you know, what I was asking before, that there may be other independent variables besides weight that influence your cost results?

A Yes, sir.

Q Then the analysis you used, since you said it wasn't regression analysis, did that isolate the effect of weight from the effect of the other variables on cost?

A Again, the way that the Postal Service has used this data, we have used the average cost of mail in various ounce groupings. I have provided data that would allow one to normalize for presorting, prebar-coding, drop shipping. I have isolated for the effect of shape, but there are other characteristics that we currently don't have the data or the analyses to isolate for.

Q Okay. Thank you. Look at your response to our Interrogatory Number 26. And, again, your response, I believe, refers back to Table 1 of your testimony. You are

saying here that the cost of First Class presort does not exceed -- second ounce, excuse me, not First Class presort, mail does not exceed the cost of the second ounce of First Class single piece.

Now, Table 1, we have -- here you have a cost of 43 cents for the single piece and Table 2, under presort, you have a cost of 28 cents for the second ounce of First Class presort, is that correct?

A That's correct.

Q So, that is what you are relying on. You have taken it down a little further with tables. I am just looking at the graphs, that is what you are relying on in your response to Interrogatory 26?

A Yes. The average total cost of the mail in those increments.

Q Now, in your response to ABA Interrogatory 28, you have indicated that it does take longer for belts to grasp a heavy piece. What weight are you considering a heavy piece there?

A I would imagine the principle kind of holds, the heavier the piece, the longer it would take to grasp.

Q But there is no break point. In prior proceedings, we have heard discussions of different points, 1.75 ounces, I think 3 ounces, various things. You weren't talking about a particular break point, a heavy piece being

above a certain --

A Not in this context, no.

Q In your response to Number 29, in Number A, you state the data in Library Reference 91 represent all characteristics of pieces in each weight increment. What do you mean, do you have a list of all the characteristics, or a specific meaning in mind of all characteristics of the pieces in each weight increment?

A I am just noting that it is capturing the cost of pieces as they really are, inclusive of everything that could be different about them. MMA has provided a list of characteristics which may vary, but I have in mind just all characteristics.

Q So you had no specific list of characteristics in mind when you answered that?

A Again, an example of the list has been provided in MMA Number --

Q Are you talking about 4?

A Eleven. There is a list, I am sure it is not an exhaustive list of all the characteristics that could be different, but it is a very good list.

Q In particular, are you aware of any -- or did you have in mind any characteristics which might explain the higher unit cost for letter mail weighing between one and two ounces as opposed to letter mail weighing between zero

and one ounce?

A So we are talking letter mail only, so shape wouldn't be a factor?

Q Yes. Right.

A Again, the list in MMA 11 are examples of characteristics that may vary between the ounce increments and what affect those costs.

Q What did you have in mind, or what were you trying to say when you said all else is equal?

A All else is not equal.

Q Not equal. I'm sorry.

A Weight is not the only -- it is not an identical piece comparison. We are not taking the exact same letter with the exact same origin, destination, characteristics, it is not an identical piece comparison. Weight is not the only thing that is changing.

Q Okay. Thank you. Now, in your response to ABA Number 33, in (a), in section (a), you mention that linear regression estimates using ordinary least squares procedure provide unbiased estimates of the regression parameters. But that is not what, as I understand your earlier response, that is not what you did in discussing that?

A This was used to compute volume and revenue estimates at non-permit offices, so that was used to get the volume, the denominator of the unit cost. The costs did not

-- were not developed using regressions.

Q So, just the denominator of the cost. We said volume estimates?

A Right. A small portion of the volume estimates. Just the non-permit offices.

MR. WARDEN: Okay. Just non-permit. I have nothing further. Thank you.

CHAIRMAN GLEIMAN: Thank you, Mr. Warden.

Next is Mail Order Association of America.

MR. TODD: Mr. Chairman, we will have no oral cross.

CHAIRMAN GLEIMAN: Well, we are going to take advantage of the fact MOAA has no cross and take a 10 minute break at this point. And when we return, the Major Mailers Association will be up to cross.

[Recess.]

CHAIRMAN GLEIMAN: Mr. Hall.

MR. HALL: Thank you very much, Chairman Gleiman.

Let's see. Before I begin with the witness, let me ask that a document be marked as a cross examination exhibit. I have handed two copies to the reporter and I have given -- asked that he provide you with copies at the appropriate time for you and all the other Commissioners. I have given the witness a copy and counsel for the Postal Service a copy, so if I may identify the exhibit at this

time, the exhibit is a one-page exhibit.

It contains two tables. The heading of the first table is Single Piece Letters Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments.

