

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

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POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1

RESPONSE OF UNITED STATES POSTAL SERVICE
WITNESS LION TO INTERROGATORIES OF
THE OFFICE OF THE CONSUMER ADVOCATE
(OCA/USPS-T24-41-47)

The United States Postal Service hereby provides responses of witness Lion to the following interrogatories of the Office of the Consumer Advocate: OCA/USPS-T24-41-47, filed on August 7, 1997.

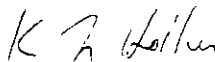
Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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OCA/USPS-T24-41. The following tabulation of rental cost per square foot is based on the data file RENT.DATA included in LR-H-216.

Comparison of $av(rent/sf)$ with $(total\ rent)/(total\ sf)$.
TYPE=0,1 for all offices, by GROUP
* indicates that GROUP is missing

OBS	GROUP	_TYPE_	_FREQ_	RCSF	TOTRSF	RATIO
1		0	24860	6.7281	5.9271	0.88095
2	*	1	286	7.9224	3.4632	0.43714
3	A	1	30	23.4905	8.3891	0.35713
4	B	1	153	16.7431	13.9132	0.83099
5	C	1	6050	7.7267	5.5969	0.72437
6	D	1	14171	5.9971	6.2122	1.03587
7	E	1	4170	7.1936	7.1541	0.99451

- a. Please confirm that the above frequencies (FREQ) and rental cost per square foot values (RCSF) update the similar figures given in LR-H-188. If you do not confirm, please explain and provide the correct figures consistent with the data files of LR-H-216.
- b. Please confirm that all differences between the above table and the analogous figures presented in LR-H-188 are due to the change in the delivery statistics file described in footnote 1, page 1 of LR-H-216.

RESPONSE:

- a. Confirmed for rental cost per square foot values (RCSF). Not confirmed for frequencies (FREQ). The frequencies shown in the table measure the number of observations in each delivery group that have rental data and that pass the outlier test. The frequencies in LR-H-188 measure the total number of observations in each delivery group in the DSF.
- b. Confirmed for rental cost per square foot; not confirmed for frequencies. See part a.

OCA/USPS-T24-42. Attachment 1 to this interrogatory provides a list of the 30 group A facilities in the RENT.DATA file contained in LR-H-216. Attachment 2 provides a list of the 29 group A facilities listed in the BOXES.DATA file contained in LR-H-216.

- a. Please confirm that several group A observations in the BOXES.DATA file contain no installed boxes. If you do not confirm, please explain how the figures in rows 2 and 19 of Attachment 2 should be interpreted.
- b. [i] Please confirm that the rental cost per square foot figures for offices having no boxes are used in library reference H-188 to compute rental cost per square foot. [ii] If you confirm, please explain why these offices without installed boxes were included in the calculations. [iii] If you do not confirm, please provide a reference to the SAS code that excludes these observations from your calculations.
- c. Please identify which of the group A observations on the RENT.DATA file correspond to facilities that have no installed boxes.

Attachment 1 to OCA/USPS-T24-42

LISTING OF ALL GROUP=A RECORDS IN RENT DATA FILE 47
12:39 Tuesday, August 5, 1997

OBS	GROUP	CAG	RCSF	RA	SF
1	A	A	20.3022	395000	19456
2	A	A	0 0020	1	508
3	A	A	55.3502	182379	3295
4	A	A	29 7628	41400	1391
5	A	A	9 4678	580000	61260
6	A	A	2 9039	100000	34437
7	A	A	27 1367	575000	21189
8	A	A	28 5006	73332	2573
9	A	A	16 7277	64000	3826
10	A	A	2 6468	45560	17213
11	A	A	44 1327	125043	2856
12	A	A	22 5000	72000	3200
13	A	A	48 3000	281299	5824
14	A	A	22 5389	8700	386
15	A	A	30.0809	178500	5934
16	A	A	31.2776	455840	14574
17	A	A	2 8377	1340000	472215
18	A	A	9 5053	539200	56726
19	A	A	46 4306	350040	7539
20	A	A	21 2020	85020	4010
21	A	A	26 5564	54600	2056
22	A	A	1 2585	13692	10880
23	A	A	14 4796	32000	2210
24	A	A	21 0555	80011	3800
25	A	A	15.3404	32000	2086
26	A	A	19 1872	285813	14896
27	A	A	64 0482	366420	5721
28	A	A	10 6878	170000	15906
29	A	A	8 4950	55812	6570
30	A	A	52.0000	177580	3415

