## UNITED STATES OF AMERICA Before The POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001

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

## ANSWERS OF THE OFFICE OF THE CONSUMER ADVOCATE TO INTERROGATORIES OF UNITED STATES POSTAL SERVICE WITNESS: J. EDWARD SMITH (USPS/OCA-T4-52-53) (July 11, 2000)

The Office of the Consumer Advocate hereby submits the answers of J. Edward

Smith to interrogatories of United States Postal Service, dated June 27, 2000. Each

interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

OFFICE OF THE CONSUMER ADVOCATE

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USPS/OCA-T4-52. Please refer to your response to USPS/OCA-T4-28(b). In OCA-T-4, do you enumerate the "unrealistic assumptions" upon which you believe the fixed effects model is based? If so, please provide detailed citations to the relevant sections of your testimony. If not, please do so.

RESPONSE TO USPS/OCA-T4-52. In the case of an improperly specified model, please see line 1 at 29 through line 10 at 30; also see line 12 at 45 through line 18 at 46; also see pages 58 through 65.

The lack of variables is discussed at lines 16-18 at 19; and line 13 at 34 through line 2 at 37.

Theoretical problems are enumerated on line 21 at 18 through line 18 at 19; also

line 3 at 38 through line 6 at 40; lines 1-12 at 47; lines 14-19 at 51; page 52 through 54.

Problems associated with the short-run analysis include lines 8-16 at 18; and lines 7-13 at 42.

Data Issues are discussed on lines 17-20 at 18; pages 23 through 25; line 11 at 30 through line 2 at 37; line 8 at 43 through line 11 at 45; line 16 at 52 through line 38 at 53.

At a number of points, I have indicated that the study does not meet the Commission's standards. Guidance on these issues was provided in Appendix F, "Appendices to Opinion and Recommended Decision," Volume 2, Docket No. R97-1. For example, the Commission noted that "a fixed-effect is by definition, fixed for all time for a given facility. It can only control for differences across facilities that are constant for all time." (App. F at 10). The Commission had been critical of Dr. Bradley's

approach; I do not see any significant difference in the fixed effects concept between Dr. Bradley and Dr. Bozzo.

The Commission indicated that an estimation procedure relying on the crosssectional dimension of the panel data set is preferable to the fixed-effect estimator. (App. F at 14). The Commission indicated that the fixed-effect estimator attempts to estimate a short-run relationship between mail volume and costs that is inconsistent with the Postal Service's operating plan over the rate cycle.

The Commission also indicated that by holding the number and size of facilities as fixed, elasticities are flawed because they do not correctly represent the variability of mail processing labor costs for the entire postal system.

The Commission also discussed the volume variability of the manual ratio (App. F at 35). Dr. Bozzo continues to use the manual ratio. A similar argument could be made for the investment variable introduced by Dr. Bozzo.

USPS/OCA-T4-53. Please refer to your response to USPS/OCA-T4-31.

- a. In your response to USPS/OCA-T4-31(b), item (ii), you indicate that you disagree with the statement enumerated in your response to USPS/OCA-31(a), item (ii) ("Dr. Bozzo maintains that it is not possible to classify all equipment at a site by cost pool."). You subsequently state, "Since some classification may appear to be arbitrary, it would be necessary to determine whether such a classification yields the best answer. However, a correctly performed analysis might not require the division of jointly shared equipment at a site by cost pool." Does your response imply that to classify all equipment at a site by cost pool, it would be necessary either to assign some equipment types to cost pools arbitrarily, or to assign some equipment to a separate pool for "jointly shared equipment"? If not, please explain.
- b. Please confirm that, in your response to USPS/OCA-T4-31(a), item (vi), your citation to Dr. Bozzo's response to UPS/USPS-T1 5-24 is, more specifically, to Dr. Bozzo's statement, "The effect of including the facility capital index is to capture the net effect on labor demand in a given cost pool of the capital services employed in that cost pool as well as the capital services employed in other cost pools" (Tr. 15/6399). If you do not confirm, please explain.

RESPONSE TO USPS/OCA-T4-53. (a) My answer to the first part of your

compound question is no. Arbitrary cost allocations are highly inappropriate. My answer to the second part of the question concerning a separate pool for "jointly shared equipment" is that the concept of "jointly shared equipment" is irrelevant in the single activity modeling being used by Dr. Bozzo and used previously by Dr. Bradley. Both parts of the question illustrate issues inadequately addressed by Dr. Bozzo, and in arriving at a conclusion on variability, one should consider, and probably adopt, some type of joint production analysis. It appears to make little sense to study separately activities that are joint in nature. For example, the manual ratio is computed on data from a number of activities, indicating that Dr. Bozzo and Dr. Bradley both believe that capital is a key variable and that there are elements of joint production. Accordingly, a joint production analysis should be considered.

(b) Confirmed.

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#### DECLARATION

I, J. Edward Smith, declare under penalty of perjury that the answers to interrogatories USPS/OCA-T4-52-53 of the United States Postal Service are true and correct, to the best of my knowledge, information and belief.

Executed July 11, 200

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J. Ecteval Smith

#### CERTIFICATE OF SERVICE

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

Rephanie S. Cefaelace TEPHANIE S. WALACE

Washington, D.C. 20268-0001 July 11, 2000