I would ask that this exhibit be marked as Exhibit MMA-XE-Daniel-1 for identification.

CHAIRMAN GLEIMAN: It has been so marked.

[Exhibit MMA-XE-Daniel-1 was marked for identification.]

CROSS EXAMINATION

BY MR. HALL:

Q Good morning, Ms. Daniel. My name is Mike Hall and I am representing the Major Mailers Association in this case.

A Good morning.

Q First, I would like to have you turn to your response to Interrogatory MMA/USPS-T28-17, which has been designated as written cross examination.

Do you have that before you?

A Yes, I do.

Q Fine. In Part (a) we asked you to confirm various cost figures shown in a table there, which you have done, with a certain clarification, and in Part (b) we asked you to explain as best you can various observations that are made on the basis of that table.

I see in Part (b) that you have responded to factors or observations one to three and five to six, and then four. There is a seventh observation that we have there, and let me read it: "It is what makes Standard Mail (A) so much less expensive to process than First Class Letters for letters weighing between 1.0 and 2.0 ounces."

Did you mean to omit an answer to that question?

A No, sir. My response to Part (b) (1)(2)(3)(5) and (6) would also apply to (7).

Q Thank you. Now turning to the cross examination exhibit which has been marked already, and then also turning to Interrogatory Response NNA/USPS-T28-11, specifically Part (g), in that response you are giving answers that relate specifically to Standard A mail, is that correct?

Is that the premise for the question?

A The premise for the question is actually Standard A ECR mail.

Q Fine, but would your observations also be true with respect to First Class single piece letters and First Class presort letters?

A The method by which I allocate a cost-to-ounce increment would be the same. I went on to provide the percent of total cost of each of the various segments and that could be different.

Q I understand. So with respect to other costs that

appear on this exhibit, as the second to last -- pardon me, as the entry before Total Cost in each of these tables on this exhibit, that is entitled Other Weight.

When you use the term Other Weight, you don't actually mean other weight, do you? Isn't it correct that you mean Other and "Weight" is simply the distribution key?

A That is correct.

Q Now have you studied in terms of the factors that you list in response to NNA Interrogatory Number 11(g), have you made any study of how weight would influence or come into play with respect to the specific items that you -- items of other costs that you list there?

A No, I haven't. In fact, I am looking for an interrogatory response where I have stated that though I have used weight, it may be a more appropriate way to distribute other to weight increment could be on the basis of total cost minus -- in proportion to all of the other costs.

Q I believe it is also in that same response.

Well, with respect to your choice of weight as the distribution key, you state that weight was chosen to counter the claim that the study was understating the impact of weight.

Can you tell me who was making that claim?

A What I was thinking about in saying that was I

believe it was AAPS in Docket Number R97-1. I don't believe it was in regard to "other" in particular but just that the study was biased toward understating the impact of weight.

Q Okay, and that is the only claim that forms the basis for that choice, is that correct? That is all you had in mind?

A That is what I remember having in mind. Maybe I was aware of other criticisms.

Q But none that you can share with us at this moment?

A None that I remember at this moment.

Q Thank you. Now, with respect to elemental load costs, which, for example, for single-piece letters are approximately $390 million, and for presort letters, are $545 million, approximately, you have used weight as the distribution key for those costs; is that correct?

A Yes, sir.

Q Now, turning to page 8 of your testimony -- actually pages 8 and 9 -- you discuss the fact that you did that. First, just for the record, in the last case, Witness McGrane used pieces as the basis for distributing those costs; is that correct?

A That's correct; that's consistent with how the CRA treats these costs.

Q Okay, now, do I understand that in your studies,

you decided to use weight because you were concerned that weight wasn't given enough importance or taken into account with respect to delivery route and delivery access; is that correct?

A I'm sorry, can you repeat that?

Q If you look at page eight of your testimony, you were concerned, were you not, and you chose to distribute elemental load costs, based on weight, because you viewed the possibility that delivery route costs and delivery access costs, which were allocated on the basis of, or distributed on the basis of piece, didn't really take into account, weight; is that correct?

A I allocated elemental load costs on the basis of weight to illustrate more of an upper bound that weight could have on carrier street costs.

It's my understanding that there hasn't been a quantitative study of the impact of weight on street costs, so I chose to allocate elemental load costs on the basis of weight, although admitting that I felt it overstated the impact that weight may play in elemental load, and it acknowledged that since it is an overstatement, in my opinion, if anybody wanted to criticize or suggest that access and route time were weight-related, then this would be compensating for that.

In fact, route time is allocated on the basis of

weight in the CRA.

Q I only had in mind, delivery route and access, I believe. Is that what you understand my question went to?