Attachment 2 to OCA/USPS-T24-42

LISTING OF ALL GROUP=A RECORDS IN BOXES.DATA FILE 48
 12 39 Tuesday, August 5, 1997

			B	B	B	B	B	B	B	B	B	B
			O	O	O	O	O	O	O	O	O	O
			X	X	X	X	X	X	X	X	X	X
	G		I	I	I	I	I	R	R	R	R	R
	R		N	N	N	N	N	E	E	E	E	E
O	C	O	S	S	S	S	S	N	N	N	N	N
B	A	U	T	T	T	T	T	T	T	T	T	T
S	G	P	1	2	3	4	5	1	2	3	4	5
1	A	A	2861	40	8	4	0	2622	36	8	3	0
2	A	A	0	0	0	0	0	0	0	0	0	0
3	A	A	1020	64	43	8	4	997	59	38	8	4
4	A	A	2724	201	120	40	0	2674	195	118	38	0
5	A	A	780	0	0	0	0	697	0	0	0	0
6	A	A	360	24	8	0	0	340	20	6	0	0
7	A	A	720	32	20	6	3	685	29	20	5	3
8	A	A	538	189	45	0	0	538	189	45	0	0
9	A	A	612	88	72	0	0	565	68	40	0	0
10	A	A	2026	159	53	0	0	1069	147	53	0	0
11	A	A	3062	396	268	40	25	2473	346	234	33	18
12	A	A	1081	0	0	0	0	930	0	0	0	0
13	A	A	1357	90	35	0	0	1267	87	32	0	0
14	A	A	888	0	4	0	0	878	0	4	0	0
15	A	A	840	0	0	0	0	678	0	0	0	0
16	A	A	2004	8	4	2	0	1944	8	4	2	0
17	A	A	3660	0	120	0	0	0	0	105	0	0
18	A	A	972	32	0	0	0	930	26	0	0	0
19	A	A	0	0	0	0	0	0	0	0	0	0
20	A	A	660	0	20	0	0	649	0	17	0	0
21	A	A	600	80	40	10	0	446	9	11	2	0
22	A	A	1800	0	38	0	0	1562	0	32	0	0
23	A	A	1010	144	60	0	0	537	72	35	0	0
24	A	A	1416	104	52	0	16	1413	102	52	0	1
25	A	A	1260	40	40	0	0	0	0	0	0	0
26	A	A	902	120	24	4	2	642	114	24	3	2
27	A	A	990	16	20	0	0	674	11	7	0	0
28	A	A	972	144	60	2	0	909	117	31	0	0
29	A	A	420	16	8	2	1	231	9	6	2	0

RESPONSE:

- a. Confirmed in that no boxes are shown for observations 2 and 19 in the PO Box Survey. In some cases, however, the DSF may show boxes for facilities when the PO Box Survey shows none (and vice versa). In Attachment 2, observation 2 shows 0 boxes and observation 19 shows 1,125 boxes, according to the DSF.
- b. [i] Confirmed.
- [ii] There is no reason to exclude them; they are valid postal rental rates in an area or district, regardless of the use to which the particular postal facility is put. When combined with other rates at other rented facilities, they provide a measure (or index) of average postal rental costs throughout a group.
- [iii] Not applicable.
- c. This information is available in the merged file, BOXRENT, contained in USPS LR-H-222. See response to OCA/USPS-T24-43.

