

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

POSTAL RATE AND FEE CHANGES

Docket No. R2006-1

RESPONSE OF THE UNITED STATES POSTAL SERVICE WITNESS BOZZO TO
INTERROGATORIES OF VALPAK DIRECT MARKETING SYSTEMS, INC. AND
VALPAK DEALERS' ASSOCIATION, INC. (VP/USPS-T12-1-7)
(May 26, 2006)

The United States Postal Service hereby provides the responses of Witness Bozzo (USPS-T-12) to the following interrogatories of Valpak Direct Marketing Systems, Inc. and Valpak Dealers' Association, Inc.: VP/USPS-T12-1-7, filed on May 12, 2006.

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

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.
Chief Counsel, Ratemaking

Frank R. Heselton

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 268-5204; Fax: -6187

Response of United States Postal Service Witness A. Thomas Bozzo
To Interrogatories of Valpak Direct Marketing Systems, Inc., and Valpak Dealers'
Association, Inc.

VP/USPS-T12-1. Please refer to your testimony at page 1, lines 3-8, wherein you state that “[t]he purpose of this testimony is to present the econometric estimate of volume-variability factors ... for a group of ‘Function 1’ mail processing labor cost pools representing letter, flat, bundle, and parcel sorting operations at facilities that report data to the Management Operating Data System (MODS).”

- a. For all cost pools included in your database, please identify each cost pool in which bundles of letters only are sorted.
- b. For all cost pools included in your database, please identify each cost pool in which bundles of flats only are sorted.
- c. For all cost pools included in your database, please identify each cost pool in which bundles of both flats and letters are sorted.

Response.

- a. None of the cost pools covered by my econometric analysis only sort letter bundles.
- b.-c. Flat bundles are sorted in the SPBS cost pool group. The SPBS operations also are used to sort non-bundled mailpieces. Except for Cancellation, the remaining cost pools analyzed are piece sorting operations.

Response of United States Postal Service Witness A. Thomas Bozzo
To Interrogatories of Valpak Direct Marketing Systems, Inc., and Valpak Dealers'
Association, Inc.

VP/USPS-T12-2.

- a. Please refer to your testimony at page 3, Table 1. Do the MODS cost pools shown in Table 1 represent a comprehensive listing of all cost pools used in your study? If not, please provide a complete list of all other cost pools that you analyzed.
- b. Please explain whether the 11 cost pools (including "Composite") in Table 1 were analyzed at the level of detail shown, or whether the cost pools were analyzed in a finer level of detail and then aggregated to the level of detail shown in Table 1 (aside from the disaggregation into outgoing and incoming cost pools for D/BCS and AFSM discussed at pages 6-7 of your testimony).
- c. If the cost pools shown in Table 1 were analyzed at a finer level of detail and then aggregated as shown in Table 1, please indicate all the components within each cost pool that were subjected to separate analysis.

Response.

- a. Yes.
- b. Apart from the D/BCS and AFSM cost pools, the cost pools shown in Table 1 represent the level of aggregation of MODS operations used in the results of the econometric analysis that I recommend for use in the BY 2005 CRA.
- c. Not applicable.

Response of United States Postal Service Witness A. Thomas Bozzo
To Interrogatories of Valpak Direct Marketing Systems, Inc., and Valpak Dealers'
Association, Inc.

VP/USPS-T12-3. Please refer to your testimony at page 3, Table 1.

- a. For the OCR cost pool, please: (i) indicate each type of mail by shape (i.e., letters, flats, parcels) that is handled in the OCR cost pool; and (ii) indicate the percentage of each type or shape of mail processed in the OCR cost pool.
- b. For the Cancellation cost pool, please: (i) indicate each type of mail by shape (i.e., letters, flats, parcels) that is handled in the Cancellation cost pool; (ii) indicate the percentage of each type processed in the Cancellation cost pool; and (iii) explain briefly what activities are performed in the Cancellation cost pool.
- c. For the 11 cost pools shown in Table 1, please indicate each one that involves sorting of bundles.
- d. If mail processing cost for sorting bundles is incurred in any cost pool other than the cost pools shown in Table 1, please indicate each any every other cost pool where mail processing costs for such bundle sortation are incurred.

Response.

- a. The MLOCR equipment used in the OCR cost pool processes card- and letter-shape pieces. The OCR cost pool primarily handles letters that are not prebarcoded and not processed on AFCS equipment with image lift capabilities. Please see USPS-T-12 at 15; USPS-T-42 at 4-5. My understanding is that the OCR cost pool also is used, to a much lesser extent, to apply correct barcodes to some pieces to which incorrect or unreadable barcodes previously had been applied either by the mailer or by Postal Service equipment.
- b. Please see witness McCrery's response to VP/USPS-T42-7.
- c. Please see the response to VP/USPS-T12-1.
- d. My understanding is that bundle sorting occurs in several cost pools in addition to those covered by my econometric analysis: the MODS opening unit and pouching cost pools (1OPPREF, 1OPBULK, 1POUCHNG), the BMC SPB and OTH cost pools, and the non-MODS (Post Office/Station/Branch) Allied cost pool.