A I guess I understood your question or in answering that question, I felt a need to explain the whole picture of how I was allocating costs for the delivery street functions.

Q Okay, let's focus on the two cost areas that were in my question, first, and perhaps we'll end up getting to what you wanted to discuss.

The costs in question, let me read them off here: For route, that's 7.1, and that's about $18 million; isn't it?

A For First Class, single-piece.

Q Yes, single-piece.

And about $89 million for access?

A That's correct, First Class single-piece letters, only.

Q That's correct. And for presort letters, for delivery route, we have approximately $21 million, and for delivery access, we have approximately $45 million?

A That's correct.

Q Okay, so, because you were concerned about -- let me back up. These costs, were you concerned that weight hadn't been taken into account? They represent roughly 25

percent or some fraction less than 50 percent, certainly less than a hundred percent, of the costs that you then chose to allocate by weight, namely, elemental load; is that correct?

A It's correct that route and access are a smaller portion of street delivery, smaller than elemental load.

Q So, in other words, to counteract the effect of not -- theoretically not giving enough recognition of weight in two costs that represent perhaps 25 percent of the total, your cure was to allocate the costs that constituted 75 percent of the total by using weight; is that correct?

These are just rough numbers I'm giving you.

A That wasn't the order that I went about making the decision. I first made the decision to allocate elemental load costs to weight, and then decided that it wasn't necessary to allocate route or access to weight, because I felt I had more than compensated for the impact of weight by allocating elemental load costs to weight.

Q Okay, and, again, the elemental load costs are the ones that in the last case were allocated on the basis of pieces?

A That's correct.

Q Okay. Now, let's look at window service. I see here we have about $755 million of window service costs that are associated with single-piece letters; is that correct?

A That's correct.

Q Now, with respect to presort letters, there is a very much smaller amount; do you see that? It's about $39 million.

A Yes.

Q Now, in -- you're generally familiar with Postal operations; aren't you?

A Generally.

Q Do you understand how presort letters are entered into the mail stream?

A Yes, sir.

Q Is it correct that Postal facilities generally have an acceptance unit where those letters are taken?

A Yes.

Q And personnel deal with them there, separate from the normal mail that goes through Postal window service?

A Yes, sir.

Q And the costs of the acceptance unit are considered institutional costs; aren't they?

A No, sir.

Q And they are not?

A I know there's a cost pool. It's part of mail processing costs where acceptance costs are recorded.

Q Are these considered related to volume, the acceptance costs? Are they, in your studies?

A Yes, sir.

Q Could you point out where?

A I developed my costs by cost pool, and it's my understanding that one of the cost pools that underlies the mail processing portion, the mods, in particular, the mods mail processing portion, includes costs for accepting mail.

MR. HALL: Perhaps -- I guess what I'd like to have is to have that mods cost pool identified, but we don't need to have the witness search through things. If she could simply inform the record through counsel, that would be acceptable to us.

THE WITNESS: I believe it's on the record, and Witness Degen, I believe, describes the cost pools in his testimony. So, somewhere on the record, is a description of which cost pool is related to accepting mail.

MR. HALL: Okay, then perhaps the best way to leave it is that we will both look in a collegial fashion, and inform the record, if that needs to be done.

CHAIRMAN GLEIMAN: I'm not sure what you mean by informing the record. I think if you want to check and find out if the information is there on your own, that's fine. If you want to have Ms. Daniel submit a response after the hearing, indicating whether, indeed, it is Witness Degen, and also where in Witness Degen's testimony of supporting Library References, particular information is found, then

that would be acceptable, too.

It's up to you to decide which you would prefer.

MR. HALL: I will take the second option, but only if I have undertaken the check first, because I think that's my responsibility to find something that's there.

CHAIRMAN GLEIMAN: Well, you'll have to inform us with a motion of some sort if you want to exercise Option 2.

MR. HALL: Fine.

BY MR. HALL:

Q Now, with respect to window service for presort letters, presort letters don't have to go through window service, do they, to enter the mail stream?

A Not to be accepted, no, sir.

Q So, what do you think the reason is that the tallies are showing window service costs for presort letters which don't require window service?

A I didn't say they didn't require window service. For instance, if you had the Post Office hold your mail, when you go to pick it up, a window clerk might be tallied handing you a piece of presorted letter mail.

And that is how presorted letter mail would end up and having window service costs.

Q I see. And that's the only example you can think of?

A That's one example. If presort mailers wanted to

buy stamps over the window to put on their presort mail, that would be another example.

Q Does that happen very often in terms of --

A I didn't say it was a great example, but I believe that would be an example.