OCA/USPS-T24-43. Please refer to the RENT.DATA and BOXES.DATA files included in LR-H-216. Please provide a merged file that provides CAG, Group, rental costs, square feet, boxes installed (by box size), and boxes rented (by box size) for the facilities that are represented in both the LR-H-216 files.

RESPONSE:

The merged file requested, BOXRENT, is provided in USPS LR-H-222.

OCA/USPS-T24-44. Please refer to your response to OCA/USPS-T24-5b. In that response you state, "It is often the case that the large facilities are built in industrial areas and have few, if any, boxes. On the other hand, many smaller facilities, such as nondelivery offices, have nothing but boxes."

- a. Would an equivalent assertion be that the proportion of square footage devoted to boxes is inversely related to the facility's square footage? Please explain.
- b. Have you tested whether the proportion of square footage devoted to boxes is inversely related to the facility's square footage? If so, what are the results? If not, why not?
- c. [i] Could the inverse relationship stated in part a of this interrogatory be tested using the RENT.DATA and the BOXES.DATA of library reference H-216? [ii] Could the inverse relationship stated in part a of this interrogatory be tested using the "Facility Cost Development Update" (LR-G-120, R94-1)? [iii] If not, what additional data would be required to test whether the proportion of square footage devoted to boxes is inversely related to the facility's square footage? [iv] Please provide in electronic form any available data that could be used to estimate the inverse relationship.
- d. Are you suggesting that smaller offices should receive a larger allocation of space costs than they would when calculating average cost per square foot as the ratio of total group rental cost to total group square feet? If so, why? If not, please elaborate on your point.
- e. Are you suggesting that your method of calculating average cost per square foot as an average of averages does, in fact, result in a larger allocation of space costs to smaller offices (e.g., nondelivery offices) than would result from calculating average cost per square foot as the ratio of total group rental cost to total group square feet? If not, please elaborate on your point.
- f. Please refer to the attachment to this interrogatory. The columns labeled "rcsf-key" and "totrsf-key" display the relative allocation of space cost to fee group using your average of averages technique and a simple ratio of rent to total square footage, respectively. [i] Please confirm that your technique allocates *more* space cost to fee groups A and C and *less* space cost to fee groups B, D, and E. [ii] If you confirm, please comment on the desirability and consistency of such a result. [iii] If you do not confirm, please provide a corrected table of relative allocations of space cost, showing the source and derivation of all numbers.

Attachment to OCA/USPS-T24-44

OBS	GROUP	_TYPE_	_FREQ_	RCSF	RA	SF	TOTRSF	RATIO
3	A	1	30	23.4905	6761242	805952	8.3891	2.8001216
4	B	1	153	16.7431	12496169	898149	13.9132	1.2033968
5	C	1	6050	7.7267	211145264	37725109	5.5969	1.3805321
6	D	1	14171	5.9971	133551070	21498175	6.2122	0.9653746
7	E	1	4170	7.1936	26062082	3642977	7.1541	1.0055213

	rscf-wt	totrst-wt
A	18932215	6761211.9
B	15037799	12496127
C	291490600	211143663
D	128926705	133550963
E	26206119	26062222
Totals	480593438	390014186

	rscf-ky	totrsf-key	ratio
A	0.0393934	0.0173358	2.2723721
B	0.0312901	0.0320402	0.9765881
C	0.6065222	0.5413743	1.120338
D	0.2682656	0.3424259	0.7834268
E	0.0545287	0.0668238	0.8160069

RESPONSE:

- a. No. My statement means that the number of post office boxes in a facility is not necessarily related to the size of the facility. This is why each facility should be weighted equally. Otherwise, as explained in the response to OCA/USPS-T24-5b, a few large facilities may dominate the result.
- b. No. I do not see how such a study would have any bearing on the analysis presented in my testimony. The overall size of the facility is relevant only insofar as it provides the divisor to determine the rental rate for that facility.
- c. [i] No, not without further assumptions on how to measure the floor space "devoted" to boxes.
- [ii] This would depend on the assumptions made.
- [iii] *One could test the relationship between number of boxes and facility size. By assuming fixed percentages for lobby space and working space, as well as standard size boxes, one could estimate the relationship, if any, between "proportion of square footage devoted to boxes" and "[a] facility's square footage."*
- [iv] Data on box counts, box lobby space, box working space, and building interior floor space are included in USPS LR-H-222. These data are from the PO Box Survey.
- d. No. There is no attempt to allocate costs to individual offices. We need only determine the relative costs of different fee groups in order to allocate costs among them. The point is that a few large facilities should not be allowed to dominate the resulting average of postal rental rates.

- e. No. There is no attempt to allocate costs to specific offices. The question mischaracterizes the method used. It is not an "average of averages," but an average of data points. Specifically, it is the average of postal rental rates throughout the fee group in question.
- f. [i] Unable to confirm. In the question, it is unclear what the terms "more" and "less" refer to. It is also unclear whether "space cost" includes space support costs in addition to space provision costs, which are otherwise the subject of this interrogatory. Assuming that the comparison requested is between columns "rcsf-ky" [sic] and "totrsf-key" in the last set of columns: the numbers in these columns are derived by multiplying the average rents for each fee group by the total square feet for that fee group. The product does not yield "space costs" or even space provision costs. Not all facilities are rented. Space provision costs include depreciation and interest on postal-owned facilities.
- [ii] Not applicable. See [i].
- [iii] Space provision costs by fee group are given in Table 12 of my testimony, as revised August 14, 1997, and are reprinted in the table on the next page.

Space Provision Costs by Fee Group

<u>Fee Group</u>	<u>Dollars in Thousands</u>
A	\$ 2,992
B	\$ 5,497
C	\$135,363
D	\$ 66,979
<u>E</u>	<u>\$ 12,394</u>
Total	\$223,226

Intuitively, we expect the average rental rate to be higher in Fee Group A (which consists of Manhattan, which has the highest retail rental costs in the nation) than in Group B (which consists of 8 other large metropolitan areas). We also intuitively expect average rental rate to be higher in Group C than in Group D. Both expectations are confirmed with the method in my testimony. Neither is confirmed using total dollars divided by total square feet as the measure of rent.

OCA/USPS-T24-45. Please refer to your response to OCA/USPS-T24-5. The following table summarizes information for the first 5 group A records on the RENT.DATA file of H-216. RCSF denotes the rental cost per square foot from the file, RA denotes rent amount, and SF denotes square footage. Totals for these variables and the average for RCSF have also been included. The column labeled comp1RA is a computed rent amount determined by multiplying SF by the average of the facility rental cost per square foot values.

OBS	GROUP	CAG	RCSF	RA	SF	comp1RA	comp2RA
				a	b	c=b*e	d=b*f
1	A	A	20.3022	395000	19456	447041	271487.2
2	A	A	0.002	1	508	11672	7088.584
3	A	A	55.3502	182379	3295	75709	45978.12
4	A	A	29.7623	41400	1391	31961	19409.88
5	A	A	9.4678	580000	61260	1407571	854816.2
total			114.885	1198780	85910	1973954	1198780
average (e)			22.977				
ratio of totalRA to totalSF (f)				13.95391			
relative difference from actual						65%	0%

- Please confirm that the average of RCSF values (AvRCSF=22.977) applied to facility square footage figures generally will not produce the known total rent amounts.
- Please confirm that the total computed RA values overstate total known RA by about 65 percent for the first five group A facilities.
- Please refer to the column labeled comp2RA. Please confirm that if (total rent amount)/(total square footage) is used as the measure of overall cost per square foot, then there is no deviation from the total of known RA values for the first five group A facilities.
- Please confirm that the "constant of proportionality (c)" discussed at page 22 of your testimony includes any adjustments necessary to account for the fact that the average of facility rental costs per square foot is not compatible with the total rent amount for the facilities. If you do not confirm, please provide citations to where any such adjustments may be found.

