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

POSTAL RATE AND FEE CHANGES  
PURSUANT TO PUBLIC LAW 108-18

Docket No. R2005-1

DIRECT TESTIMONY  
OF  
PETER BERNSTEIN  
ON BEHALF OF THE  
UNITED STATES POSTAL SERVICE

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AUTOBIOGRAPHICAL SKETCH

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My name is Peter Bernstein. I am vice-president of RCF Economic and Financial Consulting, Inc., where I have been employed since 1992. As vice-president, I have major responsibilities in forecasting, econometrics, and quantitative analysis activities. In R2001-1, I submitted testimony discussing the impacts of technological alternatives on mail volume. I have also submitted testimony on Ramsey pricing in R97-1, R2000-1, and R2001-1 and volume testimony in the MC97-2 parcel classification reform case. I have assisted Dr. George Tolley, President of RCF, in the development of his testimony for Dockets R94-1, MC95-1, MC96-2, R97-1, R2000-1, and R2001-1.

In addition to my responsibilities at RCF, I have been a faculty member of the department of economics at DePaul University of Chicago since 1992, where I have taught courses in economics, finance, and econometrics. I was a faculty member of the department of economics at Loyola University of Chicago from 1987 to 1991, and also taught classes at the University of Chicago Graduate School of Business in 1987.

In 1985, I earned a Masters Degree in Finance and Economics from the University of Chicago Graduate School of Business and I have completed all course work and examinations toward a Ph.D. from the University of Chicago. I received a B.A. in Economics from the University of Chicago in 1981.

**PURPOSE AND SCOPE OF TESTIMONY**

1  
2       This testimony discusses recent developments in the markets in which various  
3 postal products operate. The purpose of this testimony is to provide support for the  
4 analyses underlying the Postal Service’s volume forecasts in this case, and explain the  
5 overall approach to the Postal Service’s forecasting process. It both complements and  
6 supplements the testimony of Thomas Thress (USPS-T-7). This testimony reviews the  
7 volumes of different mail products and discusses factors explaining trends in mail  
8 volume, and provides data supporting the underlying analysis. Much of the focus of this  
9 testimony is on recent developments affecting the mail and on the recent impact of key  
10 variables on mail volume. This testimony also presents before and after-rates volume  
11 forecasts taken from Attachment A of the testimony of witness Thress.

## 1 I. INTRODUCTION

### 2 A. Trends in Mail Volume

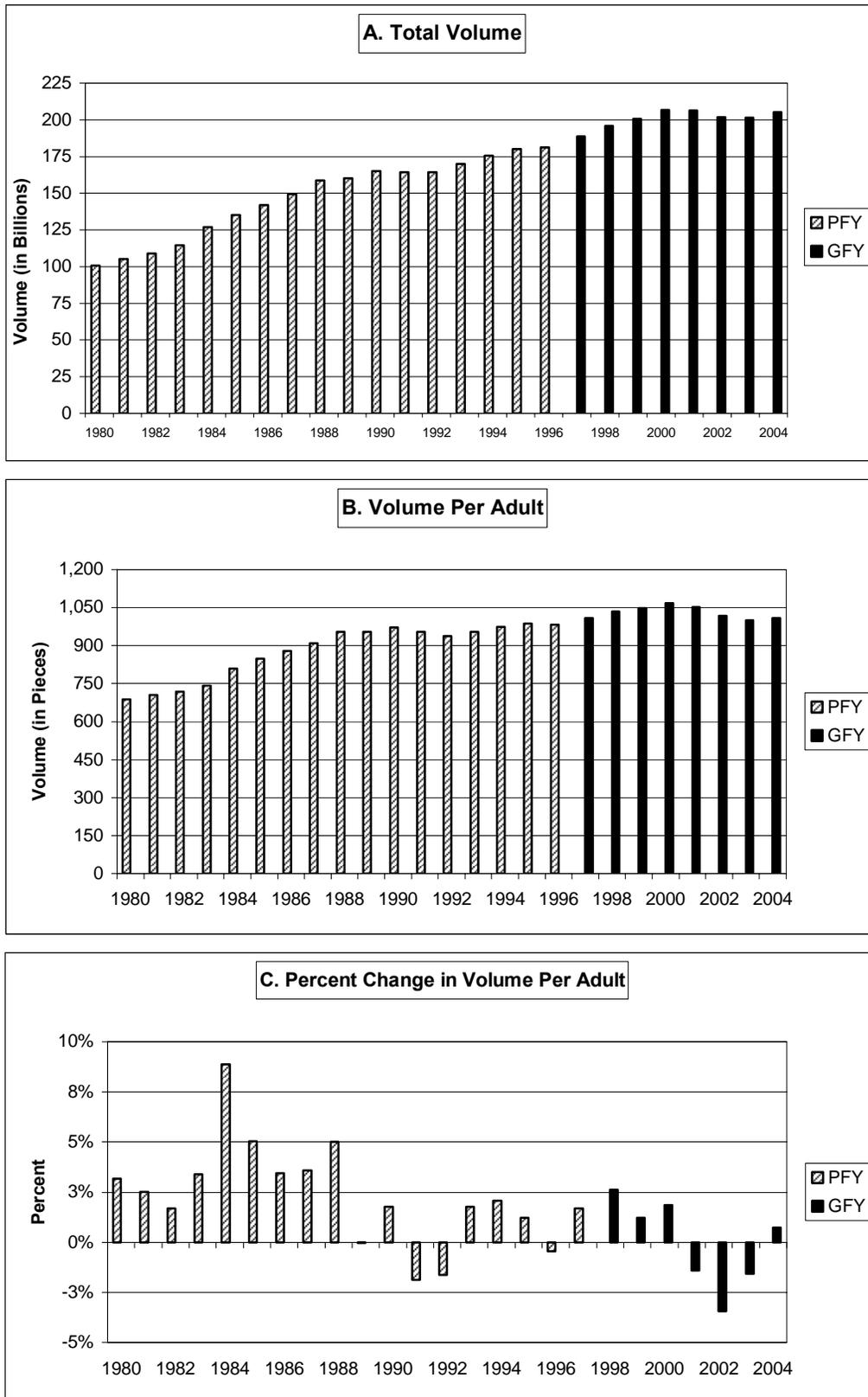
3 Figure 1 presents the history of total domestic mail volume from 1980 through  
4 2004. Volumes are presented in government fiscal years (GFY) beginning in 1997 and  
5 52-week postal fiscal years (PFY) from 1980 through 1996. Within Figure 1, section A  
6 presents total volume, section B presents volume per adult, and section C presents  
7 annual percent changes in volume per adult.

8 The total volume of domestic mail handled by the U.S. Postal Service in GFY  
9 2004 was 205.3 billion pieces, about 1.5 billion pieces below the 206.8 billion pieces  
10 handled in 2000. Despite this recent decline, total mail volume has more than doubled  
11 from the 100.6 billion pieces handled in 1980.

12 Increasing population explains much of the growth in mail volume. Adults are  
13 responsible for the generation of mail, by either sending mail or being targeted as the  
14 recipients of mail. Adult population as measured by persons 22 years of age or older  
15 rose nearly 40 percent between 1980 and 2004. Population growth has been a  
16 relatively steady influence. The rate of growth of the adult population has typically been  
17 about one percent per year.

18 The influence of population is separated out by comparing sections A and B in  
19 Figure 1. Section A shows total mail volume from 1980 to 2004, revealing the general  
20 upward trend in mail volumes. Section B shows volume per adult, reflecting influences  
21 other than adult population. It reveals a more varied situation. Starting at 689 pieces  
22 per adult in 1980, pieces per adult rose steadily to nearly 972 in 1990, an increase of  
23 over 40 percent. Volume per adult then dropped slightly over the next two years, but  
24 rose again to reach a peak of 1,068 pieces in 2000. Pieces per adult dropped each  
25 year thereafter until rising to 1,008 pieces in 2004. Between 1980 and 2004, pieces per  
26 adult rose by 46 percent.

**Figure 1**  
**Total Domestic Mail Volume History**



1 Section C of Figure 1 shows annual percentage changes in volume per adult.

2 Following the 1981-1982 recession, volume per adult increased consistently for most of  
3 the 1980s, including a more than eight percent increase in 1984. Since then, the record  
4 has been mixed, with volume per adult growing in more years than it has declined.  
5 However, volume per adult declined in 2001, 2002, and 2003, and increased less than  
6 one percent in 2004. As a result, volume per adult in 2004 was almost six percent  
7 below its peak level of 2000.

8 The years since 2000 included a number of events which have had adverse  
9 impacts on mail volume. The recession of 2001 and slow economic recovery of 2002  
10 no doubt contributed to declines in mail volume. This was especially true for Standard  
11 Mail, which was harmed by the severe advertising slump of 2001 and 2002.

12 The 9/11 terrorist attacks and the subsequent sending of anthrax through the mail in the  
13 fall of 2001 also negatively impacted the mail. Beyond the obvious tragedy of those  
14 events, mail service was disrupted for several days following 9/11, and the nation's  
15 willingness to send and view mail was harmed by the biological attack conducted  
16 through the mail system.

17 Postal rate increases following the R2000-1 and R2001-1 rate cases also had  
18 negative impacts on total mail volume since 2000. Finally, the volumes of several mail  
19 products, most notably First-Class single-piece letters, but also workshared letters and  
20 Periodicals Mail, have been adversely affected by the growing use of the Internet and  
21 other technologies that have created alternatives to the use of the mail.

22 These myriad events, all occurring over a matter of a few years, have greatly  
23 complicated the mail volume forecasting task. Careful analysis of the evidence is  
24 required to distinguish between those factors which have had only temporary impacts  
25 on the volumes of different mail categories and those factors that reflect changes to the  
26 long-standing historical trends in mail volume present in Figure 1.

## **B. Overview of Forecast Approach**

### **1. Analysis of the Volume History**

The forecasts presented in this case are based on a thorough understanding of the past history of mail volumes. The view is that understanding past changes in mail volume forms the best basis for projecting future volumes. To that end, each mail product forecast is preceded by a review of the product's volume history. Three measures of volume are examined: total volume, volume per adult, and percent changes in volume per adult. The data shown in this testimony are annual, but the forecast approach used by Thomas Thress (USPS-T-7) employs quarterly volume data.

Typically, mail volumes go through visible variations through history. The process for modeling these variations and producing forecasts begins with identifying factors which explain these variations. Population, economic activity, and postal rates are factors that traditionally explain much of the volume history. As population increases, the number of potential senders and recipients of mail increases as well. Population increases are closely related to increases in the number of households, which also act to increase mail volume. Changes in economic activity can explain variations in volume, as well. Mail volumes can be expected to be positively affected by periods of economic growth and adversely affected by periods of economic decline. Postal rates are a third factor that affect mail volumes. Increases in postal rates can be expected to depress mail volumes, and periods during which postal rates are constant can be expected to support volumes because of the decline in real (inflation-adjusted) prices.

Beyond population, economic activity, and postal rates, other factors also explain changes in mail volume. Much of this testimony focuses on developments in the markets in which different postal products operate and the impacts of these developments on mail volumes. First-Class Mail volume, for example, has been

1 adversely affected by use of the Internet and other technological alternatives to the mail.  
2 Periodicals Mail volumes have also been negatively affected by these developments as  
3 well as by longer-term demographic changes. Standard Mail volumes are affected by  
4 the costs of sending direct mail, the costs of competing advertising media, and by  
5 developments in the advertising industry. The volumes of the various other postal  
6 products are affected by the prices and market activities of competing services.

## 7 **2. Use of Econometric Evidence**

8 Once the factors that have influenced mail volumes are identified, the next step  
9 in the forecast approach is to quantify the impacts that each factor has had on mail  
10 volume in the past. One can surmise, for example, that the recession of 2001 adversely  
11 affected mail volumes. But a key question is the magnitude of this adverse effect. This  
12 question is answered through examination of the econometric evidence. Econometric  
13 demand equations are developed for each mail product examined in this testimony. A  
14 key output of each econometric equation is the set of estimated demand elasticities.  
15 Elasticities give the mathematical relation between past changes in a specific variable  
16 and changes in the volume of a specific mail product. For example, the own-price  
17 elasticity gives the relation between a change in a product's price and the resulting  
18 change in the product's volume. Elasticities differ across the various mail products  
19 because different products are affected differently by changes in key variables. The  
20 elasticity estimates are obtained from the testimony of Thomas Thress (USPS-T-7).

21 Sometimes, factors affecting mail volume do not lend themselves to direct  
22 econometric analysis. Data may not be available in a continuous, quarterly form. In  
23 other cases, the identified volume trends are not the product of a single variable but are  
24 the result of many different factors. In still other cases, the developments are too recent  
25 to yield sufficient data suitable for econometric analysis. In these cases, trend terms  
26 are included in the econometric equations estimated by Mr. Thress to reflect the market

1 developments that have been identified in this testimony as affecting mail volumes. A  
2 key aspect of this testimony is the discussion of the factors which underlie the trends  
3 estimated by Mr. Thress.

### 4 **3. Recent Contributions to Mail Volume**

5 Special attention is given to the impact that various factors have had on mail  
6 volume in the recent past. This approach is based on the view that while the entire  
7 volume history provides information about volume trends, recent information is  
8 especially important. Accordingly, the impact of different variables on volume over the  
9 past four years is examined. For example, assume a product has an estimated own-  
10 price elasticity of -0.4 and that over the past four years, the real (inflation-adjusted) price  
11 of this product has increased one percent. In this case, it can be concluded that the  
12 increase in real price has contributed a 0.4 percent decline in the volume of this product.  
13 Similar calculations are done for each variable found to influence mail volume. A  
14 contribution table is presented showing the individual contributions of each variable on  
15 the volume of each mail product over the past four years.

16 The contribution table provides a quantitative look at the factors that have  
17 collectively produced the mail volumes observed in the most recent four quarters. The  
18 analysis sets the stage for forecasting how volumes will change from their current levels  
19 to their levels in the future.

### 20 **4. Base Volume Forecasts**

21 A base volume approach is used to make the forecasts presented in this case.  
22 The base volume is the volume in the four most recent quarters, with these four  
23 quarters being referred to as the Base Year. The Base Year used in making the volume  
24 forecasts in this case consists of the four fiscal quarters from 2004Q2 through 2005Q1,  
25 corresponding to calendar year 2004.

1           The base volume forecast approach projects forward the volume in the Base  
2 Year to a volume for the Test Year. The Test Year for this case is GFY 2006.  
3 Forecasts are done on a quarterly basis and then aggregated to form the Test Year  
4 forecast. Quarterly forecasts through the end of GFY 2007 are presented in Attachment  
5 A of the testimony of Thomas Thress (USPS-T-7).

6           The basic forecast approach uses a series of multipliers to project the influence  
7 of each variable on mail volume between the Base Year and the Test Year. In brief, a  
8 multiplier is calculated by applying the estimated elasticity to the projected change in the  
9 factor between the Base Year and the Test Year. The projected changes in many of the  
10 economic variables are obtained from Global Insight, a leading macroeconomic  
11 forecasting firm. Projections of some other variables are included in the testimony of  
12 Thomas Thress. As a detail, volume forecasts are initially made on a per adult basis,  
13 conforming to the approach used in the econometric analysis. Therefore, as a final  
14 step, the per-adult volume forecasts are converted to total volume forecasts by  
15 accounting for changes in adult population between the Base Year and the Test Year.

16           This forecast approach is used for both the before-rates and after-rates volume  
17 forecasts. The only differences between the after-rates and the before-rates forecasts  
18 are differences resulting from the rates proposed by the Postal Service. In other words,  
19 the non-postal rate forecast multipliers are identical in the before-rates and after-rates  
20 forecasts of each mail product.

## 21           **5. Adjustments to the Above Approach**

22           At times, adjustments to the base volume forecast approach described above  
23 may be warranted. One adjustment that may be considered is known as a base volume  
24 adjustment. A base volume adjustment changes the volume in the Base Year from the  
25 actual volume observed over the past four quarters, thereby changing the volume  
26 forecast. A base volume adjustment can be warranted if the volume in the Base Year is

1 the result of a one-time event that will not be repeated in the forecast period. For  
2 example, if the volume in the Base Year were increased because of a large one-time  
3 mailing, the magnitude of which could be reliably estimated, and it was also known that  
4 this mailing would not be repeated in the future (and no other offsetting mailings would  
5 occur in the future), then the Base Year volume could be reduced by the magnitude of  
6 the one-time mailing. An alternative econometric approach for dealing with unusual  
7 Base Year volumes is to include a dummy variable for one or more quarters of the Base  
8 Year. The dummy variables would account for the unusual volume in the Base Year but  
9 have a value of zero in the forecast period, thereby removing this unusual volume from  
10 the forecast.

11 A second type of adjustment to the base volume forecast approach is the  
12 introduction of a judgmental trend beginning after the Base Year but having effect in the  
13 forecast Test Year. A judgmental trend can be introduced if it is believed that events  
14 that have not yet transpired, but are expected to transpire, will affect volumes in the  
15 future. In the circumstances of this case, it was not found necessary to introduce  
16 judgmental trends into the forecast. Instead, for some mail products, econometric trend  
17 terms are introduced to account for recent developments, based on observed changes  
18 in volume trends and an understanding of the factors believed to be driving those  
19 trends.

20

### 21 **C. Outline of Remainder of My Testimony**

22 The remainder of this testimony is organized as follows:

23 Chapter II: First-Class Mail

24 Chapter III: Priority Mail and Express Mail

25 Chapter IV: Periodicals Mail

26 Chapter V: Standard Mail

- 1 Chapter VI: Package Services
- 2 Chapter VII: Other Mail
- 3 Chapter VIII: Special Services
- 4

## 1 II. FIRST-CLASS MAIL

### 2 A. Overview

#### 3 1. General Characteristics

4 The most distinguishing feature of First-Class Mail is that it contains private  
5 messages. Handwritten or typewritten messages, as well as hard copy computer output  
6 if it has the character of personal correspondence, if mailed, must be sent by First-Class  
7 Mail. Bills, statements of account, and messages associated with a business  
8 transaction are considered to be private messages, and, if mailed, must be sent by  
9 First-Class Mail, as well.