Q It's applicable to maybe one/one-hundredth of one/one thousandth of a percent or something?

A I don't know how likely.

MR. HALL: Okay, I think those are all the questions I have.

CHAIRMAN GLEIMAN: That being the case, we'll move on to the next party who wishes to cross examine the --

MR. HALL: Before we do that, however, I would like to move into evidence, the cross examination exhibit.

CHAIRMAN GLEIMAN: Would you like it transcribed into the record also?

MR. HALL: Yes, please.

CHAIRMAN GLEIMAN: Well, I'll direct that the cross examination Exhibit MMA/XE-Daniel-1 be entered into evidence and transcribed into the record at this point.

[Exhibit Number MMA/XE-Daniel-1 was received into evidence and transcribed into the record.]

Exhibit No. MMA-xE-Daniel

Single-Piece Letters Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments

	Total	Unit Cost (cents)	Dist. Key/ density	
volume	47,984,446,747			
pounds	1,440,412,941			
cubic feet (weight/density)	64,189,525		22.44	USPS-LR-MCR-13 Supplement
all mp (3.1) tally	$ 5,900,351	12.296	Tally	
window service (3.2) tally	$ 755,467	1.574	Tally	
delivery in-office (6.1) tally	$ 1,124,991	2.344	Tally	
delivery in-office (6.2) 6.1	$ 278,132	0.580	6.1	
del. route (7.1) piece	$ 18,383	0.038	Volume	
del. access (7.2) piece	$ 89,336	0.186	Volume	
elem. load (7.3)shape&wt	$ 389,363	0.811	0.8073	USPS LR-I-95
del. support (7.4) sum6&7	$ 353,577	0.737	6.1 - 7.3	
vehicle service (8) cube	$ 21,760	0.045	cube	
delivery rural (10)shape&pc	$ 328,478	0.685	0.83	USPS LR-I-95
air/water trans. (14) weight	$ 153,432	0.320	weight	
hwy/rail trans. (14)cube	$ 121,419	0.253	cube	
Other weight	$ 279,169	0.582	weight	
Total Cost	$ 9,813,858	20.452		
Total Unit Cost		0.205		

Source: LR-I-91B (revised)

Presort Letters Test Year Unit Costs by Detailed (1/2 ounce) Weight Increments

	Total	Unit Cost (cents)	Dist. Key/ density	
[1]volume	46,449,168,095			
[2]pounds	1,801,587,274			
[3]cubic feet (weight/density)	74,200,464		24.28	USPS-LR-MCR-13 Supplement
[4]total mp (3.1) tally	$ 2,190,923	4.717	Tally	
[5]window service (3.2) tally	$ 39,250	0.085	Tally	
[6]delivery in-office (6.1) tally	$ 645,418	1.390	Tally	
[7]delivery in-office (6.2) 6.1	$ 159,886	0.344	6.1	
[8]del. route (7.1) piece	$ 21,235	0.046	Volume	
[9]del. access (7.2) piece	$ 44,627	0.096	Volume	
[10]elem. load (7.3)shape&wt	$ 544,765	1.173	0.98118	USPS LR-I-95
[11]del. support (7.4) sum6&7	$ 260,706	0.561	6.1 - 7.3	
[12]vehicle service (8) cube	$ 30,312	0.065	cube	
[13]delivery rural (10)shape&pc	$ 353,742	0.762	0.9837	USPS LR-I-95
[14]air/water trans. (14) weight	$ 261,445	0.563	weight	
[15]hwy/rail trans. (14)cube	$ 113,237	0.244	cube	
[16]Other weight	$ 108,844	0.234	weight	
[17]Total Cost	$ 4,774,390	10.279		
[18]Total Unit Cost		0.103		

Source: LR-I-91A (revised)

CHAIRMAN GLEIMAN: And Mr. Baker from the Newspaper Association of America, whenever you are ready?

MR. BAKER: Thank you, Mr. Chairman.

CROSS EXAMINATION

BY MR. BAKER:

Q Good morning, Ms. Daniel. I'm Bill Baker, representing the Newspaper Association of America.

A Good morning.

Q The part of your testimony that addresses the effect of weight on costs is the successor to the similar work by Mr. McGrane in R97, correct?

A That's correct.

Q And did you work with him on R97, on that part of his testimony, anyway?

A Not very closely on that part of his testimony.

Q And in response to cross examination by counsel for ABA this morning, you described this, I believe, as a distribution analysis, and that was what Mr. McGrane did, too, isn't it?

A Yes.