RESPONSE:

- Confirmed. The average of RCSF values applied to facility square footage will generally not produce the same result as the "total known rent." However, the latter is only a portion of attributed space provision costs, which also include depreciation

and facility-related interest. Thus, "total rent" is a partial cost and, as such, has no particular role in the allocation procedure.

b-c. Confirmed. This exercise is a correct manipulation of numbers, but has no bearing on the allocation of space provision costs, for the reason cited in the response to part a.

d. Unable to confirm. "c" is a constant of proportionality used to satisfy the constraint that the space provision costs for all fee groups and box sizes must sum to the total *calculated by the cost attribution method of witness Patelunas (\$223.226 million)*.

This is a standard mathematical technique. Starting with Docket No. R90-1, space provision costs have been assumed to be directly proportional to rental costs and to box capacity. This proportionality is expressed mathematically in Equation (1), page 22, of my testimony. *The constant "c" is then determined so as to satisfy the constraint.*

The "total rent" referred to has nothing to do with this process. The \$223 million includes not only rent but depreciation and interest on postal-owned facilities. This number is a given for purposes of this analysis, and we then allocate this total equitably among the different fee groups and box sizes. There is no need in this analysis to estimate a "total rent" that is only part of the space provision costs.

OCA/USPS-T24-46. Please refer to your testimony at page 17, Table 9B., and the column "New Fee." Please confirm that the "New Fee" for box size 5 in Fee Group A should be \$550. If you do not confirm, please explain.

RESPONSE:

Confirmed. An erratum to this effect will be filed.

OCA/USPS-T24-47. Please refer to page 22 of your testimony, lines 1-16.

- a. Please confirm that the units for AC_{jk} are dollars. If you do not confirm, please state the correct units and explain why they are not dollars.
- b. Please confirm that the units for R_j are dollars-ft². If you do not confirm, please state the correct units and explain why they are not dollars per square foot.
- c. Please confirm that the units for EC_{jk} are size-1 boxes. If you do not confirm, please state the correct units and explain how they are determined.
- d. Please confirm that the units for Q are size-1-box-dollars-ft². If you do not confirm, please state the correct units and explain why they are not size-1-box-dollars per square foot.
- e. Please confirm that the units for c (in either equation 1 or 2) are square feet per size-one box (or square feet per "basic unit of capacity"), not dollars. If you do not confirm, please state the correct units and explain how they are determined.
- f. Let B equal the square feet occupied by a "basic unit of capacity," i.e., a size-1 box. [i] Please confirm that the units for B are square feet per size-1 box and that [ii] B is a known value that does not vary across fee groups. [iii] If you confirm, please provide the value of B . [iv] If you do not confirm, please explain.
- g. Please refer to page 9 of LR-F-183, Docket No. R90-1. Please confirm that a standard box section contains one size-5 box and that the floor space occupied by a standard box section equals the floor space occupied by a size-5 box. If you do not confirm, please explain.
- h. Please confirm that a standard box section contains the equivalent of 5 size-5 boxes or 10 size-4 boxes or 20 size-3 boxes or 30 size-2 boxes or 60 size-1 boxes. If you do not confirm please explain.
- i. Please confirm that the square feet occupied solely by box sections (excluding lobby space in front of boxes) in Group j equals $E_j B/5$, where division by 5 accounts for stacking box modules five high. If you do not confirm, please provide the correct expression for the square feet occupied solely by box sections (excluding lobby space in front of boxes) in Group j .
- j. [i] Please confirm that you would estimate the cost of space occupied solely by box sections (excluding lobby space in front of boxes) in Group A as $R_A E_A B/5 = \$2,084,221B/5$, where $R_A = \$23.49$ and $E_A = 88,728$. [ii] If you do not confirm, please explain how to interpret the figure \$2,084,221, which is one of the five terms summed to get your value of Q .
- k. [i] Please confirm that the cost of space occupied solely by box sections (excluding lobby space in front of boxes) in all fee Groups equals $(B/5)(R_A E_A + R_E E_E) = QB/5 = \$155,481,018B/5$. [ii] If you do not confirm, please provide the correct value and explain how to interpret the value of Q .
- l. Please confirm that the units for $QB/5$ are dollars. If you do not confirm, please state the correct units and show their derivation.
- m. Let d equal $\$223,226,000/QB/5 = \$223,226,000/\$155,481,081B/5 = 7.18/B$. [i] Please confirm that d has no units associated with it. [ii] Please confirm that d is the ratio of total space devoted to box sections (including lobby space) to space occupied solely by boxes (excluding lobby space). [iii] Please confirm that