Response of United States Postal Service Witness A. Thomas Bozzo
To Interrogatories of Valpak Direct Marketing Systems, Inc., and Valpak Dealers'
Association, Inc.

VP/USPS-T12-4. Table 1 at page 3 of your testimony indicates that the volume variability of all MODS mail processing cost pools except AFSM 100 is somewhat less than one. The fact that you recommend use of these volume variabilities seemingly would indicate your belief that these results are statistically significant.

- a. On the basis of this study, is it your assertion that mail processing is subject to economies of scale? Please explain the basis for your answer.
- b. Do you conclude from your study that the Postal Service's unit cost of sorting letters in large facilities is less than the unit volume variable labor mail processing cost of sorting letters in smaller facilities? If so, please explain the basis for your conclusion.

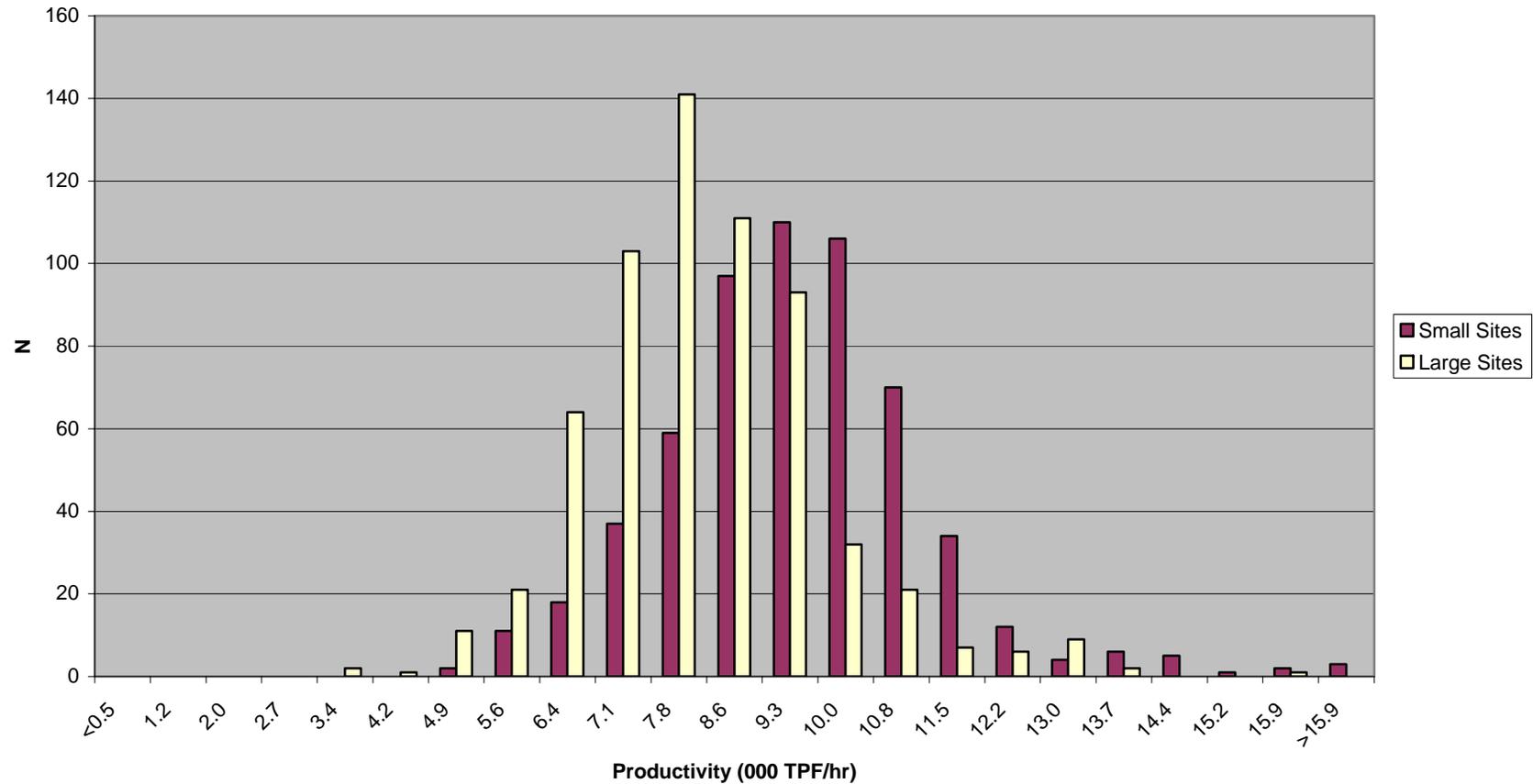
Response.