Q Now, and with a couple of differences which you note, I think, on page 8, and also in response to AAPS-3, you basically -- Library Reference 92 is basically the same work that Mr. McGrane did, but you changed a couple of the distribution keys, at least for elemental load and also the

no-weight tallies?

A We also changed the mail processing analysis.

Q Okay, right. And at several points in your testimony and cross examination exhibits, you -- interrogatory responses -- you describe Library Reference 92 as providing a general indication of how costs are influenced by weight; you remember that general kind of answer, right?

A Yes, sir.

Q Okay. And you've called, in response to, I think, to ABA-5, an understanding of the weight/cost relationship, but you said you would not call it a precise cost for each ounce increment? That's ABA/NAPM-5, the one I was thinking of.

A Right, I said it is, these costs are not represented, that the weight figures provided represent the precise cost for each ounce increment.

Q Am I correct that you would not call this the definitive study of the effect on weight on costs?

A I would say it is the best data available to study the best analysis available.

Q Which is not quite what I asked, but it is --

A So I would not say it was not definitive, I would say it was the best available.

Q All right. Now, I noticed in a number of the

tables that appeared in Library Reference 92, and I have presented Standard, regular and ECR costs, there appears a trend line generated by an Excel program, which were the subject of a number of interrogatories, which I don't really want to go over here. But am I correct, if I can summarize your answers, that the Postal Service does not purport to be relying on those Excel trend lines, is that correct?

A That's correct.

Q Okay. Now, counsel for ADVO directed your attention to your response to ADVO 12, which had run the same Excel trend line, but omitted the data point at the 15 to 16 ounce range. Do you remember that?

A Yes, sir.

Q Isn't it generally true that if you delete a data point, that the trend line will likely change? Unless it happened to fall exactly on the trend line.

A That's correct.

Q Okay. And if I chose to delete the data points that appear below the trend line, the line would likely be higher than it is otherwise, is that correct?

A That follows.

Q Okay. Could you turn to your answer to ValPak 23?

COMMISSIONER LeBLANC: Mr. Baker, is that 23?

MR. BAKER: Twenty-three, yes, sir.

BY MR. BAKER:

Q Have you had a chance to review that answer?

A Yes, sir.

Q And here, you were asked to compare two pages of Library Reference 92 and were asked which of two equations would best represent the weight cost relationship for Standard A, ECR, pound rated mail, is that correct?

A That's correct.

Q And is it the case that both of the regressions used mail weighing below -- weighing more than 3 ounces, is that correct?

A That's correct.

Q And, so, the mail that weighed below 3 ounces was not included in the data that generated that trend line, is that correct?

A That's correct.

Q And you used 3.0 there as the proxy for pound rated mail because you don't have data for exactly -- at exactly the break point, is that right?

A In this case.

Q In this case, yes. Okay. Now, could you turn to the next interrogatory, which is ValPak 24? And this asks you to report the number of tallies underlying the mail processing costs for Enhanced Carrier Route mail that underlie Library Reference 92, is that correct?

A That's correct.

Q All right. And if you look at the first page that -- well, the first page of, I guess, the attachment which presents the tables, am I correct in reading this that the top table, which is Part A, is the sum of the bottom two?

A That looks to be the case.

Q Right. And Part A is labeled Total Direct Tallies and Part B are the direct tallies for employees handling single piece and also, further below, the employees handling multiple pieces, so that would stand to reason.

And I notice on the top line there, in Part A on the all mail processing, if I move over to the 9 to 11 ounce range, I see the number 20, is that correct?

A I will note that there are two pages to the attachment, so --

Q I am looking at the direct tally records.

A The direct tally record counts.

Q Not the -- yes, the direct tally record counts.

A So, that is correct.

Q Okay. Does that indicate that there were 20 IOCS tallies recorded in mail processing, in cost saving at 3.1, at that weight increment, or in that weight range, I suppose?

A Direct tallies, right.

Q Right, and similarly the number of direct tallies for 11 to 13 ounces is 16, is that correct?

A Yes, sir.

Q And I notice that the number of tallies above 13 ounces is 115?

A That's correct.

Q You don't happen to recall the total number of IOCS tallies, do you?

I know the number is -- you don't --

A Not off the top of my head.

Q Well, would you say that these numbers we just went over are a substantial portion of the total tallies?

A They are not substantial.

Q Not at all? There are not very many at all, are there? No. In general, where there are fewer tallies, do you have less confidence in the resulting cost estimates than at the weight ranges where you have more tallies?

A If we can look at response to NNA-22, I have stated in some cases the absence of tallies in a cell may provide a reliable estimate of zero or nearly zero volume variable costs for the cell, so it is not always the case that a small number or zero number of tallies isn't a reliable estimate.