your constant $c = dB/5$. If you do not confirm, please explain how to interpret your constant c .

- n. Please confirm that use of the "TOTRSF" average cost per square foot figures from interrogatory OCA/USPS-T24-44 in the calculation of Q yields a value for c of 1.73 square feet per size-1 box and a value for d of $8.63/B$. If you do not confirm, please explain.
- o. [i] Please confirm that the square feet occupied by a size-1 box is indeed a constant and should not vary with the estimated rental cost per square foot at various fee groups. [ii] If you do not confirm, please explain.
- p. [i] Please confirm that there is only one correct value for d , the ratio of box space (including lobby space) to box space (excluding lobby space) at a given point in time. [ii] Please confirm that the correct value for d can only be derived from total rent, E_j , and R_j when the values for R_j are calculated as the simple ratio of total group space cost divided by total group square feet. [iii] If you do not confirm, please provide the actual value of d and [iv] show that your set of group rents per square foot will generate d .
- q. Please confirm that your constant c accomplishes at least four separate adjustments: (1) expanding square feet occupied solely by boxes to total square feet devoted to boxes, (2) accounting for the fact that box modules are stacked five high, (3) accounting for the space occupied by a single size-one box, and (4) deflating for the overstatement of total rent resulting from using the average of averages method of estimating rent per square foot by fee group. If you do not confirm, please provide a detailed explanation and justification for your use of a "constant of proportionality (c)" at page 22 of your testimony.

RESPONSE:

The thrust of this question seems to misunderstand the allocation process. The question attempts to build "actual" rental costs from the bottom up, whereas the allocation procedure is a top-down distribution of a fixed total. Some of the concepts introduced are correct in a narrow and technical sense. However, midway through they become an empty mathematical formalism, because the terms defined are devoid of real meaning.

- a. Confirmed.
- b. Confirmed.

- c. Confirmed.
- d. Confirmed.
- e. Confirmed. An erratum was filed on August 14, 1997 to correct this. This change has no effect on the results or conclusions.
- f. [i] Confirmed.

[ii] Not confirmed. Not all boxes are standard size. The average may well vary across fee groups.

[iii] Not applicable.

[iv] The Domestic Mail Manual describes the capacity of post office boxes in terms of cubic inches (DMM § D910.4.2). These values are shown in the column 2 of the table below. Column 3 shows the standard frontal dimensions in square inches.

(Source: USPS LR-F-183, pages 8-9). As shown in the right column, the depth of the standard box varies over a range.

<u>Box Size</u>	<u>Capacity (cu. in.)</u>	<u>Frontal Area (sq. in.)</u>	<u>Depth (in.)</u>
[1]	[2]	[3]	[4] = [2] / [3]
1	< 296	24	< 12.3
2	296 - 499	36	8.2 - 13.9
3	500 - 999	72	6.9 - 13.9
4	1,000 - 1,999	144	6.9 - 13.9
5	> 2,000	288	> 6.9

If the depth is 12 inches, as stated in USPS LR-F-183 (page 8), a standard box section, which contains 60 size-1 boxes, would have a "footprint" of 288 square

inches. Under this assumption, the space that would be allocated to a size-1 box is 4.8 square inches

- g. Confirmed.
- h. Confirmed, except that a standard box section contains 40, not 30, size-2 boxes.
- i. Confirmed, assuming B represents the appropriate exterior dimension of a size-1 box. This would equal 1/60 of the average footprint of a box section.
- j. [i] Not confirmed.

