USPS-T-4

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

POSTAL RATE AND FEE CHANGES, 2001   :   Docket No. R2001-1

DIRECT TESTIMONY
OF
HERBERT B. HUNTER III
ON BEHALF OF
UNITED STATES POSTAL SERVICE

USPS-T-4

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DIRECT TESTIMONY
OF
HERBERT B. HUNTER III

1   <u>AUTOBIOGRAPHICAL SKETCH</u>

2   My name is Herbert B. Hunter III. I am an Operations Research Analyst at the

3   Postal Service headquarters in Washington, D.C. I began my career with the Postal

4   Service in 1972 and have been employed in Finance at headquarters since 1983.

5   In my present position in Revenue, Volume and Performance Measurement,

6   Finance, and in my previous positions at headquarters serving as a Senior

7   Mathematical Statistician, Operations Research Analyst, and Statistician in the Office

8   of Revenue and Cost Systems, my primary responsibilities have included the design,

9   development, and oversight of statistical surveys, improved data measurement

10 methodologies, and data reporting systems used by the Postal Service to produce

11 estimates of revenue and volume totals, costs, and service performance. I have

12 appeared as a witness on behalf of the Postal Service in Docket Nos. R2000-1 and

13 MC96-2, and I have provided technical support to Postal Service cost, roll forward,

14 and revenue and volume model witnesses in Docket Nos. R97-1, R94-1, R90-1, R87-

15 1, and R84-1.

16   I received a Bachelor of Science degree in mathematics from George Mason

17 University in Virginia in 1984. My education includes additional graduate courses in

18 applied statistics at George Mason University and at the George Washington

19 University in Washington, D.C. I am a member of the American Statistical

20 Association.

1 I.   PURPOSE AND SCOPE OF TESTIMONY

2   The purpose of my testimony is to describe the construction of the Postal

3 Service's estimates of revenue, pieces, and weight (RPW) totals for the categories of

4 mail captured under the Bulk Mail Revenue, Pieces and Weight System (BRPW) for

5 Fiscal Year (FY) 2000. My testimony, together with that of Witness Pafford's, USPS-

6 T-3, covering estimates generated under the Domestic Revenue, Pieces and Weight

7 System (DRPW) and the Revenue, Pieces and Weight Adjustment System (ARPW),

8 completely determine the estimates of revenue, volume, and weight totals for the

9 base year underlying the Postal Service's Request. My testimony covers the general

10 design of the BRPW and it includes estimates of statistical reliability for the estimates

11 of RPW totals provided in my tables.

12   My testimony is divided into three sections as follows: Section II provides a

13 general description of the RPW estimation process, Section III describes the scope of

14 the BRPW model itself, and Section IV outlines the preparation and final construction

15 of the BRPW estimates of revenue, volume, and weight totals. Tables 1-3 of my

16 testimony show the combined BRPW and DRPW estimates of revenue, volume, and

17 weight totals along with their estimates of precision.

18   Library Reference USPS-LR-J-18 updates the BRPW computer system

19 documentation, source code listings, and machine-readable code previously provided

20 in USPS-LR-I-25/R2000-1. Library References USPS-LR-J-19 and USPS-LR-J-20

21 update the BRPW statistical system documentation and variance estimation

22 documentation, including source code listing and machine readable code, previously

23 provided in USPS-LR-I-26/R2000-1 and USPS-LR-I-28/R2000-1, respectively.

1

2   II.   <u>ESTIMATION OF REVENUE, VOLUME AND WEIGHT</u>

3   The Postal Service's revenue accounting system contains several postage

4   based revenue accounts that are directly associated with specific classes or

5   subclasses of mail; however, other revenue accounts in this system do not map

6   directly to specific mail classes or subclasses. Additionally, the revenue accounts do

7   not provide volume information. As a result, the Postal Service supplements its

8   revenue accounting information with revenue and volume data obtained from two

9   major statistical sampling systems: the probability-based sampling system known as

10   DRPW, and the combined revenue accounting and bulk mailing postage statement-

11   based system known as BRPW. My testimony discusses the BRPW component of

12   this process.