Q Do you have less confidence when there are fewer tallies than if there were thousands of tallies?

A I don't think you can draw that conclusion either. If we read on, another subclass such as classroom

periodicals would not have as many tallies, yet that could be a reliable estimate for classroom periodicals.

Q Would your answer be influenced by the coefficient of variations?

COMMISSIONER LeBLANC: You tailed off.

BY MR. BAKER:

Q I asked if the witness's answer would depend on the coefficient of variations between tallies in different subclasses.

A I think so.

Q Now if you could turn to NNA-13 and also the page in Library Reference 92 to which it refers, which appears to be page 11 of Section 2 -- what you call page 11 of Section 2 -- this is, the page in the Library Reference is the chart or table Labelled Standard A ECR All Shapes Test Year Unit Costs Detailed (1/2 ounce) Weight Increments.

A That's correct.

Q And page 11 is simply the continuation of the page before that, is that correct?

A That's correct.

Q Okay. Now directing your attention to page 11, I would like to direct your attention particularly to the columns labelled "14 to 15" and "15 to 16 Plus."

Does this chart present cost by weight increment in the various cost components that are listed on the

left-hand side?

A Yes, sir.

Q And I notice that at the bottom of each column there appears a row calls Marginal Cost Difference, is that correct?

A That's correct.

Q Okay, and looking at the 14 to 15 ounce column, the figure appears there 5.9 cents?

A That's correct.

Q And does that mean according to this table that the average 14 to 15 ounce ECR piece costs that much more than the average 13 to 14 ounce piece?

A Yes.

Q And if you move over to the 15 to 16 ounce column, the marginal cost figure is 34.2 cents, correct?

A That is correct.

Q And that is about six times more than the marginal cost at the 14 to 15 ounce range?

A About.

Q Roughly, and then graphically that is shown on the chart below by -- out on the far right side, at about the 60 cent line, correct?

A That is correct.

Q Now, first, earlier this morning counsel for ADVO, referring to that datapoint, although I think he was

referring to one of his interrogatories, asked if you call that an anomalous -- he asked if you would agree that is anomalous, that could be explained either by something in the RPW or in the IOCS.

Do you recall that question?

A Yes.

Q And you answered that as I recall by talking about the RPW but what I wanted to know is did you, do you accept this characterization of the point as anomalous?

A The point is what it is.

Q Okay. All right. Well, I asked you some questions about that point in NNA-13, so let's go into that a little bit and particularly Subpart (e).

A Yes.

Q Do you have that?

A Yes, sir.

Q And here you indicate what significance you attach to the increase in unit cost shown at the 15 to 16 ounce level, and in your answer you said two things.

You said first that its significance should reflect its proportion of the total volume, but then you went on to say that transportation costs have been allocated on the basis of pounds, which you then say implicitly assumes equal transportation cost per pound in every weight increment.

My question is why did you offer this explanation about transportation costs?

A In all other cost segments other than transportation -- well, in mail processing and window ~~and~~ in city and office, the datapoints reflect the average characteristics of the piece. However, in transportation cost I did control for that in that I used a constant per pound allocation.

Therefore, there is no difference in the length of haul or the amount of drop shipping. Transportation costs didn't hold that constant, so I was pointing out that the real average cost of a 16-ounce piece is probably somewhat lower than that because those pieces are drop shipped and they avoid more per piece when they are drop shipped.

Q So you are saying that the higher weight per piece results in greater avoided cost when the piece is drop shipped? Is that correct?

A Per piece?

Q Right -- well, if the piece is not drop shipped, the cost may be higher, go the other way, right?

A Yes.

Q You go on to say -- so are the costs then that are reported here at the cited page in Library Reference 92, to which NNA-13 addresses, actual transportation costs or some sort of normalized or averaged?

A They are actual costs distributed on the basis of just pounds, not pound miles.

Q So any costs that had been avoided by drop shipped mail would not be here at all because they would not have been incurred?

A Every piece is getting equal per pound transportation costs.

Q Right, but the actual total real transportation cost would --

A Reflect the average amount of drop shipping.

Q Right, or actually the total amount of drop shipping, yes.

A That's is correct.

Q If you go back to the table on page 11 of the Library Reference 92, isn't it true here that the transportation cost actually declined at the 15 to 16 ounce range from the 14 to 15 ounce range, is that correct?

A Yes, there are fewer pounds.

Q And you are looking at which rows, numbers? Which ones?

A 14 and 15 for the transportation costs and number 2 for the number of pounds.

Q And looking still again at the chart, doesn't the big increase in cost between 14 to 15 and 15 to 16 appear in the mail processing cost tallies?