10 First-Class Mail is guaranteed against postal inspection and is accorded  
11 expeditious handling. It is forwarded without extra charge. First-Class Mail is returned  
12 without extra charge if not deliverable. The use of First-Class Mail (as well as certain  
13 other types of letter mail) is protected by restrictions on competition for the carriage of  
14 private messages created by the Private Express Statutes. In important instances,  
15 exceptions to these restrictions are made, permitting non-postal carriers to deliver  
16 private messages, as in the case of private delivery of overnight mail. Electronic  
17 communication by computers is not covered by the Private Express Statutes and serves  
18 as an alternative to sending First-Class Mail in many cases.

#### 19 2. Subclasses and Categories

20 There are two subclasses within First-Class Mail: First-Class letters and First-  
21 Class cards. Within First-Class letters, there are two main categories, single-piece  
22 letters and workshared letters. Workshared letters include categories for which mailers  
23 receive a discount for presorting or automating their mail. The First-Class workshared  
24 letter categories are presort non-automated, mixed-AADC automated, AADC  
25 automated, 3-digit automated, 5-digit automated, and carrier-route presort. First-Class  
26 cards categories are the same as for letters.

### 3. Composition of First-Class Mail

Table 1 presents a breakdown of First-Class Mail based on data from the Household Diary Study for the years 1987, 1994, and 2004. The Household Diary Study is an annual survey of approximately 5,000 households regarding the mail the households receive and send. It also contains considerable demographic information about households, including income, education of the household head, and whether the household has Internet access. However, the Diary Study does not include information on mail sent between nonhouseholds (businesses and governments). Therefore, the data shown in Table 1 are limited to First-Class Mail that is either sent by or sent to households. This mail will be referred to as household mail throughout this section. Because the Household Diary Study is a survey of a large, but limited, number of households, the results are subject to normal sampling variability and caution must be exercised when interpreting year-to-year results. Over longer periods of time, however, certain trends can be seen.

Table 1 shows that of First-Class household mail, only 9.1 percent is sent from one household to another. Moreover, the household-to-household share has been declining for many years, as seen from the comparisons with 1994 and 1987. Both correspondence and holiday/greeting cards have declined through the years.

The share of household mail that is sent from households to businesses or the government (household-to-nonhousehold) has remained fairly steady over the years at about 20 percent.

The largest component of household mail is mail sent to households from businesses or governments (nonhousehold-to-household). According to the Household Diary Study data, in 2004, this category represented over 70 percent of household mail. This share has increased somewhat over the years. The data also show that bills,

1 advertising mail, and financial statements are the largest components of this mail, with  
 2 the share that is advertising showing a noticeable rise.

| <b>Table 1</b>  |               |               |               |
|---|---------------|---------------|---------------|
| <b>First-Class Household Mail<br/>Between Sender and Receiver, By Content</b> |               |               |               |
|   | 1987          | 1994          | 2004          |
| <b>Household to Household</b>   | <b>14.7%</b>  | <b>11.1%</b>  | <b>9.1%</b>   |
| Correspondence  | 4.4%          | 3.4%          | 2.1%          |
| Holiday/Greeting Cards  | 7.9%          | 6.5%          | 5.4%          |
| Other   | 2.4%          | 1.3%          | 1.8%          |
| <b>Household to Nonhousehold</b>  | <b>19.7%</b>  | <b>19.6%</b>  | <b>20.3%</b>  |
| Response to Advertising   | 5.7%          | 3.0%          | 1.4%          |
| Payment of Bills  | 5.6%          | 5.6%          | 7.9%          |
| Other   | 8.4%          | 11.0%         | 10.5%         |
| <b>Nonhousehold to Household</b>  | <b>65.6%</b>  | <b>69.4%</b>  | <b>70.6%</b>  |
| Bill/Invoice/Premium  | 23.7%         | 25.0%         | 25.9%         |
| Advertising Only  | 8.4%          | 10.2%         | 14.3%         |
| Financial Statements  | 8.1%          | 8.1%          | 8.8%          |
| Social/Charitable/Political   | 5.7%          | 5.6%          | 6.1%          |
| Payments  | 3.1%          | 2.6%          | 2.2%          |
| Invitations/Announcements   | 2.4%          | 6.6%          | 5.4%          |
| Other   | 14.2%         | 11.3%         | 7.9%          |
| <b>Total Household Mail</b>   | <b>100.0%</b> | <b>100.0%</b> | <b>100.0%</b> |

3 Source: Household Diary Study  
 4 Data exclude First-Class nonhousehold-to-nonhousehold mail and  
 5 mail for which the origin or destination was unknown.  
 6  
 7

8 Although the Household Diary Study does not include information on non-  
 9 household to nonhousehold mail, comparisons between Household Diary Study data  
 10 and Postal Service volume data suggest that nonhousehold-to-nonhousehold First-  
 11 Class Mail has declined in recent years.

#### 4. Volume History

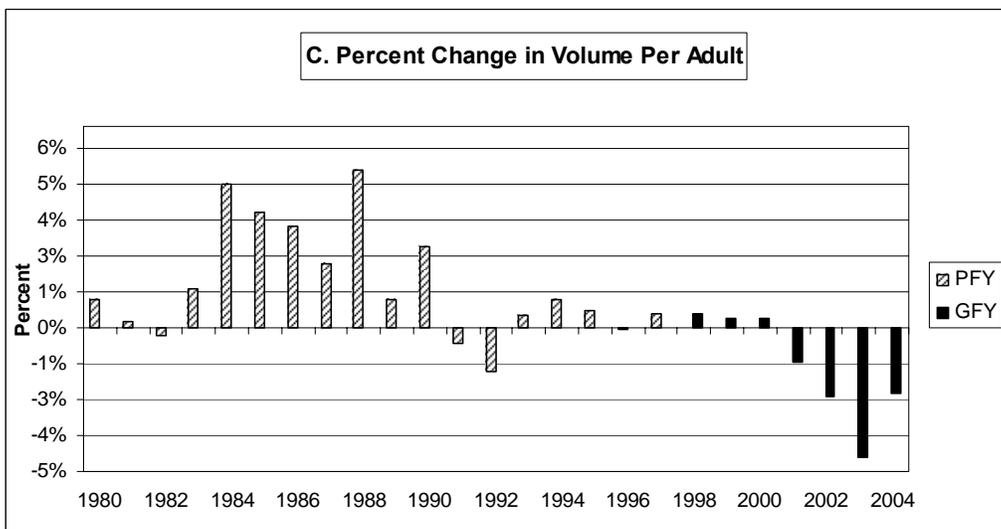
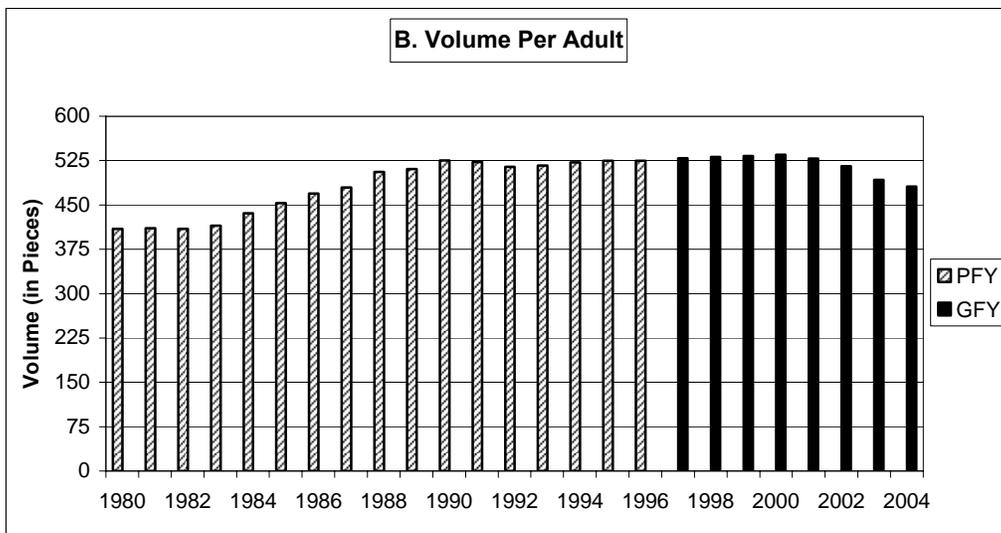
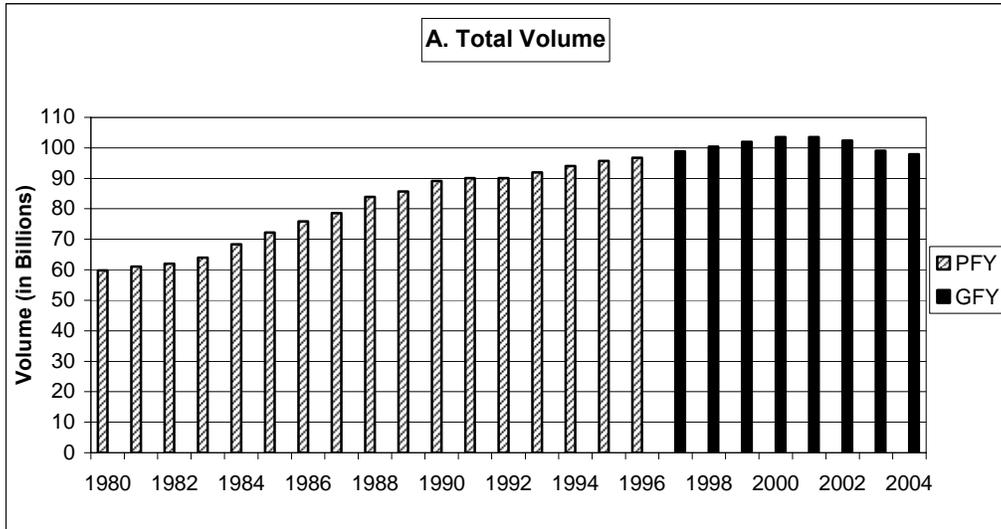
Figure 2 shows the history of First-Class Mail volumes from 1980 through 2004. Section A of Figure 2 presents total volume, measured in billions of pieces. Section B of the figure presents volume per adult and Section C shows the annual percent change in volume per adult. As a detail, volumes prior to 1997 are measured in 52-week postal years while volumes from 1997 through 2004 are measured in government fiscal years.

Since 1980, First-Class Mail volume has increased from 59.8 billion pieces to 97.9 billion pieces in 2004. First-Class Mail per adult has risen 17 percent over the same period, rising from about 409 to 481 pieces.

Looking at the annual percent changes in volume per adult, the history of First-Class Mail can be broken into three distinct periods. The first period is one of consistent growth following the 1981-1982 recession. Volume per adult increased for eight consecutive years, with growth being particularly strong in the mid-1980s. From 1982 through 1990, First-Class volume per adult increased 28 percent and total volume rose 44 percent. This period of strong volume growth ended in 1991 as a result of the 1991 recession and rate increases following the R90-1 case.

The years following the 1991 recession represent the second distinct period of the First-Class Mail volume history. Economic growth in the 1990s was as strong as, or stronger than, in the 1980s, but First-Class Mail volume growth was not. Instead, volume per adult remained essentially constant over this time period, never growing even as much as one percent in any single year. Thus, in contrast to the 1980s, when First-Class Mail volume grew at about the same pace as the economy, during the 1990s, volume grew at the slower pace of increases in adult population. Total First-Class Mail volume increased gradually, therefore, and reached its all-time peak in 2000 of 103.5 billion pieces.

**Figure 2**  
**First-Class Mail Volume History**



1           Beginning in 2001, First-Class Mail volume entered its third distinct period,  
2 characterized by mail volume declines. Volume per adult has fallen each of the last four  
3 years and is now ten percent below its level in 2000. Total First-Class Mail volume in  
4 2004 was lower than it was in 1997. To some degree, these declines were the result of  
5 temporary factors: the disruptions resulting from the 9/11 terrorist attacks and the  
6 subsequent sending of anthrax through the mail in the fall of 2001, the economic  
7 recession and initially slow economic recovery, and the impacts of higher postal rates  
8 following the R2000-1 and R2001-1 rate cases.

9           But these factors do not fully explain the sharp declines in First-Class Mail  
10 volume in recent years. Evidence of this is seen in 2004, when the economy grew more  
11 than four percent and postal rates remained constant, yet First-Class Mail per adult fell  
12 more than three percent. Furthermore, the longer-term trend for First-Class Mail  
13 volumes has clearly changed from one of solid growth, to weak growth, to decline.  
14 Thus, the recent behavior of First-Class Mail volumes must be seen both in the context  
15 of the product's historical trends and the impacts of more recent developments.

## 16           **5. Factors Affecting Volume**

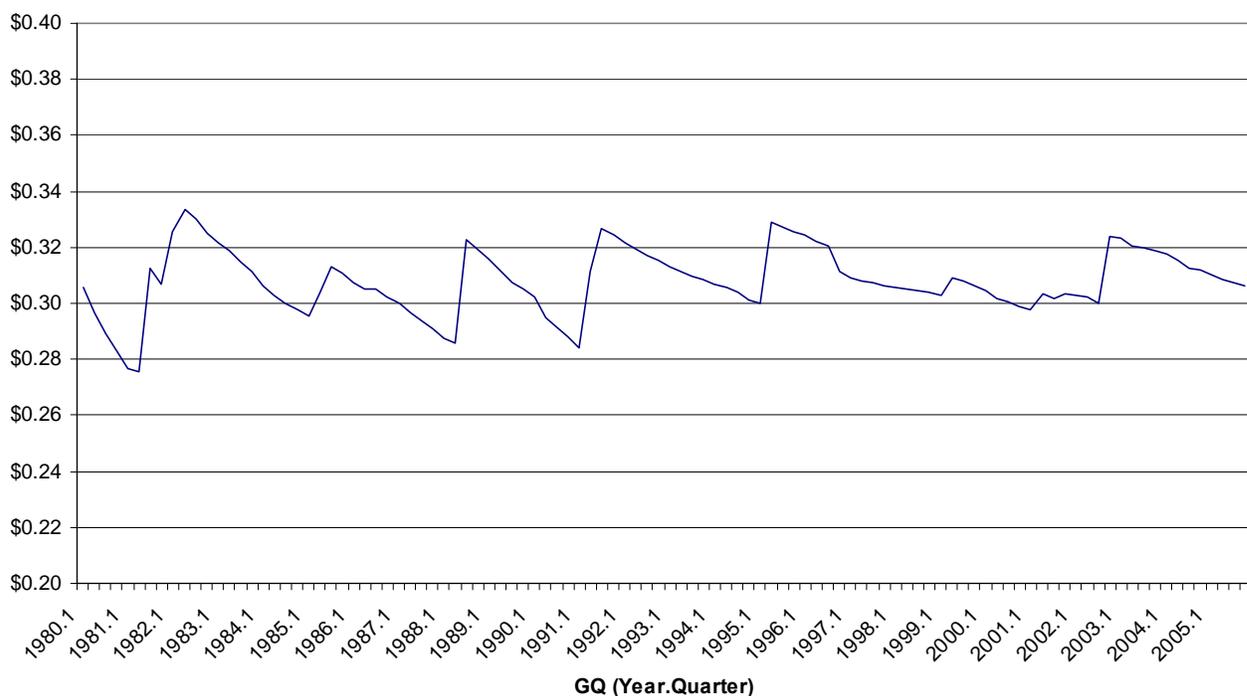
17           Historically, First-Class Mail volume has been supported by two important  
18 positive trends. The first is growth in population. Population growth increases the  
19 number of senders and receivers of the mail, and it increases the number of  
20 households, which has led to an increase in, among other things, household bills and  
21 payments. These factors traditionally have led to higher First-Class Mail volume.

22           In addition to population growth, First-Class Mail volume is supported by  
23 increases in economic activity. While the economy is subject to short-term ups and  
24 downs, over the long term, economic growth is positive. As the economy grows,  
25 employment, income, and spending increase. More people buy houses, more people  
26 open checking accounts, more people have credit cards and, traditionally, more First-

1 Class Mail is sent and received. In addition, economic growth leads to the creation of  
2 new businesses, which also leads to an increase in First-Class Mail volume.

3 Postal rates also affect mail volumes, but First-Class postage rates are not  
4 responsible for long-term trends in mail volume. Over the past twenty years or more,  
5 real First-Class letter postal rates (postal rates adjusted for inflation), have been  
6 relatively constant. Chart A shows the real price (in 2000 dollars) of First-Class letters,  
7 calculated as a volume-weighted index of the different First-Class letter categories,  
8 using 2004 volumes as weights. As shown, there is no long-term trend in the real price  
9 of First-Class letters. Price rises following postal rate cases and then decline as  
10 inflation reduces the real postal price index. Thus, while postal rates can explain short-  
11 term variations in mail volume, causing volume to fall when real rates rise and causing  
12 volume to rise when real rates fall, postal rates do not explain longer-term variations in  
13 First-Class Mail volume.

**Chart A**  
**Real Price of First-Class Letters (1980 – 2005)**



1           As noted earlier, despite constant postal rates and solid economic growth, First-  
2 Class Mail volume declined in 2004. Moreover, looking at the past decade or so, First-  
3 Class Mail volume growth was much slower than it had been in the 1980s. The  
4 observation is that First-Class Mail volume trends have undergone substantial changes.  
5 These changes are mainly due to the increased use of technological alternatives  
6 (electronic diversion), a factor that has been depressing First-Class single-piece  
7 volumes for many years. More recently, however, it appears that electronic diversion  
8 has also begun to affect the volumes of First-Class workshared mail. In addition,  
9 changes in the way businesses, households, and governments are using the mail have  
10 also contributed to this break from historical relationship between the economy and  
11 First-Class Mail volume.

12           As First-Class single-piece letters and First-Class workshared letters have been  
13 affected differently by these recent developments, this testimony will address these two  
14 First-Class Mail categories separately. A discussion of First-Class cards will conclude  
15 this chapter.