- a. Not exactly. My results imply that there are, in most cases, economies of "density" in the mail processing operations I analyzed. See, e.g., D. Caves, L. Christensen, M. Tretheway, "Economies of Density Versus Economies of Scale: Why Trunk and Local Service Airlines Differ," *Rand Journal of Economics*, Winter 1984, for additional discussion of the distinction. Please see also Docket No. R2000-1, USPS-T-15 at 47-49; 64-65.
- b. Not in general. It is a stylized fact that mail processing operations at "large" facilities have lower productivities, on average, than similar operations at "small" facilities. However, there is sufficient within-group productivity variation that there are "large" facilities with higher productivity operations than most "small" facilities. See, for instance, the histogram of D/BCS productivities provided as Attachment 1 to this response, where "small" sites are defined as having below-median delivery points prior to data screening. The demonstrated existence of significant facility-specific cost-causing factors implies that the productivity variations are due in large part to factors other than volumes (workloads).

Response of United States Postal Service Witness A. Thomas Bozzo
 To Interrogatories of Valpak Direct Marketing Systems, Inc., and Valpak Dealers' Association, Inc.

Attachment 1, Response to VP/USPS-T12-4(b)

Incoming D/BCS Productivity Distributions, FY2005 Quarterly Data, by Small and Large Sites
 (Source: USPS-LR-L-56, vv9905.xls)



Response of United States Postal Service Witness A. Thomas Bozzo
To Interrogatories of Valpak Direct Marketing Systems, Inc., and Valpak Dealers'
Association, Inc.

VP/USPS-T12-5.

- a. Does your model contain any variable (or variables) that indicates facility size, and that might enable analysis of how unit volume variable labor mail processing cost varies with facility size, either by cost pool or in aggregate?
- b. If your answer to preceding part a is affirmative, please indicate each such variable, and then, regardless of whether you actually have done any such analysis, explain what insight could be enabled with respect to how unit volume variable labor cost for mail processing operations varies with facility size.

Response.

- a. Yes.
- b. My models contain two variables (in addition to piece handlings) that may be viewed as indicators of facility size: delivery points in the facility's service territory (DPT) and a capital input measure (QIAHE or QIMHE, depending on the cost pool). Variables such as these might, in principle, be used to determine the extent to which average productivities and output elasticities—both are needed to investigate how facility size might affect marginal productivities and hence unit volume-variable (marginal) costs—vary by facility size, for instance by creating subsample groups by facility size.

Response of United States Postal Service Witness A. Thomas Bozzo
To Interrogatories of Valpak Direct Marketing Systems, Inc., and Valpak Dealers'
Association, Inc.

VP/USPS-T12-6.

- a. During the course of your study, did you make any attempt to develop the volume variability of mail processing costs for facilities of different sizes, either by cost pool or in aggregate?
- b. On the basis of your study of the volume variability of mail processing costs, are you able to make any determination, or derive any inference, as to whether volume variability of mail processing costs, or individual cost pools, differs as between smaller and larger facilities? If so, please state how volume variability differs by facility size, and explain the basis for your statements.

Response.

- a. No, the purpose of my analysis was to estimate systemwide elasticities applicable to entire mail processing cost pools.
- b. The translog models I recommend for automated sorting operations include higher-order terms (squared TPF or TPH and interactions between TPF or TPH and other variables), the effect of which is that the translog-based volume-variability factors (output elasticities) depend on the variables mentioned in the response to VP/USPS-T12-5(b). The detailed econometric output in USPS-LR-L-56 shows the coefficients on those terms to be small, which implies that variabilities generally should not differ greatly between large and small facility groups.

Intuitively, a plant serving 750,000 delivery points will have many more scheme changes than a plant serving 150,000 delivery points, and the former plant will also tend to have greater sorting volumes. As a result, the two plants may not differ very much in the extent to which non-volume-variable scheme change costs are spread over their volumes. Consequently, both sizes of plants may have similar

Response of United States Postal Service Witness A. Thomas Bozzo
To Interrogatories of Valpak Direct Marketing Systems, Inc., and Valpak Dealers'
Association, Inc.

opportunities to achieve economies of density—e.g., by processing more mail to their respective (existing) delivery networks.

Response of United States Postal Service Witness A. Thomas Bozzo
To Interrogatories of Valpak Direct Marketing Systems, Inc., and Valpak Dealers'
Association, Inc.

VP/USPS-T12-7. Please refer to your testimony in Docket No. R2005-1 (USPS-T-12), page 9, lines 12-15, where you state that “the utility of employing the factor demand function approach, as opposed to directly estimating the cost function, is that ... labor cost is not available at the cost pool level.”

- a. Is labor cost available at the facility level?
- b. If your response to preceding part a is affirmative, to what extent is labor cost at the facility level available in sufficient detail to study unit mail processing cost by size of facility?
- c. Could study of such costs be a useful way to develop insights or inferences concerning whether postal facilities do in fact exhibit economies of scale?

Response.

- a. Yes.
- b. Labor cost (as opposed to workhour) data are not available at appropriate levels of operational detail. The finest levels at which labor cost data are available—Labor Distribution Codes, or LDCs—involve the aggregation of operations, including operations from different shape-based mailstreams in certain LDCs, that should be separated for analytical purposes.
- c. While an analysis of the available facility-level labor cost data cannot be said to be “useless,” such an analysis would conceptually be of no greater utility than an analysis based on workhour data.