A Yes, sir.

Q And if you return to ValPak-24 where you broke out the direct tallies for IOCS, and I notice here -- and the point there is that the 13 ounce, above 13 ounces there are more tallies than in the several preceding weight ranges, just below that from 7 through 13, and the higher, 115 direct tallies, in ValPak-24 is consistent with the mail processing costs being higher in the 15 to 16 ounce range, isn't it? Isn't --

A Yes.

Q Okay. Do you have any reason to think that these tallies were not properly recorded?

A No.

Q So these tallies are not a data measurement, the fact that these tallies are higher in this weight increment rather than the 14 to 15 or below is not a data measurement problem, is it?

A I would have no reason to think that it is.

Q All right, and I would like now to have you turn to your testimony at page 11, Table 1 --

MR. BAKER: Mr. Chairman I am turning to the last line of cross I have for the witness and I am hopeful that we can complete it by 12:30 or so.

BY MR. BAKER:

Q Now do you have that page?

A Yes, sir.

Q And this presents test year unit costs by ounce increment for single piece First Class mail, correct?

A That's correct.

Q And you report an average cost of 12.42 cents for each additional postage ounce for First Class single piece, correct?

A In excess of the first ounce.

Q In excess of the first ounce -- and we find that number at the far right, lower right hand corner of Table 1, is that correct?

A That's correct.

Q And you derive that 12.42 cents by dividing the total cost of pieces in excess of the first ounce by the total number of additional ounces?

A Additional postage ounces.

Q Postage ounces. Yes. So back on Table 1, if I read this correctly, the two bottom rows, labelled total number of additional ounces purchased and cost of pieces in excess of the first ounce of cost where the numbers for at least the total column were the numbers used to generate the 12.42 cents. Is that right?

A That's correct.

Q Does that 12.42 cents include any costs or volumes of one ounce pieces?

A It does not include the cost or volumes of pieces weighing less than one ounce.

Q Does it include any costs for volumes of the first ounce of pieces paying for more than one ounce?

A Say that again?

Q Does it include any costs or volumes of the first ounce of pieces that pay for more than one ounce of pieces that pay for more than one ounce?

A Taking the total in each of the ounce increments greater than one ounce and subtracting the 20.2 cents, which was the cost of an average piece under one ounce, that is what the number includes.

Q Well, if your 12.42 cents is what results when you divide the total cost of pieces in excess of the first ounce cost by the total number of additional ounces purchased, doesn't it follow that the result does not include any costs of the first ounce?

A That's generally what we are implying.

Q Was generating this number your idea or that of Witness Fronk?

A I believe I remember this being Witness Fronk's suggestion.

Q And if we turn to page 13, which was revised on March 1st, line 15, you report that you, for First Class Presort mail, you follow the same analysis as you went

through for single piece, and you come up with an average cost of 14.8 cents for each additional postage ounce for First Class presort mail, is that correct?

A That's correct.

Q And Mr. Fronk used that number, too, don't you believe? You think he did anyway? Did you provide that number to him?

A I provided that number.

Q All right. And that number is generated on the next page, which is Table 2?

A That's correct.

Q And did you generate that in the same manner as you generated Table 1 for single piece mail?

A Yes, sir.

Q Okay. Now, if you could turn a little more to page 17, Table 3. And here you estimate test year unit costs for piece and pound rated Standard A mail, again, drawn from Library Reference 92. Do these represent an estimate of average test year costs -- well, back up, I am referring to the lines in each grouping that are labeled greater than 3 ounces and greater than 3.5 ounces. Are these an estimate of average test year costs for pound rated mail in each of the four subclasses?

A It is an estimate of costs greater than 3.5 and 3.0 ounces, which we have used as a proxy for pound rated

mail.

Q Now, I think this is obvious, but when you calculated the cost of pieces above 3 and 3.5 ounces, you excluded the cost of the pieces below those weights?

A That's correct.

Q And is it your understanding that Mr. Moeller uses these figures to calculate the implicit cost coverages for pound rated ECR mail?

A Yes, it is.

Q Okay. In fact, did he ask you to calculate those figures?

A I believed we would ~~work~~ have worked this out jointly.

Q Well, how would that go, would you say, Mr. Moeller, what numbers do you want? Or would he say, I have a rate design I have got to do, I need this number?

A We discussed Library Reference 92 and decided what the best way to use all of this data would be.

Q Okay. Referring again to these calculations above 3 and above 3.5 ounces, can you confirm for me that the calculations of these estimated costs include the costs associated with the first ounce of pound rated pieces?