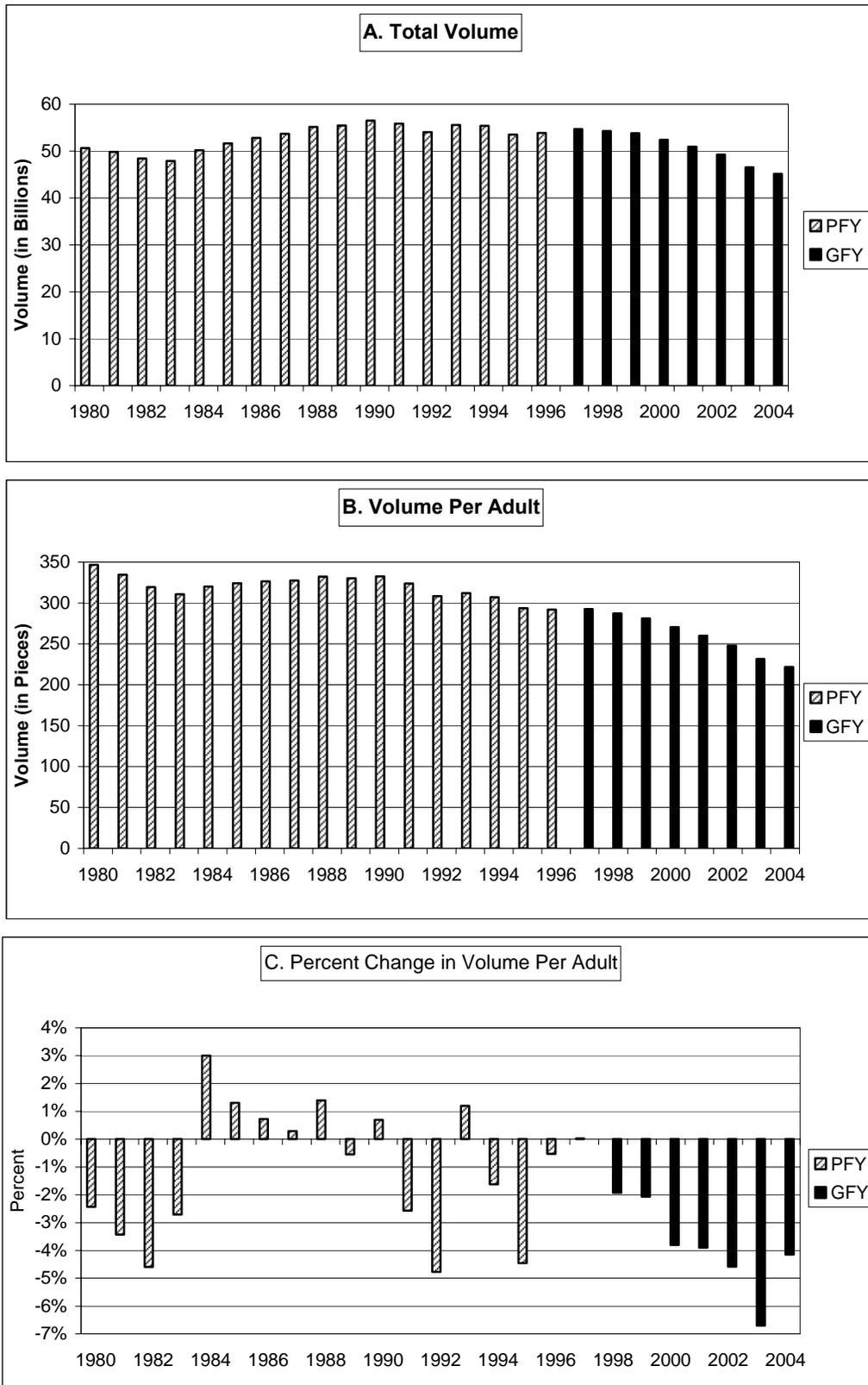
## 16           **B. First-Class Single-Piece Letters**

### 17                   **1. Volume History**

18           Single-piece letters refer to letters that do not receive any presort or automation  
19 discounts. Figure 3 shows the volume history of single-piece letters from 1980 to 2004.  
20 Single-piece letter volume fell in the early 1980s and rose in the later part of that  
21 decade, reaching 56.5 billion pieces in 1990. Since then, single-piece volume has  
22 steadily declined. Volume per adult has fallen for twelve of the past fourteen years,  
23 including all of the last seven. As a result, volume fell to about 222 pieces per adult in  
24 2004, one-third lower than in 1990. Moreover, the volume declines in the past few  
25 years have been noticeably greater than in the 1990s.

26

**Figure 3**  
**First-Class Single Piece Letter Volume History**



1 For example, from 1990 to 1999, total single-piece volume declined by about  
2 three billion pieces. Since 1999, volume has fallen by more than eight billion pieces. In  
3 other words, almost three-fourths of the total decline over the past 14 years has  
4 occurred in just the last five years. The decline in volume per adult in 2003 was the  
5 largest such decline in single-piece letter volume since the Postal Reorganization Act.

## 6 **2. Factors Affecting Volume**

7 Over time, single-piece letters volume has been positively affected by growth in  
8 population and increases in economic activity. However, the benefits of population  
9 increases have been mitigated by a gradual decline in letter-writing and a corresponding  
10 reduction in household-to-household mail. Recall Table 1, which showed that the share  
11 of household-to-household First-Class Mail declined from 14.7 percent in 1987 to 9.1  
12 percent in 2004. While declines in household-to-household mail may explain part of the  
13 gradual decline in single-piece volumes, these factors cannot explain the sharp declines  
14 that have occurred in recent years.

15 Single-piece letter volume has also been reduced by the shift of mail into the  
16 various workshared letter categories, following the introduction and expansion of  
17 workshared letter discounts. In 1980, single-piece letters comprised 88 percent of total  
18 First-Class letter mail. By 1995, the single-piece share had declined to just 60 percent.  
19 Therefore, a large part of the long-term decline in single-piece letter volume can be  
20 explained by a shift of single-piece mail into workshared categories.

21 But another significant factor affecting single-piece volumes has been the  
22 reduction in mail due to the increased use of technological alternatives. This impact,  
23 referred to as electronic diversion or technological diversion, has been occurring for  
24 many years. Fax transmissions began replacing some single-piece mail many years  
25 ago. Automatic payments of recurring bills have been a factor reducing First-Class  
26 single-piece volume for some time, as has the use of e-mail as an alternative to letters.

1 More recently, there has been considerable growth in online bill payment. Moreover,  
2 the spread of the Internet has increased the number of people who are willing and able  
3 to communicate online instead of through the mail. Because of its importance as an  
4 explanation of the decline in single-piece letter volume, much of the remainder of this  
5 section addresses electronic diversion.

### 6 **3. Electronic Diversion**

7 Electronic diversion typically refers to the reduction in mail volume due to the use  
8 of technological alternatives. My R2001-1 testimony presented an extensive  
9 discussion of electronic diversion and its impacts on mail volumes. The present  
10 testimony first examines some key drivers of electronic diversion and then presents  
11 evidence of the reduction in single-piece letter volumes due to the expanded use of  
12 technological alternatives. To some extent, this discussion also applies to First-Class  
13 workshared letters and First-Class cards which follow.

#### 14 **a. Computers and the Internet**

15 This section details recent developments in the use of computers and the  
16 Internet. The primary conclusion from this analysis is that over a period of only a few  
17 years, the United States has gone from a country in which the Internet was used by  
18 about one-third of the population to a country in which more than two-thirds of the  
19 population are online. Moreover, as will be documented in the section discussing First-  
20 Class workshared letters, in the next few years, it is likely that the Internet population  
21 will undergo a similar shift, from being comprised primarily of dial-up Internet users to a  
22 group dominated by broadband Internet users.

23 Household computer ownership and Internet access are key drivers of electronic  
24 diversion. Table 2 below shows that the percentage of households with a computer has  
25 increased from 25.5 percent in 1994 to 74.8 percent in 2004. Home Internet access has  
26 shown an even more rapid rise, from 11.2 percent of households in 1994 to 35.3

1 percent of households in 1999 to 67.2 percent of households in 2004. Households with  
 2 Internet access have therefore doubled in the last five years. This suggests that a large  
 3 segment of the population is new to the Internet and has probably not yet fully utilized it  
 4 as an alternative to the mail.

5

| <b>Table 2</b>                                       |       |       |       |
|--|-------|-------|-------|
| <b>Households with Computers and Internet Access</b> |       |       |       |
|  | 1994  | 1999  | 2004  |
| Computer   | 25.5% | 44.2% | 74.8% |
| Internet   | 11.2% | 35.3% | 67.2% |

6 Source: Household Diary Study

7

8 The HDS data on Internet access are similar to those reported from other  
 9 sources. In September 2004, Harris Interactive found that 73 percent of US adults  
 10 were online as of August 2004, more than double the number in February 1998. Harris  
 11 also reports that 65 percent of adults had Internet access from home, triple the  
 12 percentage in February 1998. [Harris Interactive Poll #63, (September 8, 2004)] A  
 13 2004 study by USC Annenberg School, "The Digital Future Report," found that in 2003,  
 14 74.0 percent of households had at least one computer and 65.1 percent of people used  
 15 the Internet at home. [J. Cole et al., USC Annenberg School, Center for the Digital  
 16 Future, "The Digital Future Report – Surveying the Digital Future, Year Four – Ten  
 17 Years, Ten Trends," (September 2004)]

18 Beyond having Internet access, another important metric is the number of people  
 19 who use the Internet, either at home or at work. According to Nielsen/Net Ratings,  
 20 139.0 million people (Nielsen includes children as well as adults in their analysis) went  
 21 online from home during January 2005. This represents nearly a 40 percent increase in  
 22 the number of people online since October 2000 and more than double the number who  
 23 did so in April 1999. Nielsen also reported that 54.9 million people went online from

1 work during January 2005, 50 percent more than in October 2000. [Nielsen/Net  
2 Ratings, United States Average Web Usage, various months]

3 **b. Online Banking**

4 Online banking refers to Internet access to bank accounts and the use of the  
5 Internet to pay bills, check account balances, and move money between accounts.  
6 Some online bank services also provide electronic presentment of bank statements and  
7 recurring bills.

8 According to data from eMarketer, the number of online banking households has  
9 increased from 12.5 million in 2000 to 31.5 million in 2004, an average annual growth of  
10 more than 25 percent. Online banking growth is projected by eMarketer to slow, but it is  
11 still predicted that by 2007, 45 million households will have online banking access.  
12 [eMarketer, "Is Online Banking at a Crossroads or Traffic Jam?" (November 10, 2004)].

13

| <b>Table 3</b>                                   |      |      |      |      |      |      |      |
|--|------|------|------|------|------|------|------|
| <b>U.S. Households Banking Online, 2000-2007</b> |      |      |      |      |      |      |      |
| (in millions)                                    |      |      |      |      |      |      |      |
| 2000   | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| 12.5   | 17.6 | 21.9 | 26.8 | 31.5 | 35.0 | 40.0 | 45.0 |

14 Source: eMarketer; figures after 2004 are projections

15  
16 Online banking activity reduces the use of First-Class Mail. First, online bill  
17 payment is a direct substitute for payments by mail. Second, easier access to checking  
18 account balances can make it easier for households to manage their finances and more  
19 willing to use other forms of electronic payment such as automatic deduction of  
20 recurring bills from checking accounts. Third, online banking allows for the e-mailing of  
21 bank statements, reducing mail sent by banks to customers. Fourth, some online  
22 banking services also provide online bill presentment, further reducing mail sent to  
23 households.

1 Many banks have encouraged online banking by eliminating monthly fees for  
2 online bill payment. Not surprisingly, free online bill pay encourages households to use  
3 online bill payment. According to comScore Networks, in 2004Q1, 25 percent of online  
4 bank customers at banks offering free bill pay make online bill payments. Among  
5 customers who pay for online bill payment services, adoption was only nine percent.  
6 [comScore Networks, "The State of Online Banking – Industry Overview and Analysis"  
7 (June 2004)] Celent Communications reports that the average online bill payment user  
8 gets twelve bills each month and pays five of these bills online. [D. Wolfe, "Looking to  
9 Cards for New Life in Aggregation," 169 American Banker No. 122 1 (November 18,  
10 2004)]

### 11 c. Check Payments

12 The volume of checks written in the United States is declining, and the pace of  
13 decline has accelerated in recent years. According to data from the Federal Reserve,  
14 checks paid declined from 49.5 billion in 1995, to 41.9 billion in 2000, to 36.7 billion in  
15 2003. Over this eight-year period, check volume fell by 13 billion, an average decline of  
16 1.6 billion checks per year. The annual average decline in check payments has  
17 increased to 4.3 percent per year since 2000, as opposed to a 3.3 percent annual  
18 decline from 1995 to 2000. [G. Gerdes and J. Walton II, "The Use of Checks and Other  
19 Noncash Payment Instruments in the United States," Federal Reserve Bulletin 360 –  
20 374 (August 2002) and Federal Reserve System, "The 2004 Federal Reserve Payments  
21 Study – Analysis of Noncash Payments Trends in the United States, 2000 – 2003"  
22 (December 15, 2004)]

23 The decline in check payments means that checks now account for less than half  
24 of all non-cash payments in the U.S. Of the estimated 81.2 billion non-cash payments  
25 made in 2003, 55 percent were made using some form of electronic payment. Table 4  
26 summarizes the changes in payment activity.

| <b>Table 4</b>                             |             |             |             |                            |                            |
|--|-------------|-------------|-------------|----------------------------|----------------------------|
| <b>Annual Numbers of Non-Cash Payments</b> |             |             |             |                            |                            |
| (in billions)                              |             |             |             |                            |                            |
| Payment Method                             | 1995        | 2000        | 2003        | Avg. Change<br>1995 – 2000 | Avg. Change<br>2000 – 2003 |
| <b>Check</b>                               | <b>49.5</b> | <b>41.9</b> | <b>36.7</b> | <b>-3.3%</b>               | <b>-4.3%</b>               |
| <b>Electronic</b>                          | <b>14.7</b> | <b>30.6</b> | <b>44.5</b> | <b>15.8%</b>               | <b>13.3%</b>               |
| Credit Card                                | 10.4        | 15.6        | 19.0        | 8.4%                       | 6.7%                       |
| ACH  | 2.8         | 6.2         | 9.1         | 17.2%                      | 13.4%                      |
| Debit                                      | 1.4         | 8.3         | 15.6        | 42.8%                      | 23.4%                      |
| EBT  | 0.1         | 0.5         | 0.8         | 38.0%                      | 17.0%                      |
| <b>Total</b>                               | <b>64.2</b> | <b>72.5</b> | <b>81.2</b> | <b>2.5%</b>                | <b>3.8%</b>                |

Source: Federal Reserve and Dove Consulting, 2002, 2004

1           As payments by check have declined, all electronic payment methods have  
2 increased. Payments by credit card, ACH (automated clearing house) payment, debit  
3 card, and EBT (electronic benefits transfer) increased from 14.7 billion in 1995 to 44.5  
4 billion in 2003.

5           In his January 2005 presentation to the Electronic Payments Association, William  
6 Nelson, Executive Vice-President of NACHA, provided a further breakdown of check  
7 and electronic payments by consumer and business/government activity. In 2003,  
8 consumers made 18.4 billion check payments and 36.6 billion electronic payments.  
9 Businesses and governments made 18.3 billion check payments and only 7.1 billion  
10 electronic payments.<sup>1</sup> [W. Nelson, "Teleseminar –Federal Reserve System's Research  
11 Update on Retail Payments, January 5, 2005"] Businesses and governments, therefore,  
12 made more than seventy percent of their payments by check, but only about one-third of  
13 consumer non-cash payments are made by check. Furthermore, comparisons with

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<sup>1</sup> Nelson's data did not include electronic benefits transfers (EBT), which totaled 0.8 billion in 2003, or a little more than one percent of all non-cash payments.

1 data from 2000 show that in just three years, check payments from consumers and from  
 2 businesses and governments both fell twelve percent. [NACHA, "Consumer and  
 3 Business/Government Payments, 2000"]

4

| <b>Table 5</b>   |            |      |      |          |
|--|------------|------|------|----------|
| <b>Payments by Check and Electronic Methods by Type of Payer</b> |            |      |      |          |
| (in billions)  |            |      |      |          |
| Payer  | Method     | 2000 | 2003 | % Change |
| Consumers  | Check      | 21.0 | 18.4 | -12%     |
|  | Electronic | 24.3 | 36.6 | +51%     |
| Business/<br>Government  | Check      | 20.9 | 18.3 | -12%     |
|  | Electronic | 5.7  | 7.1  | +25%     |

Source: NACHA and the Federal Reserve  
 (Note: Electronic payments do not include EBT)

5 The key result from the above tables is this: In 1995, the United States had a  
 6 primarily check-based payment system, with checks accounting for more than three-  
 7 quarters of all non-cash payments. By 2003, the U.S. payment system was primarily  
 8 electronic, with consumers making two-thirds of their non-cash payment electronically.  
 9 If the growth rates experienced over the last three years continue for the next three  
 10 years, then barely more than one-third of all non-cash payments will be made by check  
 11 in 2006. Indeed, in a 2004 report, Celent Communications predicted that the total  
 12 volume of checks would fall to 24 billion by 2010. [Celent , "The Future of Check  
 13 Processing in the U.S" (October 27, 2004)]

14 It is certainly true that not all electronic payments displace mail, for example,  
 15 using a debit card to pay for groceries. And it is also true that not all check payments  
 16 are made through the mail. But of all payment methods, checks are the payments that

1 are most commonly sent through the mail.<sup>2</sup> Therefore, as check payments have  
2 declined, so has the potential mail volume generated by mailed checks.

3 For example, according to a joint study by Dove Consulting and the ABA,  
4 consumers have reduced their use of checks as payment for recurring bills. In 2001, 72  
5 percent of recurring bills were paid by check. By 2003, this figure had fallen to 60  
6 percent. The decline in check use corresponds to an increase in the use of electronic  
7 payments. According to the Dove/ABA study, 60 percent of consumers used at least  
8 some form of electronic payment and 41 percent paid at least some bills online.  
9 [American Bankers Association, "Consumers Now Favor Credit and Debit Over Cash  
10 and Checks as Payment for In-Store Purchases" (December 16, 2003)]

11 The decline in check writing has occurred for two main reasons. First, check  
12 writers – consumers and businesses – have more non-check payment choices available  
13 to them. Many consumers prefer using other methods of payment besides writing  
14 checks, including automatic deduction (e.g., monthly mortgage payment automatically  
15 removed from the consumer checking account), online bill payment (e.g., consumer  
16 pays bills over Internet through his or her bank, an online billpay service, or directly at  
17 the biller's website), and the use of credit or debit cards for payments in lieu of checks.  
18 The advantages of non-check payments include a) savings on postage; b) usually faster  
19 delivery of payment to the recipient, which may be a particularly effective way to avoid  
20 late payment fees; c) reduced bill-paying time costs, although these time savings are  
21 typically not realized until expending initially greater time to set up the electronic bill  
22 payment activity.

