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

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-T4-44-48) (June 30, 2000)

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

Edward Smith to interrogatories of United States Postal Service, dated June 19,

2000. Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

OFFICE OF THE CONSUMER ADVOCATE

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TED P. GERARDEN Director Office of the Consumer Advocate

KENNETH E. RICHARDSON Attorney

1333 H Street, N.W. Washington, D.C. 20268-0001 (202) 789-6859; Fax (202) 789-6819

USPS/OCA-T4-44. Please confirm that panel data, by definition, have both cross-section and time series dimensions. If you do not confirm, please explain fully.

RESPONSE TO USPS/OCA-T4-44. Confirmed.

USPS/OCA-T4-45. Please refer to your testimony at page 40, lines 10-12. You state, "The concepts of the short run and the long run are clear from the viewpoint of theoretical economics. In the *short run*, some of the factors of production (for example, labor) are variable. In the *long run*, all of the factors of production are variable [emphasis in original]." Please consider a period of time over which some the factors of production are not variable. Please confirm that, "from the viewpoint of theoretical economics," such a period of time would correspond to the economic concept of the short run, regardless of the amount of calendar time involved. If you do not confirm, please reconcile your answer with the statement from your testimony quoted above.

RESPONSE TO USPS/OCA-T4-45. Confirmed on a theoretical basis.

USPS/OCA-T4-46. Please refer to your testimony at page 57, line 3. Please provide a precise definition of the term "total cost" as you use it in the cited location.

RESPONSE TO USPS/OCA-T4-46. At page 57, line 3, of my testimony, the term "total cost" means total mail processing cost which is measured in labor hours. Confusion results from the terminology associated with the estimating process. Dr. Bradley uses the term "total cost" in estimating cost equations. With essentially the same approach, Dr. Bozzo indicates he is estimating a labor demand function.

USPS/OCA-T4-47. Please refer to your testimony at page 63, lines 11-13. You state, "Figure 5 has two types of plots in it. The facility by facility plots (labeled 'Plant A' and 'Plant B') are the types of plots that both Dr. Bradley and Dr. Bozzo generate and estimate."

- a. Please provide detailed citation(s) to Dr. Bozzo's testimony, USPS-T-15, or USPS-LR-I-107, indicating the basis for your statement that Dr. Bozzo generates "facility by facility plots."
- b. What, precisely, do you mean by your statement that Dr. Bozzo's estimates 'facility by facility plots'? Specifically, does your statement indicate that you believe Dr. Bozzo's estimation methods are equivalent to estimating regression models separately for each facility? Please explain fully.

RESPONSE TO USPS/OCA-T4-47. (a) Please refer to pages 6 and 7 of *Analysis of Panel Data* by Cheng Hsiao. In performing the fixed effects estimation procedure in the TSP program, Dr. Bozzo obtains different alpha intercepts for each of the mail processing units. A graphical representation of Dr. Bozzo's the work could be represented by Figure 1.1 on page 7. It is in this sense that there are plots of data; strictly speaking, there are no physical plots presented.

(b) Dr. Bozzo estimates his model using the fixed effects approach; this is

not equivalent to estimating regression models separately for each facility.

USPS/OCA-T4-48. Please indicate the basis for your statement at page 63. line 17, "The mail-processing network consists of over 300 plants."

RESPONSE TO USPS/OCA-T4-48. In UPS/USPS-T-15-25 you will find reference to their being 321 sites in the analysis, and information was subsequently furnished in LR-I-286.

DECLARATION

I, J. Edward Smith, declare under penalty of perjury that the answers to interrogatories USPS/OCA-T4-44-48 of the United States Postal Service are true and correct, to the best of my knowledge, information and belief.

Executed ferre 30, 2000

J E Carl 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.

Janet E ferhards e

KENNETH E. RICHARDSON

Washington, D.C. 20268-0001 June 30, 2000