13

14   III.   <u>BULK MAIL REVENUE, PIECES AND WEIGHT SYSTEM (BRPW)</u>

15   The BRPW provides estimates of revenue and volume totals for the bulk mail

16   categories that have corresponding postage revenue accounts in the Postal Service's

17   revenue accounting system. The BRPW also reports estimates of revenue and

18   volume totals for other bulk mail categories for which revenue and volume data can

19   be obtained from bulk mailing postage statements. For the FY 2000 period, revenue

20   and volume totals are estimated under the BRPW for the following bulk mail

21   categories: First-Class Mail, permit imprint Priority Mail, Periodicals, Nonprofit and

22   Regular Standard Mail, and permit imprint Parcel Post and Bound Printed Matter

23   (BPM) Standard Mail. The postage totals obtained from the following Account

1   Identifier Code (AIC) sub-accounts reported in the revenue accounts system are

2   used in the BRPW: AIC 121 for permit imprint First-Class Mail, AIC 237 for permit

3   imprint Priority Mail, AIC 135 and AIC 224 for Periodicals, AIC 125 and AIC 130 for

4   permit imprint Nonprofit and Regular Standard Mail, respectively, and AIC 131 and

5   AIC 223 for permit imprint BPM and Parcel Post Standard Mail, respectively.

6   Because these revenue accounts do not provide rate category detail and volume

7   information, and they do not represent all bulk mail categories, the BRPW captures

8   mailpiece information from postage statements obtained from a panel of post offices.

9   The panel consists of an automated office component comprised of offices under the

10   PERMIT SYSTEM, an automated bulk mail acceptance and financial reporting

11   system, and a supplemental probability based sample of non-automated post offices.

12   An ongoing census of the panel is taken in which the member offices report their

13   postage statement information each postal accounting period. The PERMIT System

14   is documented in Library References USPS-LR-J-24 through USPS-LR-J-28.

15   Revenue and volume data are captured under the BRPW for Base Year 2000

16   from the following postage statement series: PS Form 3600 for First-Class Mail and

17   Priority Mail, PS Form 3541 for Periodicals, PS Form 3602 for Nonprofit and Regular

18   Standard Mail, and PS Form 3605 for BPM and Parcel Post Standard Mail.   A copy

19   of each type of postage statement is provided in Appendix A of USPS-LR-J-19.

20   For the bulk mail categories of First-Class Mail, Periodicals, and Nonprofit and

21   Regular Standard Mail, the BRPW estimates of revenue and volume totals comprise

22   the Postal Service's final estimates. For the bulk mail categories of Priority Mail,

23   BPM, and Parcel Post, the estimates of revenue and volume totals are developed

1   separately for the permit imprint and postage affixed indicia components under the

2   BRPW and DRPW, respectively.

3   The revenue account postage totals and the postage statement revenue and

4   volume information obtained from the panel are combined in the BRPW jobstream to

5   produce the estimates of revenue and volume totals each postal quarter (PQ).

6   These PQ based estimates are summed to obtain the estimates of totals for the

7   Postal Fiscal Year (PFY).   The PFY estimates are in turn adjusted to coincide with

8   the Government Fiscal Year (GFY) upon their input to the ARPW model. The BRPW

9   data processing and reporting procedures, and the BRPW sample design, including

10   estimator methodology, are described in USPS-LR-J-18 and USPS-LR-J-19,

11   respectively. The ARPW is documented in Library Reference USPS-LR-J-21.

12

13   IV.   PREPARATION OF REVENUE, PIECES AND WEIGHT ESTIMATES

14   The BRPW and DRPW estimates of revenue and volume totals are combined

15   with other data in the ARPW model to produce the final estimates for the base year

16   as shown in Tables 1-3 of my testimony. Because the Postal Service's statistical

17   systems are PFY based, a final adjustment is made to the estimates for the PQ1 and

18   PQ4 periods. The resultant estimates of revenue and volume totals are reported by

19   mail category for the GFY 2000 period in Tables 1-3. Estimates of the coefficient of

20   variation (C.V.), expressed as a percentage, and the upper and lower 95%

21   confidence limits for the estimates of totals are provided in the tables. For each

22   estimate of total, the tables also identify the source: BRPW, DRPW or combined

23   systems (both). For example, the estimate of volume total for Bound Printed Matter

1   shown in Table 2 is obtained from the sum of the BRPW estimate of permit imprint

2   volume, the DRPW estimate of postage affixed volume, and any official mail (U.S.

3   government agency and congressional franked) volume.