23 Second, many check payees have lower costs for non-check electronic  
24 payments and are actively discouraging the use of checks. As the volume of check

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<sup>2</sup> Credit card bills are often paid by mailed checks. As such, the payment would be included in the check totals given in the table.

1 payments has declined, the per-unit cost of check processing has increased.  
2 According to the Federal Reserve, their cost of processing a written check increased  
3 from 4.5 cents in 2002 to 5.1 cents in 2003, a 13.3 percent rise. In contrast, the Fed's  
4 unit cost to process an ACH payment decreased by 15.4 percent, from 1.3 cents in  
5 2002 to 1.1 cents in 2003. As recently as a decade ago, unit costs for checks and ACH  
6 payments were both about 3.5 cents per unit. [W. Nelson, NACHA, op cit.]. Thus, over  
7 the past ten years, per-unit check costs have risen by almost half while per-unit ACH  
8 transaction costs have fallen by two-thirds.

#### 9 **d. ACH Transactions**

10 Automated Clearing House (ACH) transactions refer to the volume of electronic  
11 payment transactions that occur over the ACH inter-bank network transfer system in the  
12 United States. ACH transactions include direct deposit of payroll, Social Security, other  
13 government benefits and tax refunds; direct payment of consumer bills such as  
14 mortgages, loans, utility bills, and insurance premiums; business-to-business payments;  
15 e-checks; e-commerce payments; and federal, state, and local tax payments. Table 6  
16 presents total ACH transactions annually from 1989 through 2003, with an estimated  
17 total for 2004 based on preliminary data. The data are collected by the National  
18 Automated Clearinghouse Association (NACHA).

19 In 1989, there were 1,331 million total ACH transactions. By 2003, the number of  
20 transactions had increased to 10,017 million, an average annual growth rate of 15.5  
21 percent. What is striking about the growth in ACH use is that unlike many other forms  
22 of technology use, the growth rate shows no signs of tapering off. ACH transactions  
23 have grown at double-digit rates in every year since 1989. Moreover, based on  
24 preliminary data, total transactions are estimated to have been more than twenty  
25 percent greater in 2004 than they were in 2003.

1 More relevant for the diversion of mail is the absolute, as opposed to the  
2 percentage, increase in ACH transactions, also shown in Table 6. Although not every  
3 ACH transaction displaces letter mail, increases in mail diversion are related to the  
4 absolute increase in ACH activity. For example, in 1990, total ACH transactions  
5 increased by 218 million, which can be loosely thought of as the maximum amount of  
6 additional mail diversion that could have occurred due to ACH use in 1990. In 2003,  
7 ACH transactions increased by more than a billion, creating a much larger amount of  
8 potential, and likely actual, mail diversion. Absolute increases in ACH transactions  
9 averaged about one billion per year from 2001 through 2003 and, based on preliminary  
10 2004 data, total transactions may have increased by about two billion in that year.

11 The total dollar value of ACH transactions has also increased, rising from \$5.1  
12 trillion in 1989 to \$27.4 trillion in 2003. What is interesting, however, is that the growth  
13 in ACH dollar volume has been less than the growth in ACH transactions volume and,  
14 as a result, the average value of an ACH transaction has declined from about \$3,800 in  
15 1989 to \$2,700 in 2003. In real terms (accounting for inflation), the average value of an  
16 ACH transaction has fallen in half over this time period. The decline in the average  
17 value of ACH transactions is evidence that its use has expanded beyond larger  
18 business-to-business payments to the smaller, more numerous, consumer-to-business  
19 payments.

| <b>Table 6</b>                |                        |                |                 |
|-------------------------------|------------------------|----------------|-----------------|
| <b>Total ACH Transactions</b> |                        |                |                 |
| (in millions)                 |                        |                |                 |
| Year                          | Total ACH Transactions | Percent Change | Absolute Change |
| 1989                          | 1,331                  |                |                 |
| 1990                          | 1,549                  | 16.4%          | 218             |
| 1991                          | 1,964                  | 26.8%          | 415             |
| 1992                          | 2,206                  | 12.3%          | 242             |
| 1993                          | 2,559                  | 16.0%          | 353             |
| 1994                          | 2,933                  | 14.6%          | 374             |
| 1995                          | 3,407                  | 16.2%          | 474             |
| 1996                          | 3,929                  | 15.3%          | 522             |
| 1997                          | 4,549                  | 15.8%          | 620             |
| 1998                          | 5,344                  | 17.5%          | 795             |
| 1999                          | 6,122                  | 14.6%          | 778             |
| 2000                          | 6,883                  | 12.4%          | 761             |
| 2001                          | 7,994                  | 16.1%          | 1,111           |
| 2002                          | 8,943                  | 11.9%          | 949             |
| 2003                          | 10,017                 | 12.0%          | 1,074           |
| Est. 2004                     | 12,161                 | 21.4%          | 2,144           |

Source: NACHA, 2004 estimate based on preliminary data

1 **e. Diversion of Household Bill Payments**

2 Evidence of diversion of single-piece letter mail comes from Household Diary  
3 Study (HDS) data on household bill payments. Table 7 shows the percentage of  
4 households that use different payment methods for the years 1994, 1999, and 2004.

5 Although the data show that most households continue to pay at least some bills  
6 by mail, the increased use of electronic alternatives to payment by mail is evident. The  
7 percentage of households that pay bills through an automatic deduction, typically from  
8 their checking accounts, has increased from 15.4 percent in 1994 to 50.4 percent in

1 2004. The increase in the percentage of households using online bill payment is even  
 2 more dramatic. A decade ago, household online bill payment was rare, and as recently  
 3 as 1999, only 1.5 percent of households regularly paid any bills using this method. By  
 4 2004, almost one in four households used online bill payment to pay at least some of  
 5 their regular monthly bills. Overall, the data show that nearly two-thirds of all  
 6 households use some form of electronic payment (including payments by phone, ATM,  
 7 and credit card) to pay their regular monthly bills, more than twice the share that did so  
 8 in 1999.

| <b>Table 7</b>                                    |       |       |       |
|---|-------|-------|-------|
| <b>Households Using Different Payment Methods</b> |       |       |       |
| Payment Method                                    | 1994  | 1999  | 2004  |
| Mail  | 96.8% | 95.8% | 94.6% |
| In-Person   | 39.8% | 34.0% | 34.6% |
| Automatic Deduction                               | 15.4% | 19.3% | 50.4% |
| Online  | 0.1%  | 1.5%  | 22.0% |
| Any Electronic Method                             | 16.6% | 21.9% | 65.6% |

9 Source: Household Diary Study

10 Table 8 shows the share of bills paid (as opposed to households paying) by  
 11 different methods, again for 1994, 1999, and 2004. Over this time period, the share of  
 12 regular bills paid by mail declined from 84.7 percent to 80.4 percent to 69.2 percent,  
 13 revealing an especially sharp decline in the mail payment share over the past five years.  
 14 During the same period, the share of bills paid using an electronic method increased  
 15 from 3.3 percent to 7.4 percent to 23.3 percent. The data show that almost one in ten  
 16 regular monthly bills was paid online in 2004. Given that the diary study reports about  
 17 1.2 billion monthly payments, the decline in the share paid by mail represents a  
 18 reduction of 125 million mailed payments by households per month, or 1.5 billion on an  
 19 annual basis, since 1999.

| <b>Table 8</b>   |       |       |       |
|--|-------|-------|-------|
| <b>Share of Regular Household Bills Paid by Method</b> |       |       |       |
| Payment Method   | 1994  | 1999  | 2004  |
| Mail   | 84.7% | 80.4% | 69.2% |
| In-Person  | 12.0% | 12.3% | 6.7%  |
| Automatic Deduction                                    | 2.9%  | 5.3%  | 9.2%  |
| Online   | 0.1%  | 1.1%  | 9.2%  |
| Other Electronic Methods                               | 0.3%  | 1.0%  | 5.0%  |
| Any Electronic Method                                  | 3.3%  | 7.4%  | 23.3% |

Source: Household Diary Study

Note: Other electronic methods include payment by phone, ATM, and credit card

1 Table 9 provides another look at household bill payment activity. Households are  
 2 grouped into one of three categories: those that do not use any electronic methods,  
 3 those that use some kind of electronic method but do not pay bills online, and those that  
 4 pay bills online.

| <b>Table 9</b>  |                                 |                                    |             |
|---|---------------------------------|------------------------------------|-------------|
| <b>Share of Household Bills Paid by Different Methods</b> |                                 |                                    |             |
| Payment Method  | Household Type                  |                                    |             |
|   | Does Not Use Electronic Methods | Pays Electronically But Not Online | Pays Online |
| By Mail   | 87.2%                           | 66.3%                              | 34.3%       |
| In Person   | 12.8%                           | 7.8%                               | 4.6%        |
| Online  | 0.0%                            | 0.0%                               | 36.8%       |
| Other Electronic  | 0.0%                            | 25.9%                              | 24.3%       |

Source: 2004 HDS Data

5 Not surprisingly, households that do not use any electronic methods to pay their  
 6 bills pay the vast majority of their bills by mail. In contrast, households that pay bills  
 7 electronically but not online pay only 66.3 percent of their bills by mail. But the most  
 8 interesting result is that households that use online bill payment pay only 34.3 percent

1 of their bills by mail. Moreover, households that use online bill payment tend to have  
2 higher incomes and receive more bills than other households.

3 **f. Diversion of Business-to-Business Payments**

4 The use of electronic alternatives for business-to-business payments is less  
5 advanced than for household bill payments. The complexity associated with  
6 coordinating the various business payment systems has been a barrier to wider  
7 adoption of electronic payment methods. Rossana Solaris of Clearing House Payments  
8 says that only fourteen percent of B-to-B payments are made electronically. [W. Wade,  
9 “Making Electronic B-to-B Payments User-Friendly,” 169 American Banker No. 213 1  
10 (November 4, 2004)]

11 However, businesses are increasingly purchasing and paying electronically, and  
12 this trend will continue into the future. A 2004 survey conducted by the Association for  
13 Financial Professionals found that 28 percent of corporate respondents said their  
14 organization was very likely to move a majority of B-to-B payments to electronic  
15 payments over the next three years. [Association for Financial Professionals, “2004  
16 Electronic Payments Survey – Report of Survey Results” (October 2004)]

17 **g. Additional Examples of Diversion**

18 There are many other examples of the diversion of First-Class single-piece  
19 letters. College applications are submitted online or e-mailed instead of mailed. Sixty-  
20 two million returns were filed electronically in 2004. [A. Golab, “Electronic tax filing  
21 surging, IRS says,” Chicago Sun Times, (online issue, March 11, 2005)] Greeting  
22 cards and party invitations are sent by e-mail, as are myriad correspondences between  
23 households and businesses: health insurance forms, travel documents, and product  
24 warranties, among others. Individually, none of these actions makes much of a dent in  
25 the 45 billion pieces of single-piece letter volume. Collectively, however, they can  
26 explain a good part of the decline in volume that has been seen over the past few years.

1 To give some sense of the scope of e-mail communication, IDC estimates there  
2 were 7.8 trillion e-mails sent person-to-person worldwide in 2004. This figure is  
3 expected to reach 10.4 trillion in 2008. A substantial portion of these is believed to  
4 originate in the U.S. [J. Raikes, "An Information Worker's View of Microsoft Office  
5 Evolution,"Microsoft Office Assistant (February 2005)] Also, eMarketer estimates  
6 there were 1.5 trillion e-mails in the U.S. alone in 2003. This figure is projected to  
7 nearly double in 2007. Regardless of the exact amount of e-mail sent in the U.S., the  
8 conclusion is that if even a small percentage of e-mail diverts postal mail, the total  
9 impact on First-Class single-piece volume is considerable.

#### 10 **h. Limits to Electronic Diversion**

11 Although electronic diversion is reducing the volume of First-Class Mail, there are  
12 factors that act to slow the rate of diversion. First, the Postal Service works,  
13 successfully delivering billions of letters and trillions of dollars of payments each year.  
14 Second, while Internet penetration continues to grow, growth is slowing and Internet use  
15 is not likely to become universal in the near future. As a result, some people will never  
16 send or receive e-mail, and never make an online bill payment.

17 A third important factor limiting electronic diversion is continued concerns about  
18 the privacy and security of information transmitted across the Internet. As the number  
19 of Internet users has grown, so too has the number of Internet related problems.  
20 Computer viruses have long been a concern that has probably kept some people from  
21 using the Internet. More recently, "phishing" – using the Internet to deceive someone  
22 into providing personal or financial information – is probably also acting to limit some  
23 people's willingness to conduct financial or other activities online.

#### 24 **4. Other Recent Influences**

25 Single-piece letter volume has also been adversely affected by other recent  
26 influences beyond electronic diversion. The sending of anthrax through the mail in the

1 autumn of 2001 may have turned some households and businesses away from the mail.  
2 Because of continuing security concerns, many government agencies have stopped  
3 accepting certain types of mailings. Technological advancements that reduce the costs  
4 associated with presorting and automating the mail may have led to shifts of single-  
5 piece letters to workshared letters, independently of changes in the workshare discount.  
6 The specific nature of the current economic recovery, in which cost-cutting seems to  
7 play such a large role, could be expected to negatively impact single-piece letters since  
8 they are the most expensive form of letter mail. Finally, as the economy becomes  
9 more and more technology-oriented, it may be the case that economic growth is being  
10 driven by sectors that use single-piece letter mail less intensively. For example, it is not  
11 uncommon for a new cell phone account to require automatic bill payment. In this case,  
12 mail is not technically diverted because the mail never existed in the first place. This  
13 effect may be thought of as reflecting a decline in single-piece letters' share of  
14 economic growth or as another form of electronic diversion.

## 15 **5. Recent Contributions to Volume**

16 Evidence of electronic diversion is found in Table 10, which shows the  
17 contribution of different variables to the change in single-piece letter volume over the  
18 past four years. The bottom row of Table 10 indicates that single-piece letter volume  
19 declined 13.68 percent during the four-year period ending in 2005Q1. This calculation  
20 is done by comparing the volume in the four most recent quarters (2004Q2 through  
21 2005Q1) with the volume in the four quarters occurring four years earlier (2000Q2  
22 through 2001Q1). These four-quarter periods correspond to calendar 2000 and  
23 calendar 2004.

24 Table 10 also presents the contribution of each variable to this four-year volume  
25 change. The contributions are calculated in a way that corresponds to the Base Volume  
26 forecast approach discussed earlier in this testimony. The Base Year for the purposes

1 of these contribution calculations is 2000Q2 through 2001Q1. For each variable, the  
 2 percentage change in the variable's value between its value in this Base Year and its  
 3 value in the four most recent quarters ending in 2005Q1 is calculated. Applying the  
 4 econometrically estimated elasticity to this calculated percentage change gives a  
 5 measure of the impact of this variable on volume over the past four years. The  
 6 elasticity estimates are obtained from the testimony of Thomas Thress (USPS-T-7).  
 7 The data used in the contribution calculations presented in this testimony can be found  
 8 in Library Reference LR-K-64, accompanying the testimony of Mr. Thress. In some  
 9 cases, the calculations presented here combine the impacts of individual variables  
 10 differently than as presented in the Library Reference.

11 The impacts of each of the variables affecting single-piece letter volume over the  
 12 past four years will now be addressed in turn.

13

| <b>Table 10</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in First-Class Single-Piece Letters Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 2.9%                          | -0.175                  | -0.50%                             |
| Workshare discount  | 0.7%                          | -0.102                  | -0.07%                             |
| Employment  | -6.1%                         | 0.363                   | -2.26%                             |
| Internet Experience   | 41.4%                         | -0.491                  | -15.65%                            |
| Econometric Trend   | -                             | -                       | -2.50%                             |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   | -                             | -                       | 2.65%                              |
| Total Change in Volume  | -                             | -                       | -13.68%                            |

14

15

**a. Own-Price**

Table 10 shows that the own-price of First-Class single-piece letters increased 2.9 percent over the past four years. This means that the real price over the past four quarters was 2.9 percent greater than the real price in the four quarters from 2000Q2 through 2001Q1.<sup>3</sup> The estimated own-price elasticity of single-piece letters with respect to changes in its real price is -0.175. Applying this elasticity to the 2.9 percent change in real price gives the result that over the past four years, single-piece letter volume declined by 0.50 percent due to price. In other words, real price did not have much of an effect on single-piece letter volume because real price did not change much and because single-piece letter volume is not especially sensitive to price.

**b. Workshare Discount**

The volume of single-piece letters is also affected by the workshare discount, measured as the volume-weighted average of the discounts of each of the workshared letter categories. Holding single-piece letter price constant, an increase in the workshare discount reduces single-piece volume because some single-piece mail shifts into a workshared category in response to the greater discount. Econometrically, it is estimated that a one percent increase in the level of the workshare discount reduces single-piece volume by 0.102 percent. Therefore, the 0.7 percent increase in the real workshare discount over the past four years contributed to a 0.07 percent decline in the volume of single-piece letters.

---

<sup>3</sup> The calculation is somewhat more involved than described here because price elasticity effects have a lag structure, meaning that volume in any given quarter of a year is affected by price in that quarter as well as price in earlier quarters. Therefore, it may be best to think of the price changes shown in the contribution tables as being representative of the real price change over the past four years.

**c. Employment**

1  
2 The volume of single-piece letters is also affected by changes in employment per  
3 adult. The econometric analysis of Witness Thress finds that the elasticity of single-  
4 piece letter volume with respect to employment is declining over time. This means that  
5 changes in employment have had a smaller impact on volume in recent years,  
6 compared with years in the past. This is consistent with the notion that economic  
7 growth is not generating as much single-piece letter volume today as it has in the past.