[ii] The figure "\$2,084,221" that is cited (as well as "Q"), are intermediate quantities in the calculation. They would have meaning only when divided by an appropriate total to produce a ratio or percentage.

Total space provision cost for Fee Group A cannot be determined by multiplying "E_AB/5" by "R_A" because not all facilities are rented. The only use for the "R_k" is to estimate the relative rental costs among groups. It would be reasonable, however, to consider that the expression "R_AE_AB/5" represents the space provision costs for Fee Group A relative to other fee groups. For all fee groups, this is expressed mathematically as:

$$AC_k = d (R_k) (E_k) (B/5)$$

where the subscript refers to fee group k and d is a constant used to satisfy the constraint that the space provision costs for all fee groups and box sizes must sum to \$223.226 million. That, of course, is equivalent to the method we used, and the relationship between the two constants of proportionality is:

$$d = c / (B/5)$$

In this case, d is a pure number (no units) and is the same number defined in part m below.

k. [i] Not confirmed. See part j.

[ii] The correct value of Q is 155,580,997. (See Table 12, USPS-T-24, as revised August 14.) However, it is not the "cost of space" as asserted in subpart [i]. As explained in part j, it is an intermediate step in the calculation.

l. Confirmed.

m. [i] Confirmed.

[ii] Not confirmed. " d " is properly defined as a constant of proportionality, used to satisfy the total cost constraint.

[iii] Confirmed. See part j.

n. Confirmed.

o. [i] Not confirmed. While a standard box size has fixed dimensions, not all boxes are standard.

[ii] See part f [iv].

p. [i] Not confirmed. The question contains a premise that is not true, i.e., that " d " is "the ratio of box space (including lobby space) to box space (excluding lobby space)."

[ii] The "correct value for d " is the value that makes the sum of all space provision costs equal \$223.226 million. It does involve the E_j and R_j as shown in the response to part j. The "total rent" has no role in this analysis as explained in the response to

OCA/USPS-T24-45a. The calculation can be done using either the average of postal rental costs, as in my testimony, or the ratio of total rent dollars to total square feet, as suggested by the OCA. The former method is superior, as indicated in the response to OCA/USPS-T24-44f.

[iv] See response to part j.

q. Not confirmed. "c" is a single constant that is used to satisfy but one constraint. The correct interpretation of "c" is given in the response to USPS/OCA-T24-45d.

The line of reasoning pursued in this interrogatory becomes a mathematical formalism about halfway through. In particular, it loses meaning at part j, when the average rent (which applies to a subset of facilities) is multiplied by the equivalent capacity (of all facilities), and the result interpreted as the "cost of space." (This statement is true whether the average rent is calculated as the average of postal rental rates, as in my testimony, or as the ratio of total rent dollars to total facility square feet as suggested by the OCA.)

This contrasts with the allocation method used in my testimony. We use the average rent and the equivalent capacity only to determine the relative amounts (percentages) to be allocated to different box sizes and fee groups. There are three conditions satisfied by the approach used:

- (1) Space provision costs are proportional to average rent.

- (2) Space provision costs are proportional to equivalent capacity.
- (3) Total space provision costs are equal to a specified total.

The assumptions and methodology used in my testimony have been applied since Docket No. R90-1. They result in a fair and equitable allocation of space provision costs.

DECLARATION

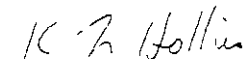
I, Paul M. Lion, declare under penalty of perjury that the foregoing answers are true and correct, to the best of my knowledge, information, and belief.

Paul M Lion

Dated: 8/20/97

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.



Kenneth N. Hollies

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August 20, 1997