A I am sorry, these costs were?

Q Include all the costs of all the -- all the costs of the pound rated pieces, correct?

A All the costs of pieces weighing greater than 3 or

greater than 3.5.

Q Okay. You did not try to isolate here, in this Table 3, the incremental costs that might be associated by the above break point portion of the weight of those pieces?

A That's correct.

Q Okay. So, therefore, these numbers are not calculated in the same way as were the costs of the additional ounces in First Class mail that we were discussing a few minutes ago?

A That is correct.

MR. BAKER: Mr. Chairman, I have no more questions.

CHAIRMAN GLEIMAN: Thank you, Mr. Baker.

The last party that indicated cross-examination was ValPak-Carol Wright. I don't see Mr. Olson or any of his colleagues in the room right now, which means that we will move to follow-up questions, if there are any. Is there any follow-up cross-examination?

Mr. McLaughlin.

CROSS-EXAMINATION

BY MR. McLAUGHLIN:

Q Ms. Daniel, in some questioning from Mr. Warden for ABA, there was some discussion in the case of First Class, your First Class analysis, that you had not factored out a lot of possible cost causative influences in doing

your weight analysis. I would like to refer you now to your analysis in Standard A mail, particularly Standard A ECR. Did you, in fact, factor out the effect of shape on ECR by calculating costs separately for letters and flats?

A Yes, sir, I have calculated costs by shape in all classes separately.

Q And have you also done it in Standard A ECR by analyzing data above the break point and below the break point, for example?

A Yes, sir.

Q Did you also, in your response to ADVO Interrogatory Number 10, factor out work sharing differences for drop shipment?

A Yes, sir, in both 10 and then to some degree in number 13.

Q And also in number 13, you factored out differences between the ECR basic presort level and the ECR high-density saturation levels; is that correct?

A In number 13 I did that more explicitly than I did in number 10, but in number 10, I was trying to isolate for presort or density, as well as drop shipping.

Q Now, you had some discussion with Mr. Baker about confidence intervals -- excuse me, coefficients of variation and the numbers of tallies, particularly when you get into the higher weight ranges for ECR mail.

It is true that you would have a higher coefficient of variation as you get out to the smaller cells in terms of the volumes of mail in those cells; is that correct?

A That's what I would expect.

Q Now, in terms of reliability, as I understood it, you were saying that you could not place great faith in a particular unit cost number that's there, and you don't want to give to much weight to a particular number; is that correct?

A One would need to consider the sampling variation around any particular number.

Q Were you interested more in trying to determine overall patterns of cost behavior, as opposed to determining the precise cost at, say, the four- to five-ounce range?

A Yes, sir. In fact, what we've put in testimony is the average total cost of pound-rated or over 3 or 3.5, so that's a very large grouping of mail.

Q In the case of ECR mail, do you believe that you have identified a consistent -- a reasonably obvious and consistent pattern of costs behavior?

A I believe that ~~in~~ the analysis presented in Table 3 and used by Witness Moeller, ~~it~~ is reasonable.

MR. McLAUGHLIN: That's all I have, Mr. Chairman.

CHAIRMAN GLEIMAN: Is there any further followup

from anyone?

[No response.]

CHAIRMAN GLEIMAN: Questions from the Bench?

[No response.]

CHAIRMAN GLEIMAN: There don't appear to be any questions from the Bench. Mr. Alverno, would you like some time with your witness to prepare for redirect?

MR. ALVERNO: Yes, thank you, Mr. Chairman.

CHAIRMAN GLEIMAN: Ten minutes?

MR. ALVERNO: Yes.

CHAIRMAN GLEIMAN: Okay, ten minutes it is.

[Recess.]

CHAIRMAN GLEIMAN: Mr. Alverno?

MR. ALVERNO: Thank you, Mr. Chairman. We have no redirect.

CHAIRMAN GLEIMAN: Well, if you have no redirect, there can't be any followup, and that means we're going to call it a day, unless Mr. Olson sneaks in the back of the room all of a sudden.

Would you please close the door and lock it?

[Laughter.]

CHAIRMAN GLEIMAN: Ms. Daniel, that completes your testimony here today. We appreciate your appearance and your contributions to the record. And if there is nothing further, I will thank you, and you're excused.

[Witness Daniel excused.]

CHAIRMAN GLEIMAN: And that concludes today's hearing. We'll reconvene tomorrow morning at 9:30, when we will receive testimony from Witnesses Yacobucci and Kingsley. You all have a good afternoon.

[Whereupon, at 12:43 p.m., the hearing was recessed, to be reconvened on Thursday, April 13, 2000, at 9:30 a.m.]