8 Table 10 shows that the elasticity of single-piece letter volume with respect to  
9 employment per adult is 0.363. This is the elasticity in the four most recent quarters.  
10 Applying this estimated elasticity to the 6.1 percent decline in employment per adult,  
11 yields the result that this variable was responsible for a 2.26 percent decline in single-  
12 piece letter volume over the past four years. Therefore, economic factors, as measured  
13 by changes in employment, explain some, but not most, of the recent decline in single-  
14 piece letter volume.

**d. Internet Experience**

15  
16 As detailed in the preceding section of this chapter, single-piece letter volume  
17 has been strongly affected by electronic diversion. In his testimony, Mr. Thress  
18 estimates this impact econometrically using a variable measuring Internet experience.  
19 The variable is created by converting consumer spending on ISPs (Internet Service  
20 Providers) from a dollar measure to a quantity measure. His testimony provides a  
21 detailed discussion of this variable. Table 10 shows that over the past four years, the  
22 volume of single-piece letters declined 15.65 percent due to increases in measured  
23 Internet experience. While this variable is technically a measure of consumer Internet  
24 use, it is likely to be closely correlated with use of the Internet by businesses and the

1 government, as well as use of other technological alternatives to the mail.<sup>4</sup> Therefore,  
2 this variable can be viewed as measuring the reduction in single-piece letter volume due  
3 to electronic diversion.

#### 4 **e. Econometric Trend**

5 The demand equation for single-piece letters includes an econometric trend term  
6 beginning in 2002Q4. This trend reflects recent ongoing influences on single-piece  
7 volume beyond those captured by postal prices and discounts, employment, and the  
8 Internet experience variable. These other influences may include those referred to  
9 earlier in this section such as continuing reductions in single-piece volume resulting  
10 from the anthrax attacks or other recent changes in the use of single-piece letter mail.  
11 This trend explains a 2.50 percent decline in single-piece letter volume over the past  
12 four years, though all of this impact occurs in the period beginning in 2002Q4.

#### 13 **f. Adult Population**

14 Mail volumes are measured on a per-adult basis in the econometric estimation of  
15 mail demand, and the impact on mail volume of the factors discussed above is  
16 presented on a per-adult basis as well. Since total volume is equal to volume per adult  
17 multiplied by adult population, changes in volume can be decomposed into changes in  
18 volume per adult and changes in adult population. If there were no change in volume  
19 per adult, total volume would still change due to growth in adult population over time.  
20 Table 10 shows that over the past four years, growth in adult population was  
21 responsible for a 5.21 percent increase in the volume of single-piece letters.

22

---

<sup>4</sup> There is nothing unique about the Internet experience variable reflecting other related influences. As noted, single-piece letter volume is affected by changes in employment, but certainly other economic variables also impact volume. In constructing econometric equations, it is often best to include a limited number of variables, each capturing a specific type of influence. For a full discussion of the econometric variable choices, please see the testimony of Mr. Thress.

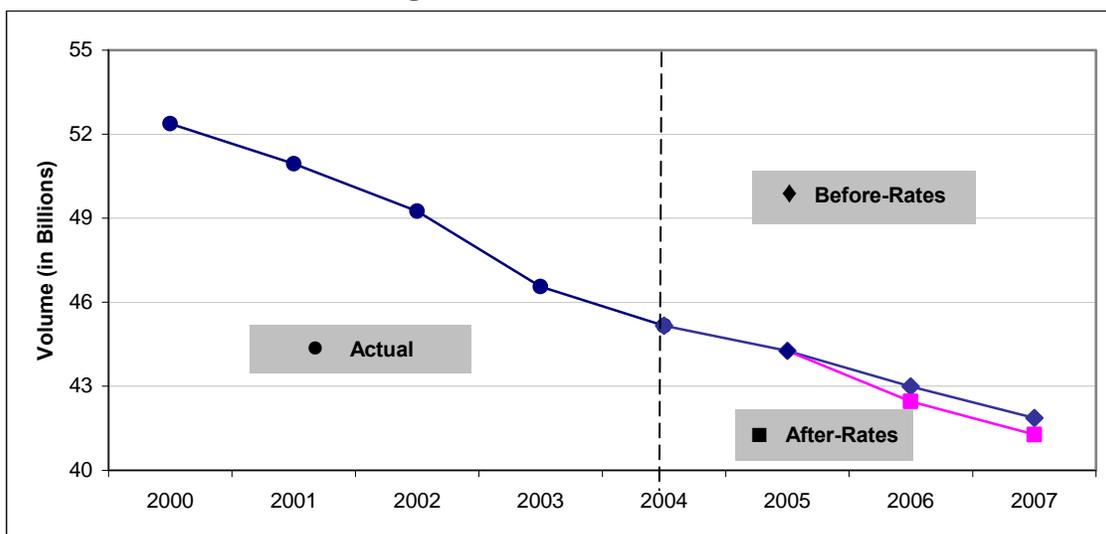
**g. Other Factors**

Table 10 shows that other factors were responsible for a 2.65 percent increase in single-piece letter volume over the past four years. These other factors represent the part of the four-year volume change that is not explained by the variables discussed above. It includes, for example, volume changes due to seasonal variation in the quarterly data. It also includes other influences not captured by the econometric demand equation but captured in the Base Year volume of single-piece letters.

**6. Before- and After-Rates Volume Forecasts**

The before-rates and after-rates forecasts of First-Class single-piece letters are presented in Figure 3A, along with the recent volume history. The forecasts are obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). The downward trend in single-piece letters is projected to continue into the future. The before-rates Test Year (GFY 2006) forecast of First-Class single-piece letters is 42,987.742 million pieces. The Test Year after-rates forecast is 42,459.296 million pieces.

**Figure 3A  
First-Class Single-Piece Letters Volume Forecasts**



## **C. First-Class Workshared Letters**

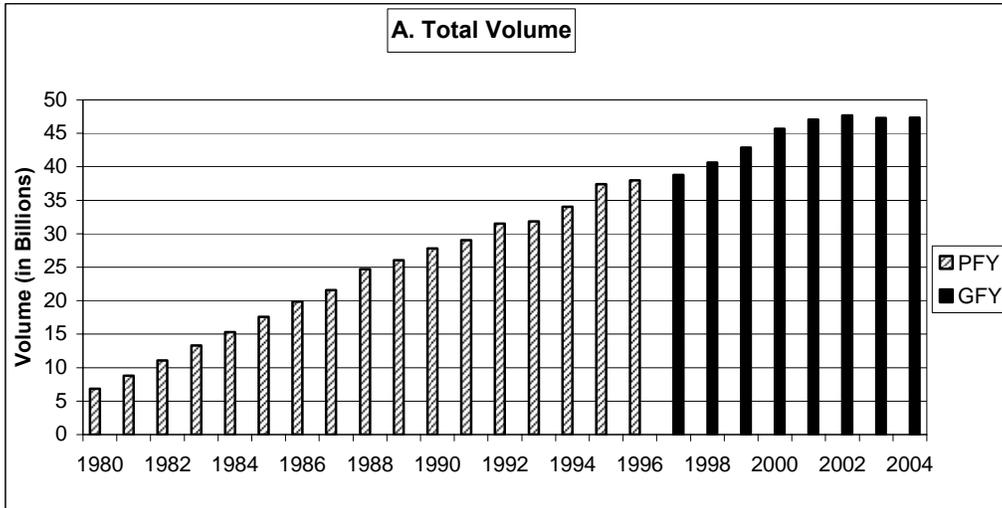
### **1. Volume History**

Figure 4 shows the volume history of First-Class workshared letters from 1980 through 2004. Comparing Figure 4 to Figure 3 shows important differences between the volume histories of workshared and single-piece letters. Until 2002, workshared letter volume increased every year since its introduction, rising from 6.8 billion pieces in 1980 to 47.7 billion pieces in 2002, a seven-fold increase. Volume per adult rose from 47 pieces to 240 pieces over this same period, a five-fold increase. As Section C shows, volume per adult grew quite rapidly in the 1980s, with annual increases above twenty percent due in part to the growing economy but primarily due to shifts of single-piece letters to workshared letters.

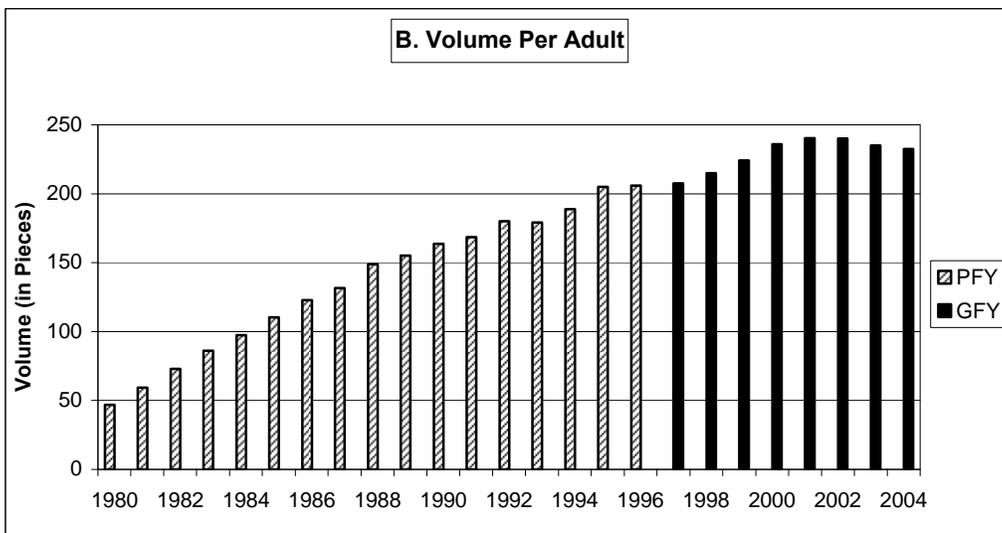
Workshared volume continued to grow in the 1990s, albeit at a slower pace. The small increases in volume per adult in 1996 and 1997 can be attributed to the effect of rule changes resulting from the MC95-1 reclassification case which eliminated the presort non-automation category and temporarily shifted some workshared letter mail into the single-piece category. Beginning in 1998, volume per adult grew solidly until the 2001 recession.

Since 2001, workshared volume per adult has declined. In fact, in comparison to single-piece letter mail, workshared letter volume growth experienced an even greater shift in a shorter amount of time. In 2004, workshared volume was lower than in 2002, a sharp contrast from the period from 1997 to 2002, during which volume increased by more than 22 percent. Again, the decline in workshared letter volume during 2004, a period of economic growth and stable postal rates, is an obvious departure from its traditional, positive long-term volume trend.

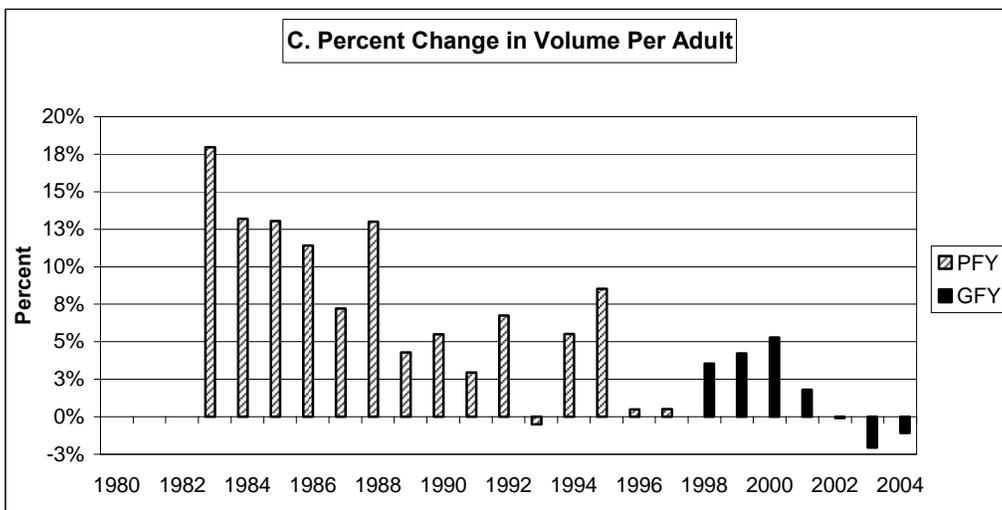
**Figure 4**  
**First-Class Workshared Letters Volume History**



1



2



3

## 2. Factors Affecting Volume

1  
2 First-Class workshared letters volume, like the volume of single-piece letters, has  
3 been positively affected by increases in population and economic growth. In contrast to  
4 single-piece letters, however, technology has had a mixed impact on the volume of  
5 First-Class workshared mail. Growth in workshared volume has occurred not only  
6 because of the introduction and expansion of workshare discounts, but also because  
7 technological advancements have lowered the cost of processing bulk First-Class Mail.  
8 Furthermore, computer databases have made direct mail advertising more effective,  
9 though the impact of this effect is greater for Standard Mail than it is for First-Class Mail.

10 Technology has had other positive impacts on workshared mail due to the growth  
11 in the adoption of new products that generate periodic bills and statements, e.g., cell  
12 phone and cable television accounts. Finally, workshared volume has also benefited  
13 from a long-term increase in the number of credit card accounts, which has led to an  
14 increase in credit card statements and credit card advertising mail, though much of the  
15 latter is sent as Standard Mail.

16 Until recently, workshared mail volumes did not appear to have been materially  
17 affected by diversion to technological alternatives. However, it now appears that  
18 diversion of First-Class workshared mail is occurring, though the effects are smaller  
19 than what has been experienced by single-piece mail.

20 Changes in business operating activities have likely also had a negative impact  
21 on workshared mail volume. Increased emphasis on cost cutting has encouraged many  
22 companies to limit their mailings. Workshared mail volume was also affected by a  
23 decline in advertising mailings, particularly by the credit card industry, in 2002 and 2003,  
24 though it now appears that this market has recovered. Each of these issues --  
25 electronic diversion, changes in business activities, and the credit card market -- will be  
26 addressed in turn.

### 3. Electronic Diversion

1                   **3.       Electronic Diversion**  
2           Until recently, workshared letters did not appear to have been materially affected  
3 by electronic diversion. Volume growth remained strong even as use of the Internet and  
4 other technological alternatives to the mail increased rapidly. However, the substantial  
5 change in workshared letter volume trend from solidly positive to essentially flat raises  
6 the prospect that electronic diversion is affecting this mail product as well.

7           The diversion of workshared letters comes principally from the replacement of  
8 bills, statements, advertising, and other mailings by various forms of electronic  
9 presentment. Since a large portion of workshared letter mail is sent to households, the  
10 increase in household Internet penetration is one key driver of workshared letter  
11 diversion. Specifically, it appears that workshared volumes are affected in ways better  
12 measured by growth in broadband Internet use, as opposed to dial-up Internet.

#### a.       Broadband

13                   **a.       Broadband**  
14           The University of Southern California's Center for the Digital Future writes in its  
15 2004 report that "broadband is changing entirely our relationship with the Internet at  
16 home." The report notes that beyond having a faster connection speed, broadband is  
17 "always on," in contrast with dial-up Internet which requires the user to log on each time  
18 he or she wishes to use the Internet. "Already we are seeing that broadband users  
19 spend more time online than users who connect to the Internet by modem, and that the  
20 tasks people undertake online vary based on their method of access," the USC report  
21 observes. [J. Cole et al., USC Annenberg School, Center for the Digital Future, "The  
22 Digital Future Report – Surveying the Digital Future, Year Four – Ten Years, Ten  
23 Trends," (September 2004)]

24           The differences between broadband and dial-up Internet, and between  
25 broadband and dial-up Internet users, represent important distinctions for businesses  
26 considering the use of electronic substitutes for the mail. While most people have the

1 Internet, the Internet is not always integrated into people’s lives. Some people rarely  
 2 check their e-mail, for example, but broadband households are much more likely to be  
 3 regularly connected to the Internet. They can be reached by e-mail much more reliably  
 4 than dial-up users. They are more likely to be comfortable with e-mail and other forms  
 5 of technology than dial-up Internet users, let alone those who do not use the Internet at  
 6 all. As the USC report notes, the always-on feature of broadband “will have broad  
 7 effects on Internet use, creating changes for users that are almost as great as the  
 8 difference between Internet access and not having access at all.”

9 In recent years, broadband Internet use has increased dramatically. According  
 10 to Leichtman Research Group, there were more than thirty million U.S. broadband  
 11 subscribers at the end of 2004. [Leichtman Research Group press release, “A Record  
 12 Year for High-Speed Internet” (March 2, 2005)]. As shown in Table 11, the number of  
 13 subscribers has almost doubled in the last two years, tripled in the last three, and  
 14 increased more than 20-fold over the past five years.

15

| <b>Table 11</b>                                 |      |      |      |      |      |      |
|---|------|------|------|------|------|------|
| <b>Broadband Internet Subscribers, Year End</b> |      |      |      |      |      |      |
| (in millions)                                   |      |      |      |      |      |      |
| 1998  | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| 0.5   | 1.4  | 5.8  | 11.0 | 17.4 | 24.6 | 33.1 |

16  
17  
18

Source: Leichtman Research Group  
(2004 projected using data through 2004Q3)

19 The shift from dial-up to broadband is documented in the U.S. Department of  
 20 Commerce’s 2004 report, “A Nation Online: Entering the Broadband Age.” The agency  
 21 found that from 2001 to 2003, the number of dial-up Internet households declined from  
 22 44.2 million to 38.6 million while the number of broadband households rose from 10.4  
 23 million to 22.8 million. [U.S. Dept. of Commerce, Economics and Statistics

1 Administration, National Telecommunications and Information Administration, "A Nation  
 2 Online: Entering the Broadband Age" (September 2004)] The 2004 Ramsey Review  
 3 provides another look at the increasing share of online households with broadband  
 4 access. That report predicted that in 2005, more than half of all online households will  
 5 have broadband. [G. Ramsey, "The Ramsey Review – The State of the Online  
 6 Advertising Industry," (November 2004)] According to Nielsen, this point occurred in  
 7 2004, if one includes people who access the Internet at work. [J. Hu, "Study:  
 8 Broadband Leaps Past Dial-up," CNET News.com (August 18, 2004)] In any case,  
 9 Ramsey projects that by 2007, almost two-thirds of those online at home will have  
 10 broadband access.

11

| Table 12   |       |       |       |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| Dial-Up and Broadband Access as Share of Total Online Households |       |       |       |       |       |       |       |       |
| Access Method  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  |
| Dial-Up  | 91.1% | 80.1% | 72.8% | 63.7% | 54.9% | 47.0% | 39.5% | 34.7% |
| Broadband  | 8.9%  | 19.9% | 27.2% | 36.3% | 45.1% | 53.0% | 60.5% | 65.3% |

12 Source: 2004 Ramsey Review

13

14 **b. Evidence of Workshared Diversion**

15 Although the overwhelming majority of bills are delivered by the mail, electronic  
 16 presentment of bills (e-bills) is growing rapidly. The Household Diary Study reports that  
 17 only 1.5 percent of regular monthly bills were received by e-mail in 2003, but this figure  
 18 is 50 percent greater than in 2002. The 2004 Household Diary Study reports that  
 19 households received an average of 0.79 electronic bills per month, of which 0.48 were  
 20 also received through the mail. This suggests that 0.31 bills per month per household,  
 21 or about 400 million bills for the year, were received only by electronic methods.

22 Other evidence of the growth in e-bills comes from CheckFree's Fiscal 2005Q2  
 23 report. It is noted CheckFree delivered almost 33 million e-bills during their most recent

1 quarter, 77 percent more than in the same quarter of fiscal 2004. [CheckFree  
2 Corporation 10Q SEC Filing of quarterly report as of December 31, 2004] Other  
3 electronic bill payment and presentment companies such as Princeton eCom and  
4 Metavante have also seen growth in their e-bills activities. Banks are also jumping into  
5 this market. American Banker reports that Wells Fargo e-bill customers increased 241  
6 percent over the past year. [S. Bills, "Will Presentment Growth Enliven Online Bill Pay?"  
7 170 American Banker No. 22 17 (February 2, 2005)].

8         And the link between e-bills and broadband Internet is revealed by a finding from  
9 the aforementioned Department of Commerce report that 38.7 percent of broadband  
10 households bank online, compared with 23.8 percent of "narrowband" households, and  
11 16.3 percent of households without Internet access (who presumably bank online from  
12 work or somewhere else). E-presentment of bills becomes a third stage of online  
13 banking development. First, customers use the Internet to access their accounts, next  
14 they use it to pay their bills, and eventually they use it to receive their bills and regular  
15 monthly statements.

16         Statements and other correspondence from businesses to households and other  
17 businesses are also being sent electronically instead of by the mail. According to  
18 Catherine Graeber of Forrester Research, "eStatement adoption has more than tripled  
19 in the past year, with 26 percent of online households now receiving one or more  
20 eStatements from their financial providers." [C. Graeber, "The Dirty Little Secret About  
21 eStatement Adoption," Forrester (December 7, 2004)] Another example of workshare  
22 letter diversion is frequent flyer notices, which now are commonly sent by e-mail, as are  
23 other regular correspondences between businesses and their customers. Company  
24 business reports can be downloaded from the Web. Some insurance companies offer  
25 policy holders financial incentives for receiving policy documents online. [G. Davies,  
26 "How Financial Incentives Can Drive e-Servicing," Insurance & Technology (July 17,

1 2002)] Blue Cross Blue Shield recently entered into an agreement with PayFormance  
2 Corporation to change the health insurance company's operations from paper-based to  
3 electronic-based communications. [Payformance Corporation, "Blue Cross and Blue  
4 Shield Association and Payformance Corporation Sign National Agreement" (November  
5 30, 2004)]

6 Finally, First-Class workshared letter advertising mail has probably been reduced  
7 to some degree by increased use of e-mail and Internet advertising.

#### 8 **4. Changing Business Operations**

9 Peter Lucas of Collections & Credit Risk writes, "Cutting costs and improving  
10 cash flow are two top-of-mind challenges for chief financial officers in today's uneven  
11 economy, so it's no shock to see paper-based labor-intensive processes move to the  
12 endangered species list." [P. Lucas, "B2B Tames the Paper Tiger," 9 Collections &  
13 Credit Risk No. 6 22 – 26 (June 2004)] Whether paper-based processes are  
14 endangered, they are certainly coming under pressure from cost-cutting businesses.  
15 According to Rick Long, a director at Capital One Financial, "Our ROI models are built  
16 on lowering costs," and that's why the company is using the Internet to drive costs out of  
17 the system by encouraging customers to pay online and to receive monthly statements  
18 electronically. [W. Wade, "Coming Full Circle on E-Strategies," 169 American Banker  
19 No. 114 1 (June 15, 2004)]

20 Many companies are offering incentives to customers to give up paper  
21 statements, and some are actually charging extra for their delivery. The bottom line is  
22 that electronic processing of payments, bills, and invoices, and electronic presentment  
23 of bills and statements is less costly than using the mail. As companies increasingly  
24 emphasize cost reductions as part of their business strategy, technology will continue to  
25 replace the mail.

1 Another change in the business world has been the immediate use of electronic  
2 billing and statement presentment for new accounts. For example, a new cell phone  
3 account might require the customer to accept electronic presentment of bills and  
4 statements. As a result, an activity which traditionally led to more workshared letter  
5 volume (a new account), no longer leads to an increase in mail.

6 Transportation disruptions resulting from the 9/11 attacks, and the sending of  
7 anthrax through the mail soon afterward, may have caused some businesses to  
8 reassess their reliance on the mail. A January 2005 report from Killen & Associates,  
9 “Financial Supply Chain Requirements of Consumer Services Organizations,” argues  
10 that the threat of a future disruption of the mail system has alerted many businesses to  
11 the benefits of electronic presentment of bills, statements, and other materials. The  
12 Killen report quotes Pete Lambert of the National City Bank of Cleveland, “You know  
13 what happened during 9/11 and the anthrax attacks of October 2001. The Postal  
14 Service could not deliver bills to customers or payments to the firms that issued those  
15 bills. Planes were forced to stay on the ground. The anthrax attacks shut down part of  
16 the United States Postal Service and companies’ mail rooms.” [Killen & Associates  
17 white paper 474-2005, “Financial Supply Chain Requirements of Consumer Services  
18 Organizations” (January 2005)]

## 19 **5. Credit Cards**

20 The credit card industry is a major user of the mail. According to data from the  
21 2004 HDS, households received more than six billion pieces of First-Class Mail from the  
22 credit card industry. The industry also sent considerable First-Class Mail to businesses.  
23 Credit card mailings are for the most part either monthly statements or solicitations for  
24 new cards or new services.

25 Growth in credit card mailings explains part of the long-term positive trend in  
26 workshared letters volume. According to data compiled from the *Statistical Abstract of*

1 *the United States*, the number of people with a MasterCard or Visa credit card  
2 increased 35 percent from 1992 to 2002. The number of people holding any type of  
3 credit card (including store cards, American Express, gasoline station cards, etc.)  
4 increased 44 percent over this ten-year period. Both these growth rates far outstripped  
5 growth in population.

6 In addition to growth in the number of people with credit cards, there has been  
7 growth in the number of credit cards per account holder. As a result, the total number of  
8 credit cards has grown even faster than the number of card holders. As of 2002, there  
9 were 525 million MasterCard or Visa cards in circulation, more than double the number  
10 a decade earlier. [U.S. Census Bureau, *Statistical Abstract of the United States: 1994*,  
11 Table No. 799 and *2004-2005*, Table No. 1185]. These cards, along with other non-  
12 bank-issued cards, generate mailed statements and remittances.

13 In addition, there has been tremendous growth in the amount of direct mail  
14 solicitation undertaken by the credit card industry. According to data from Synovate  
15 MailMonitor, the number of credit card solicitation mailings rose from under one billion in  
16 1992 to over five billion in 2001. Not all of these mailings were sent as First-Class Mail,  
17 but the upward trend in First-Class solicitations is also confirmed by HDS data over the  
18 same period which shows that households received 2.4 billion First-Class credit card  
19 solicitations in 2001, compared to only 325 million in 1992.

20 The credit card industry was hit hard by the 2001 recession. Credit card  
21 delinquencies rose as did the level of charge-offs, the percentage of loans removed  
22 from the books for non-payment. Many companies scaled back their solicitation  
23 mailings, particularly to households with weaker (sub-prime) credit records. After  
24 peaking at 5.02 billion pieces in 2001, mailings fell to 4.89 billion in 2002, and then to  
25 4.29 billion in 2003. Credit card mailings to sub-prime candidates explain much of this  
26 decline, as they fell in half over this time period. [Synovate, "Synovate today reported

1 that annual credit card mail volume for 2003 decreased by 12% compared to volume in  
2 2002” (March 29, 2004)]

3 By 2004, credit card financial conditions had greatly improved. As the financial  
4 books of credit card issuers improved and industry profits rose, many card issuers  
5 resumed their marketing efforts. Synovate reported that credit card solicitations for the  
6 first three quarters of 2004 were up more than 20 percent from the first three quarters of  
7 2003. [CORe Synovate Web site, “Mail Volume Estimates from Mail Monitor,” quarterly,  
8 Q1 1992 – Q3 2004]

9 More recently, Comperemedia reported that mailings in October 2004 were up 20  
10 percent from October 2003. Capital One reported that its marketing expenses  
11 increased more than 60 percent in the fourth quarter of 2004 compared with the third  
12 quarter of 2004. [L. Kuykendall, “In Brief: Cap One’s Profits Plunge 27%,” 170  
13 American Banker No. 13 20 (January 20, 2005)]

14 Another key development in the past year occurred in October 2004, when the  
15 Supreme Court refused to hear an appeal by MasterCard and Visa, thereby opening the  
16 way for more banks and finance companies to begin issuing American Express cards.  
17 In November, MBNA began marketing American Express cards, and within one week  
18 300,000 cards were approved. [“MBNA, AmEx Alliance Begins with a Bang,” 17 Credit  
19 Card Management No. 10 11 (December 2004)] Credit Card Management estimates  
20 that total solicitations in 2004 will reach 5.36 billion, almost seven percent more than the  
21 number of mailings in 2001. [K. Fitzgerald, “Mail Mania,” 17 Credit Card Management  
22 No. 10 20 – 24 (December 2004)]

23 And, finally, restrictions on telemarketing (“Do Not Call”) have probably given at  
24 least a temporary lift to credit card solicitations, as well as to other kinds of First-Class  
25 Mail advertising. The impact of “Do Not Call” legislation is discussed in more detail in  
26 the chapter on Standard Mail.

1           Looking to the future, it is reasonable to expect the credit card industry to  
2 continue to expand its marketing activity as it has for at least the last decade. However,  
3 it is unlikely that solicitation volume will continue to grow as rapidly as it did in 2004.  
4 First, there is an ultimate saturation point that the industry may be reaching. Mailings  
5 are up, but the response rate in the third quarter of 2004 was only 0.4 percent. Second,  
6 the financial improvements affecting the industry have largely already occurred.  
7 According to Richard B. Shane, Jr., Jeffries & Co. Inc. analyst, the September 2004  
8 improvement in charge-offs probably indicates that credit card charge-offs are nearing  
9 the bottom. According to Mr. Shane, “the trend down in charge-offs is running out of  
10 steam...charge-offs are at a level where there is not much room for improvement.”  
11 [L. Kuykendall, “Positive Signs from Master Trusts,” 169 American Banker No. 200 6  
12 (October 18, 2004)] Third, rising interest rates will increase card issuers’ cost of funds,  
13 putting more pressure on their bottom lines and possibly causing another cut-back in  
14 solicitation activity.

15           In any case, the recent increase in credit card solicitation mailing is included in  
16 the Base Volume used to forecast workshared letter volumes.

## 17           **6.       Recent Contributions to Volume**

18           Table 13 presents the contribution of each variable to the change in workshared  
19 letter volume over the past four years. It is constructed following the same approach as  
20 described for single-piece letters in the preceding section. Table 13 shows that over the  
21 past four years, workshared letter volume increased 4.90 percent. Before the  
22 contributions of the individual factors to this volume change are discussed, it is worth  
23 reflecting on how different this recent four-year period has been from only a few years  
24 ago when *annual* volume gains were greater than 4.90 percent.

25

26



1                                   **c.     Standard Discount**

2           Advertising mailers have a choice between sending their mail as First-Class  
3 workshared or as Standard Regular. Workshared letter postage is higher than for  
4 Standard Mail, but First-Class Mail provides some benefits such as more timely delivery  
5 and free forwarding not available to users of Standard Mail. Therefore, advertising  
6 mailers could be expected to weigh the relative benefits of First-Class Mail against its  
7 higher costs. The difference between the workshared letter rate and the Standard  
8 Regular rate can be thought of as the Standard Regular discount. If this discount  
9 increases, Standard Mail becomes less expensive relative to First-Class workshared  
10 mail, and some advertising mailers may shift volume from First-Class to Standard. The  
11 estimated elasticity of workshared letter volume with respect to the Standard Regular  
12 discount is -0.097. The negative coefficient means that increases in this discount lead  
13 to reductions in workshared letter volume.

14           As Table 13 shows, however, over the past four years, the real Standard Regular  
15 discount barely changed, declining just 0.1 percent. Therefore, this variable did not  
16 have much net impact on workshared letter volume over this time period.

17                                   **d.     Retail Sales**

18           The elasticity of workshared letter volume with respect to retail sales (real per  
19 adult) is estimated to be 0.459. Applying this elasticity to the 5.6 percent increase in  
20 sales over the past four years leads to a 2.53 percent increase in workshared letter  
21 volume due to this variable. Therefore, growth in retail sales was one factor that  
22 contributed to workshared letter volume over the past four years.

23                                   **e.     Broadband Subscribers**

24           As discussed in the preceding section, workshared letter volume has begun to be  
25 affected by electronic diversion. Furthermore, it was noted that the use of broadband  
26 Internet serves as a good measure of this diversion. Econometrically, the evidence is

1 that growth in the number of broadband subscribers has had a significant impact on  
2 workshared letter volume. Table 13 shows that over the past four years, increases in  
3 broadband subscribers explain a 4.22 percent decline in workshared letter volume.

#### 4 **f. Econometric Trends**

5 Table 13 shows that workshared letter volume increased 1.98 percent due to  
6 factors that are explained by econometric trend terms. This impact is the net result of  
7 two separate trend effects, a long-term positive trend reflecting the historical growth in  
8 workshared letter volume and an additional negative trend beginning in 2002Q4  
9 reflecting recent stagnation of workshared letter volume. The testimony of Thomas  
10 Thress (USPS-T-7) provides a greater discussion of these recent impacts.

#### 11 **g. Adult Population**

12 A 5.21 percent increase in workshared letter volume is attributable to growth in  
13 adult population over the past four years, as shown in Table 13. Given that total  
14 workshared volume increased only 4.90 percent over this time, this means that volume  
15 per adult actually fell over this four year period.

#### 16 **h. Other Factors**

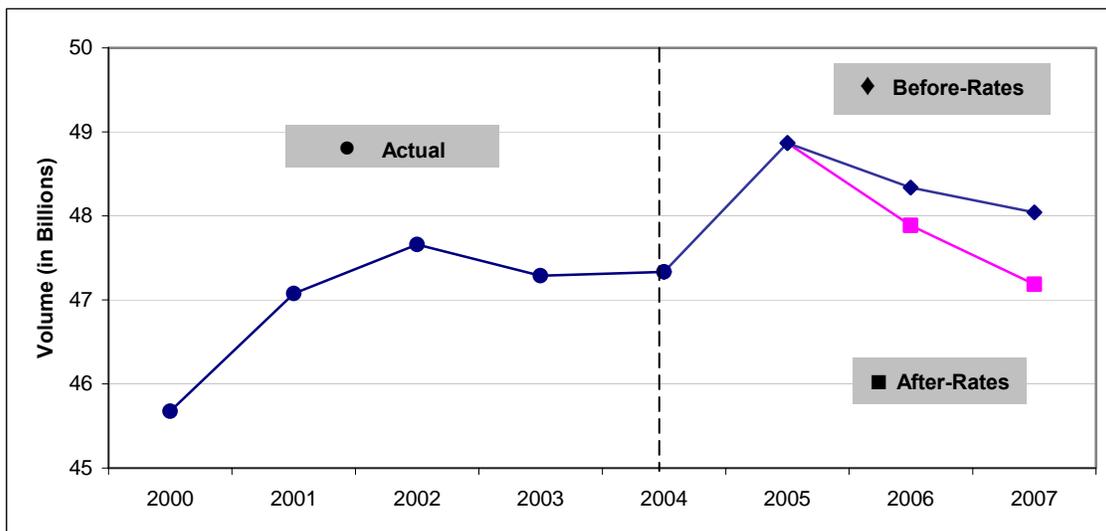
17 Other factors beyond those described above were responsible for a 0.85 percent  
18 increase in workshared letter volume over the past four years. Included in these other  
19 factors are seasonal differences, as well as the impact of recent positive influences on  
20 workshared volume, such as the increase in credit card mailings discussed earlier.

### 21 **7. Before- and After-Rates Volume Forecasts**

22 The before-rates and after-rates forecasts of workshared letters are presented in  
23 Figure 4A, along with the recent volume history. The forecasts are obtained from  
24 Attachment A of the testimony of Thomas Thress (USPS-T-7). The projected increase  
25 in workshare letter volume in GFY 2005 is due primarily to a surge in volume in  
26 2005Q1, which was itself driven by a double-digit volume increase in November. Since

1 then, workshare volume growth has slowed, indicating that the negative influences  
 2 which decreased workshare letter volume in 2003 and 2004 are continuing to operate.  
 3 Overall, volume in the Test Year (GFY 2006) is projected to be greater than in 2004 in  
 4 the before-rates situation, and about the same as in 2004 in the after-rates situation.  
 5 The before-rates Test Year (GFY 2006) forecast of First-Class workshared letters is  
 6 48,336.414 million pieces. The Test Year after-rates forecast is 47,886.718 million  
 7 pieces.

**Figure 4A**  
**Class Workshared Letters Forecast**



## **D. First-Class Cards**

### **1. Definition**

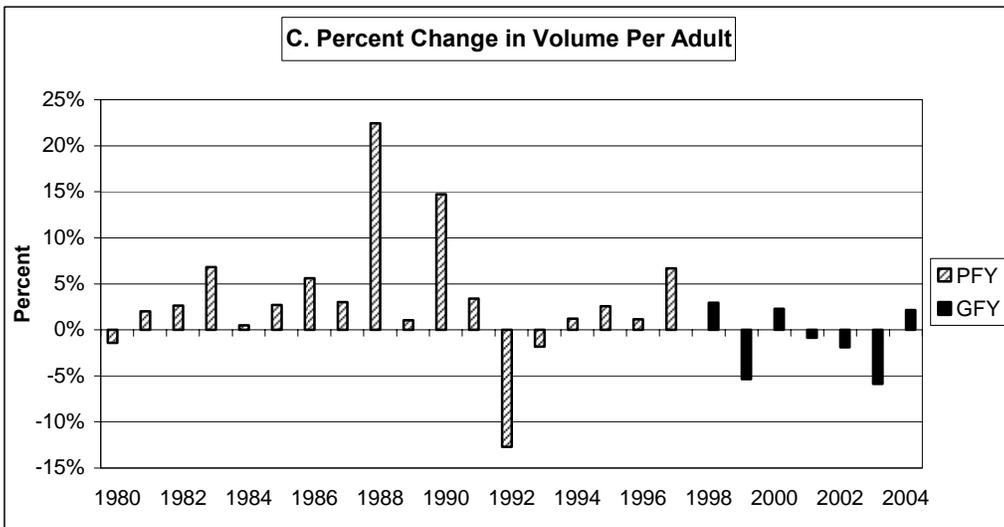
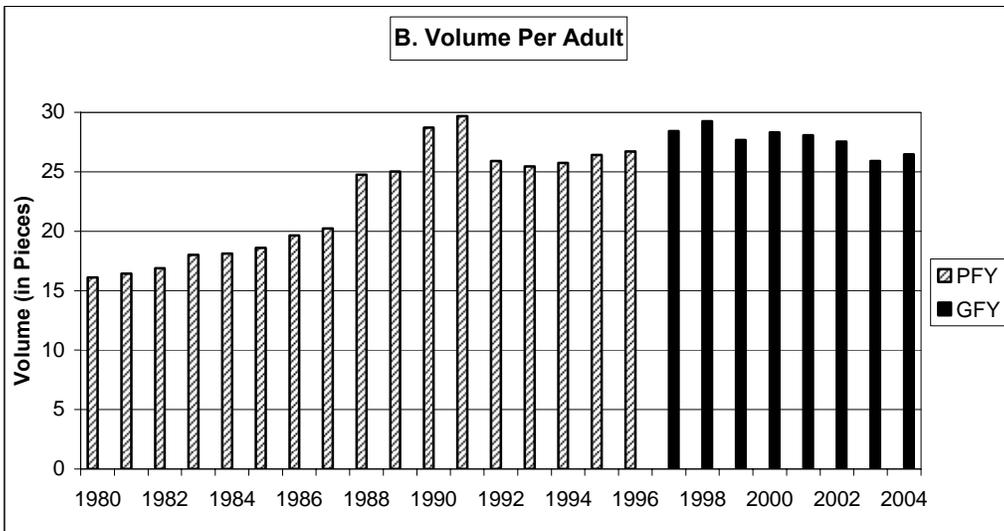
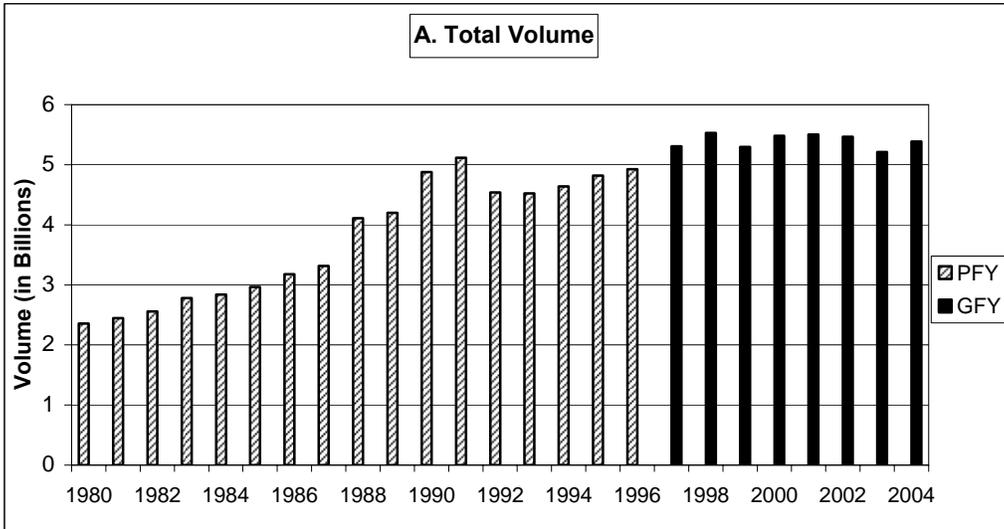
First-Class cards represent a little more than five percent of total First-Class Mail. The characteristic that distinguishes First-Class cards from First-Class letters is that letters are sealed and cards are not. Like letters, however, First-Class cards consist of messages involving the use of personalized information, and their delivery is covered by the Private Express Statutes. First-Class cards are used to send short greetings, as in the case of vacation post cards. It is not uncommon for utility bills to be sent as First-Class cards. However, the most common use for First-Class cards is for advertising.

According to Household Diary Study data, advertising mailings represent almost half of the First-Class cards received by households. Therefore, while First-Class cards carry some of the same features as First-Class letters, they are also similar to Standard Mail.

### **2. Volume History**

As shown in Figure 5, the total volume of First-Class Cards increased steadily throughout the 1980s and reached 5.1 billion in 1991 before dropping to 4.5 billion in 1992. Volume growth returned in 1993 and continued until 1998. Volume fluctuated over the next few years, declining between 2001 and 2003 before experiencing modest growth in 2004. By 2004, volume stood at nearly 5.4 billion pieces. Volume per adult followed a pattern similar to total volume between 1980 and 2004. Annual growth in volume was positive in all but seven years between 1980 and 2004, though the magnitude of the declines was sometimes large.

**Figure 5**  
**First-Class Cards Volume History**



1 In Table 14, single-piece and workshared volumes of First-Class cards are  
 2 presented for selected years beginning in 1980. Table 14 shows that from 1985 to  
 3 2004, workshared cards increased from 20.7 percent to 53.2 percent of all First-Class  
 4 cards. The breakdown of First-Class cards into the single-piece and workshared  
 5 categories is similar to the breakdown for First-Class letters.

| <b>Table 14</b>   |              |            |            |            |
|---|--------------|------------|------------|------------|
| <b>Single-Piece and Workshared Volumes of First-Class Cards</b> |              |            |            |            |
| (in millions)   |              |            |            |            |
| Year  | Single Piece |            | Workshared |            |
|   | Volume       | Percentage | Volume     | Percentage |
| 1980  | 1,793.6      | 76.2%      | 560.4      | 23.8%      |
| 1985  | 2,349.8      | 79.3%      | 613.5      | 20.7%      |
| 1990  | 3,284.0      | 67.4%      | 1,591.7    | 32.6%      |
| 1995  | 2,835.3      | 58.9%      | 1,981.6    | 41.1%      |
| 2000  | 2,719.3      | 49.6%      | 2,761.4    | 50.4%      |
| 2001  | 2,653.4      | 48.2%      | 2,846.7    | 51.8%      |
| 2002  | 2,669.2      | 48.8%      | 2,798.1    | 51.2%      |
| 2003  | 2,551.6      | 49.0%      | 2,661.5    | 51.0%      |
| 2004  | 2,524.2      | 46.8%      | 2,863.7    | 53.2%      |

### 6 **3. Factors Affecting Volume**

7 First-Class cards volume has been affected by many of the same factors that  
 8 have influenced the volume of First-Class letters. One such factor is the decline in mail  
 9 sent by households. According to Household Diary Study data, the share of First-Class  
 10 cards sent by households has fallen in half since 1987. First-Class cards volume has  
 11 also been reduced by electronic diversion, though the volume data indicate that the  
 12 impact of diversion has been less than for letters. Still, it seems reasonable that e-mail  
 13 would be well-suited as a substitute for First-Class cards.

1 Economic factors do not play as clear a role in contributing to the volume of First-  
2 Class cards as they do for First-Class letters. Because cards are priced substantially  
3 below letters, there may be some counter-cyclical movements between these two  
4 subclasses. During periods of economic decline, mailers might be expected to reduce  
5 costs by sending cards instead of letters.

6 Because a large share of cards is advertising mail, First-Class cards volume is  
7 also affected by some of the same factors that affect Standard Mail. These factors are  
8 discussed in detail in the Standard Mail chapter of this testimony. Briefly, advertising  
9 mail has been growing over time, and First-Class cards advertising has probably  
10 benefited from this long-term positive trend.

11 More specifically, cards volume has been affected by the relative pricing of First-  
12 Class cards and Standard Mail. The large increase in volume per adult shown in 1988  
13 was largely a result of changes in rates following the R87-1 case which priced First-  
14 Class cards below the prices of their corresponding categories of Standard Regular  
15 Mail. The big decline in cards volume in 1992 can be traced to the R90-1 rate case  
16 which reversed this price relationship for most mail categories, making cards once again  
17 more expensive.

#### 18 **4. Recent Contributions to Volume**

19 Table 15 shows that over the past four years, the volume of First-Class cards has  
20 declined 0.88 percent. The table also presents the contributions of individual variables  
21 to this four-year volume change.

##### 22 **a. Own-Price**

23 Table 15 shows that the real price of First-Class cards increased by 7.5 percent  
24 over the past four years. The First-Class cards price is a weighted average of the  
25 prices of the individual categories of the subclass. Applying the estimated own-price  
26 elasticity of -0.376 to this percentage change gives the result that the volume of First-

1 Class cards declined by 2.67 percent over the past four years due to price. Therefore,  
2 unlike the case of First-Class letters, postal rates were an important factor explaining  
3 the decline in First-Class cards volume.

| <b>Table 15</b>  |                               |                         |                                    |
|--|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in First-Class Cards Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable   | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price  | 7.5%                          | -0.376                  | -2.67%                             |
| Standard Regular   | -19.0%                        | 0.069                   | -1.44%                             |
| Internet Experience  | 21.1%                         | -0.168                  | -3.15%                             |
| Adult Population   | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors  | -                             | -                       | 1.42%                              |
| Total Change in Volume   | -                             | -                       | -0.88%                             |

4

5 **b. Standard Regular**

6 As noted in the discussion of volume trends, First-Class cards are priced close to  
7 Standard Mail. At times, specific categories of cards may be priced above or below the  
8 corresponding Standard Mail category. This effect is accounted for by a variable  
9 measuring the percent of mail pieces at Standard Regular letter rates that would be  
10 cheaper to mail as First-Class cards. Econometrically, this variable explains a 1.44  
11 percent decline in First-Class cards volume over the past four years.

12

**c. Internet Experience**

13 First-Class cards, like First-Class letters, have been affected by electronic  
14 diversion. The variable used to measure the electronic diversion of First-Class cards is  
15 the Internet experience variable, also used in the First-Class single-piece letter volume  
16 equation. As shown in Table 15, this variable explains a 3.15 percent decline in First-  
17 Class cards volume over the past four years.

**d. Adult Population**

Over the past four years, increases in adult population explain a 5.21 percent increase in the volume First-Class cards.

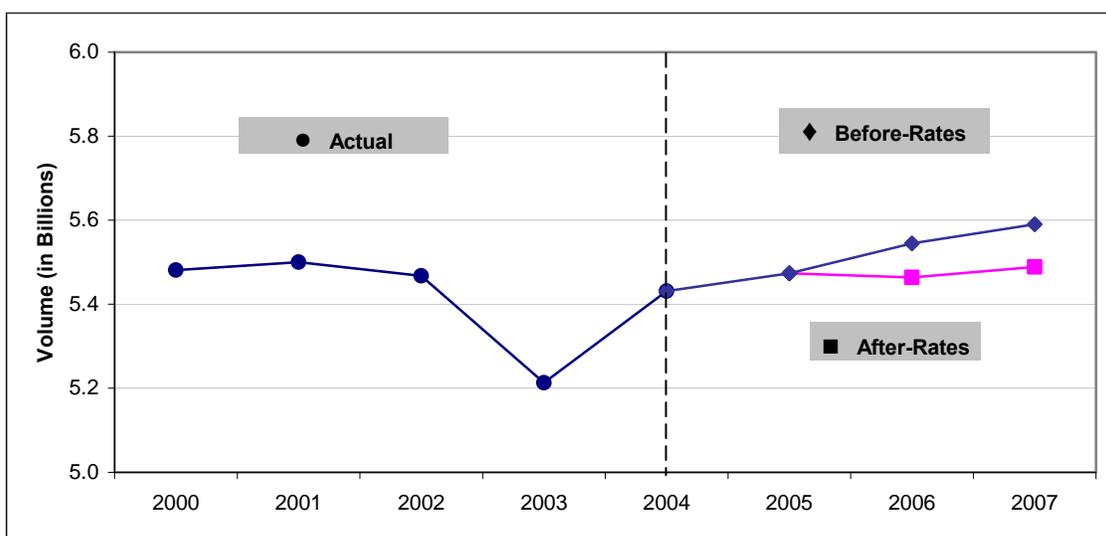
**e. Other Factors**

Table 15 shows that other factors beyond those listed specifically in Table 15 were responsible for a 1.42 percent increase in the volume of First-Class cards. Most of this increase was due to seasonal mailing differences between the most recent four quarters and the four quarters four years earlier.

**5. Before- and After-Rates Volume Forecasts**

The before-rates and after-rates forecasts of First-Class cards are presented in Figure 5A, along with the recent volume history. The forecasts are obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). First-Class cards volume is projected to increase over the next few years. The before-rates Test Year (GFY 2006) forecast of First-Class cards is 5,544.356 million pieces. The Test Year after-rates forecast is 5,463.895 million pieces.

**Figure 5A  
First-Class Cards Volume Forecasts**



### 1 III. PRIORITY AND EXPRESS MAIL

#### 2 A. Priority Mail

##### 3 1. General Characteristics

4 Priority Mail provides many of the same features as First-Class Mail but is  
5 available for mail weighing between 13 ounces and 70 pounds. Priority Mail can be  
6 used for mailings weighing less than 13 ounces, but this mail can also be sent as First-  
7 Class. In general, Priority Mail is delivered within two days to most locations, but there  
8 is no service guarantee.

9 Priority Mail rates are zoned for mailings weighing more than one pound. Rates  
10 increase as the delivery distance increases between specified zones, and as weight  
11 increases in one-pound increments until reaching the 70 pound maximum. For Priority  
12 Mail weighing one pound or less, rates are unzoned (they do not vary with distance). In  
13 addition, a Priority Mail flat-rate envelope can be used to send mail at the one-pound  
14 Priority Mail rate, irrespective of the actual weight and destination zone.

15 On November 20, 2004, the Postal Service introduced, on an experimental basis,  
16 a Priority Mail unzoned flat-rate box. There are two configurations of boxes available,  
17 and the rate for each is currently twice the one-pound rate, irrespective of the actual  
18 weight.

19 Priority Mail is part of a highly competitive package delivery market. Customers  
20 have a variety of choices, not only among different postal products but among different  
21 package delivery firms including UPS, FedEx and DHL. One feature that distinguishes  
22 Priority Mail from the ground services of the various private delivery firms is that Priority  
23 Mail is more commonly used by households to send packages. Table 16 shows that in  
24 2002, 15.6 percent of Priority Mail was sent by households, but household-sent  
25 packages represented less than three percent of the volume of the private ground  
26 delivery market.

| <b>Table 16</b>   |                    |               |                    |
|---|--------------------|---------------|--------------------|
| <b>Priority Mail by Sender and Recipient:<br/>Comparisons with Private Delivery Firms, 2002</b> |                    |               |                    |
|   | Sent by Businesses |               | Sent by Households |
|   | To Businesses      | To Households |                    |
| Priority Mail   | 64.1%              | 20.3%         | 15.6%              |
| Private Firms   | 78.9%              | 18.3%         | 2.7%               |

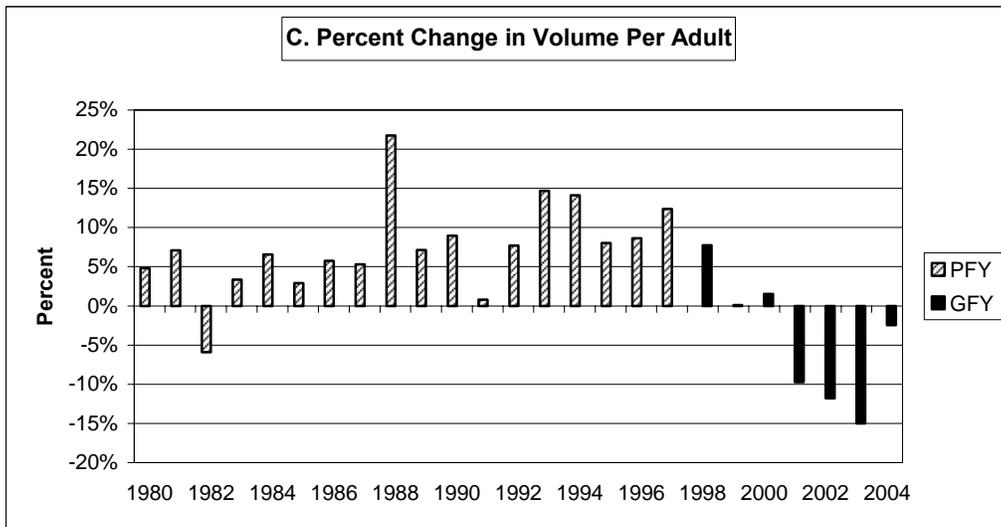
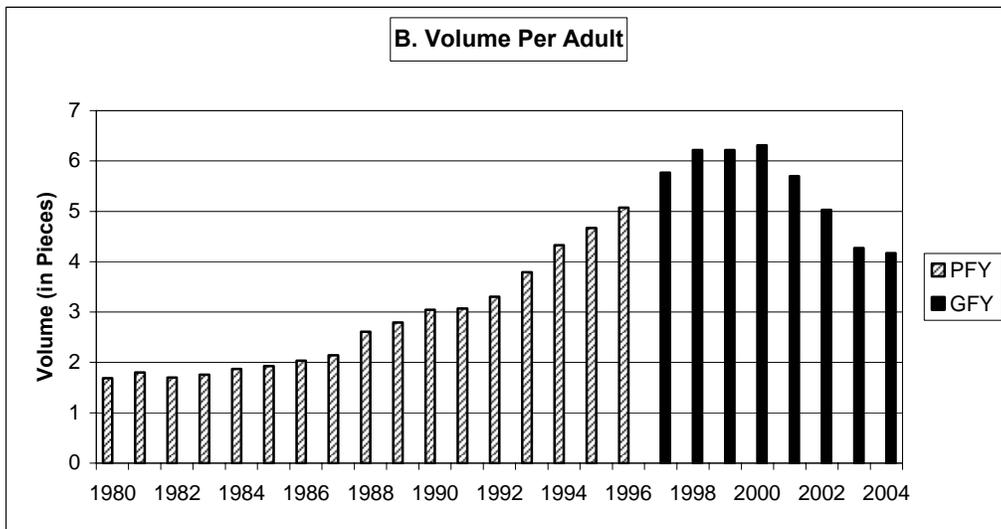
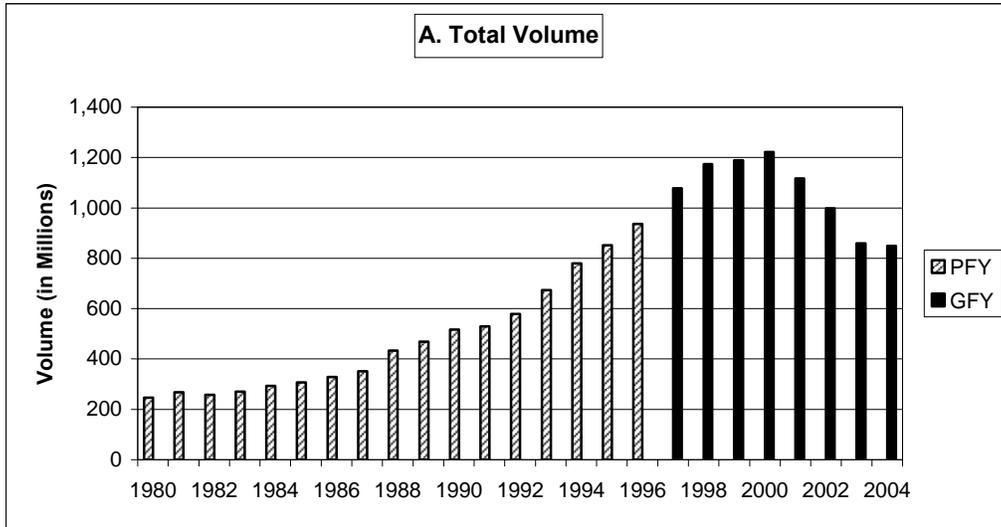
Source: Colography Group (2002), USPS (2002)

## 2. Volume History

Figure 6 presents the volume history of Priority Mail. As is clear from Section A of Figure 6, Priority Mail volume trends have undergone a dramatic reversal in the past few years. From 1980 to 2000, Priority Mail volume increased from 246 million pieces to 1,222 million pieces. From 2000 to 2004, volume fell to 849 million pieces. In terms of pieces per adult, Priority Mail volume increased from 1.7 to 6.3 pieces per year from 1980 through 2000, but declined to 4.2 pieces per year in 2004.

Section C of Figure 6 shows that growth in volume per adult was particularly strong from 1992 through 1998. Total volume doubled over this six-year period. After slowing in 1999 and 2000, volume per adult began to decline rapidly beginning in 2001, with annual declines in pieces per adult of 9.7 percent, 11.8 percent, and 15.0 percent. Volume did show signs of stabilizing in 2004, though on a per adult basis it still declined 2.4 percent.

**Figure 6**  
**Priority Mail Volume History**



### 3. Factors Affecting Volume

The story of Priority Mail is one of solid, then rapid growth, followed by a period of stagnation and then substantial decline. This volume history can be explained by a combination of trends in the overall economy, price competition, and changes in market structure and non-price competition. The testimony of Thomas Thress presents a detailed examination of these different factors. My testimony presents a more general overview.

#### a. The Overall Economy

To some degree, the history of Priority Mail volumes can be explained by trends in the overall economy. Figure 6 shows that Priority Mail volume declined during the 1981-1982 recession and then grew solidly along with the economy for the rest of the decade. Volume growth slowed during the 1991 recession but, again, as the economy recovered and expanded, so did Priority Mail volume. Priority Mail volume growth was particularly strong through much of the economic expansion of the 1990s.

Priority Mail volume declined during the 2001 recession, but unlike in the 1991 recession, Priority Mail volume did not resume its growth when the economy recovered. Instead, volumes continued to decline in 2002, 2003, and 2004. Therefore, the recent evidence suggests that while macroeconomic factors play a role in explaining the long-term Priority Mail volume trends, in recent years there is more to the story than just the economy.

#### b. Price Competition

At another level, Priority Mail's volume history can be explained in terms of price competition. During its long period of growth, Priority Mail rates increased less than those of its principal rival, UPS. From 1982 through 1990, Priority Mail rates were essentially constant while UPS rates (measured as average revenue) increased about forty percent. During this period, Priority Mail volume doubled. Similarly, from 1990

1 through 1998, Priority Mail rates increased 24 percent while UPS rates rose 43 percent,  
2 and Priority Mail volume continued to show strong growth.

3 The pricing relationships changed in recent years. Priority Mail rates rose more  
4 than 30 percent as a result of the R2000-1 and R2001-1 rate cases, while UPS rates  
5 increased only 17 percent over the same time period. And it was in this period that  
6 Priority Mail volumes stagnated and then declined. It is only during this past year, in  
7 which Priority Mail rates have remained constant, that Priority Mail volume has  
8 stabilized.

9 Therefore, relative prices are an important factor explaining the volume history of  
10 Priority Mail volume. In fact, the econometric analysis of Thomas Thress finds that  
11 Priority Mail volumes are sensitive to its price and the prices of its competitors. But an  
12 interesting result from his analysis is that this price sensitivity has increased in recent  
13 years and the magnitudes of the own-price and cross-price elasticities are greater now  
14 than in the past. This increase in price sensitivity is a reflection of other changes in the  
15 market that have occurred over the years.

### 16 **c. Market Structure and Non-Price Competition**

17 The Priority Mail volume history can also be explained as a story of market  
18 structure and non-price competition. During its period of growth, Priority Mail carved  
19 itself a key slice of the overall package market, positioned between more expensive  
20 overnight service and less timely ground delivery services. Priority Mail volume was  
21 further helped by a number of initiatives including the introduction of the flat rate  
22 envelope, the February 1985 increase from one pound to two pound weight limit for the  
23 minimum rate, and the establishment of unzoned rates for packages weighing up to five  
24 pounds following the R90-1 rate case. The Postal Service also heavily advertised  
25 Priority Mail during this period and generally increased customer awareness of the  
26 Priority Mail product. The strike by UPS workers in the summer of 1997 also helped

1 support Priority Mail volumes. Throughout this period, Priority Mail remained somewhat  
2 insulated from competitive pressures.

3 By the later 1990s, the ground package market underwent a number of changes.  
4 UPS began offering guaranteed deliveries. FedEx acquired Roadway Package  
5 Services (RPS), enabling it to become a major player in the ground delivery market:  
6 FedEx Ground. FedEx eventually added FedEx Home Delivery to its service line, with  
7 Saturday residential deliveries in order to expand its reach in the ground residential  
8 market. UPS purchased Mail Boxes Etc., which increased its ability to reach  
9 households and small businesses that had been using Priority Mail. Later, DHL  
10 acquired Airborne.

11 The impacts of these actions can be seen in the changing volume shares of the  
12 package delivery market over the past few years. Table 17 presents package market  
13 volume shares, where the package market is defined in this table as including the  
14 various delivery companies' 2-3-day products and their ground delivery products. The  
15 table shows that beginning in 2001, Priority Mail's share of this market has declined and  
16 FedEx's share of the market has increased. The "Other" market share has also  
17 increased, where "Other" includes the combined volumes of Parcel Post, DHL/Airborne,  
18 and various smaller delivery companies.

19 These changes in market structure had a number of effects. First, FedEx's entry  
20 as a competitor probably served to limit the size of UPS's rate increases. It is no  
21 coincidence that UPS rates increased at a much slower pace after FedEx became a  
22 larger player in this market.

| <b>Table 17</b>                     |                 |            |              |              |
|-------------------------------------|-----------------|------------|--------------|--------------|
| <b>Package Market Volume Shares</b> |                 |            |              |              |
| <b>Year</b>                         | <b>Priority</b> | <b>UPS</b> | <b>FedEx</b> | <b>Other</b> |
| 1998                                | 23.8%           | 53.8%      | 12.1%        | 10.4%        |
| 1999                                | 23.8%           | 54.4%      | 11.6%        | 10.4%        |
| 2000                                | 23.4%           | 54.9%      | 11.7%        | 10.0%        |
| 2001                                | 21.8%           | 55.5%      | 12.0%        | 10.8%        |
| 2002                                | 19.7%           | 54.9%      | 13.8%        | 11.7%        |
| 2003                                | 17.0%           | 55.1%      | 15.4%        | 12.6%        |
| 2004                                | 16.2%           | 55.6%      | 16.0%        | 12.2%        |

Source: Colography Group, USPS

1           Beyond price competition, non-price competition between UPS, FedEx, and the  
2 Postal Service intensified. UPS started including tracking of its ground shipments in  
3 1997. The Postal Service introduced delivery confirmation for Priority Mail in 1999, but  
4 delivery confirmation does not provide step-by-step tracking. FedEx and UPS also  
5 provide money-back service guarantees, while Priority Mail does not. FedEx and UPS  
6 rates include insurance up to \$100. In contrast, insurance may be an additional charge  
7 for Priority Mail. Similarly, while the Postal Service began providing delivery  
8 confirmation in 1999, there is sometimes an additional charge for this service, but there  
9 is no extra charge for this service provided by FedEx and UPS.

10           With this increased emphasis on improving their ground products, FedEx and  
11 UPS have altered the position of Priority Mail in the marketplace. In years past, Priority  
12 Mail was comparable with the competitors' 2-3 day services, but Priority Mail now  
13 competes more directly with the FedEx and UPS ground delivery products.

14           In summary, Priority Mail volumes have been affected by the economy and by its  
15 price and prices of its leading competitors. But also important has been the change in  
16 the competitive nature of the market. For much of Priority Mail's history, it faced less

1 aggressive competition, and volumes grew steadily as a result. More recently, other  
2 delivery firms pursued a number of ventures aimed, in part, at capturing a greater share  
3 of the market. As a consequence, Priority Mail volumes have declined.

4 Moving forward, recent volume evidence suggests that Priority Mail volumes  
5 have stabilized and, absent major new initiatives by the Postal Service or other  
6 competitive delivery companies, this situation would seem likely to continue.

7 **4. Recent Contributions to Volume**

8 Table 18 shows that over the four-year period ending in 2005Q1, Priority Mail  
9 volume declined 29.29 percent. Table 18 also presents the contribution of each factor  
10 to this four-year volume change, based on the econometric analysis of Thomas Thress.

| <b>Table 18</b>  |                               |                         |                                    |
|--|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Priority Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable   | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price  | 22.3%                         | -1.004                  | -18.30%                            |
| UPS/FedEx Ground Price   | 4.4%                          | 1.446                   | 6.38%                              |
| Average Delivery Time  | -2.0%                         | -0.162                  | 0.32%                              |
| Retail Sales   | 5.6%                          | 0.144                   | 0.79%                              |
| Econometric Trends   | -                             | -                       | -20.57%                            |
| Adult Population   | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors  | -                             | -                       | -3.70%                             |
| Total Change in Volume   | -                             | -                       | -29.29%                            |

11 **a. Own-Price**

12 Over the past four years, the real price of Priority Mail increased 22.3 percent.  
13 The estimated own-price elasticity of Priority Mail is -1.004, which reflects a recent  
14 increase due to greater competition associated with FedEx's entry into the ground

1 delivery market. Applying this price elasticity to the change in price yields an 18.30  
2 percent decline in Priority Mail volume over the past four years. Therefore, the increase  
3 in the real price of Priority Mail was an important factor contributing to its recent volume  
4 decline.

#### 5 **b. UPS / FedEx Ground Price**

6 As discussed in the preceding section, the volume of Priority Mail is also affected  
7 by the prices of competing products. This impact is econometrically estimated by  
8 Witness Thress as a cross-price elasticity, with the competitor cross-price being a  
9 volume weighted average of the revenues per piece for UPS and FedEx. Table 18  
10 shows that over the past four years, this cross-price increased 4.4 percent. Applying  
11 the econometrically estimated cross-price elasticity of 1.446 to this percentage change  
12 in price gives the result that over the past four years Priority Mail volume increased 6.38  
13 percent due to this factor.

#### 14 **c. Average Delivery Time**

15 In addition to the prices for Priority Mail and its competitors, Priority Mail volume  
16 is also affected by service quality. This factor is measured by average delivery time for  
17 Priority Mail. Table 18 shows that over the past four years, the average delivery time  
18 decreased 2.0 percent (delivery time was 2.0 percent less in the four most recent  
19 quarters than it was four years earlier). Applying the estimated elasticity of -0.162 to  
20 this decline in average delivery time gives the result that Priority Mail volume increased  
21 0.32 percent due to this factor.

#### 22 **d. Retail Sales**

23 Priority Mail volume is positively related to economic activity, measured  
24 econometrically by real retail sales per adult. The estimated elasticity of Priority Mail  
25 volume with respect to this variable is 0.144. Therefore, the 5.6 percent increase in real

1 retail sales per adult over the past four years contributed 0.79 percent to Priority Mail  
2 volume.

3 **e. Econometric Trends**

4 As discussed in the review of factors affecting Priority Mail, changes in market  
5 structure and non-price competition have had important impacts on Priority Mail volume.  
6 To briefly review, there was at first a long period during which Priority Mail volume faced  
7 less direct competition, and it was during this period that volumes showed strong  
8 growth. By 2001, the ground package market became much more competitive, due to  
9 the expansion of FedEx's operations. More recently, it appears that this impact has  
10 been muted. The impacts on volume arising from each of these different competitive  
11 landscapes are measured by separate econometric trends, as discussed in detail in the  
12 testimony of Thomas Thress. An initial positive trend runs through the entire sample  
13 period, a second negative trend begins in 2001, and a third smaller positive trend  
14 begins in 2004. Table 18 shows that over the past four years, these trend terms  
15 explain a 20.57 percent decline in Priority Mail volume, indicating that increased  
16 competition has had the largest impact on volumes over the past four years.

17 **f. Adult Population**

18 Increases in adult population explain a 5.21 percent increase in Priority Mail  
19 volume over the past four years.

20 **g. Other Factors**

21 Other factors beyond those described above were responsible for a 3.70 percent  
22 decline in Priority Mail volume over the past four years. These other factors include the  
23 impact of differences in the seasonal pattern of the most recent year and the year  
24 occurring four years ago, as well as other influences captured in the Base Year volume.

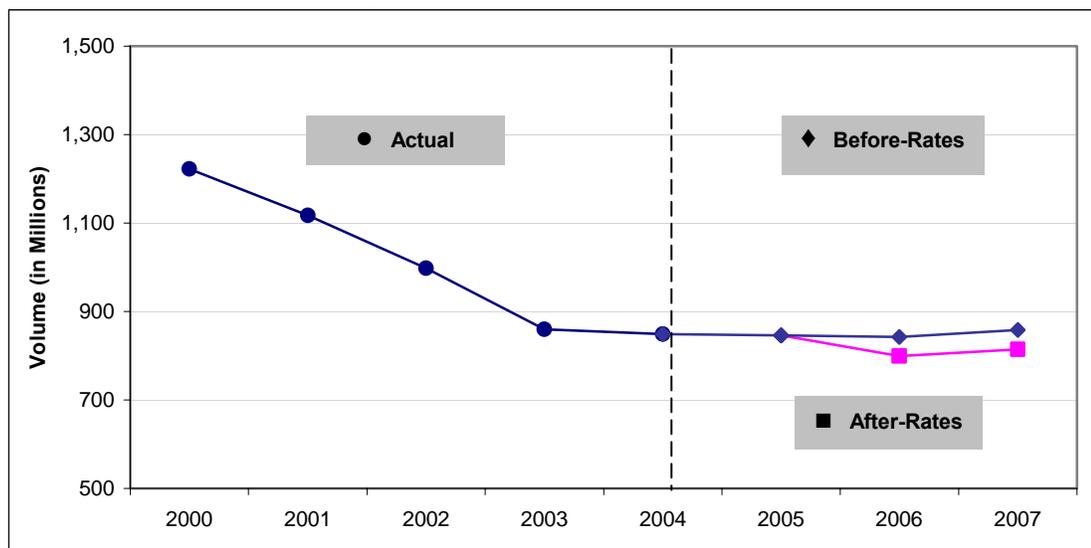
25

26

**5. Before- and After-Rates Volume Forecasts**

The before-rates and after-rates forecasts of Priority Mail are presented in Figure 6A, along with the recent volume history. The forecasts are obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). In the before-rates situation, volumes are projected to remain flat, consistent with the recent experience. Proposed increases in Priority Mail rates are projected to cause a decline in volume in 2006. The before-rates Test Year (GFY 2006) forecast of Priority Mail is 842.705 million pieces. The Test Year after-rates forecast is 799.324 million pieces.

**Figure 6A  
Priority Mail Volume Forecasts**



**B. Express Mail**

**1. General Characteristics**

Express Mail is offered for mail weighing up to 70 pounds. It is an expedited service guaranteeing same day, next day, or second day delivery, depending on the service purchased by the mailer and the location of the sender and recipient. Express Mail became an official class of mail in 1977.

1           There are five different domestic Express Mail service offerings: Same Day  
2 Airport Service (currently suspended), Custom Designed Service, Next Day Service,  
3 Second Day Service, and Military Service. Second Day service is provided to  
4 addresses not served by the Next Day network. The overwhelming majority of Express  
5 Mail volume is either Next Day or Second Day Service.

6           Express Mail rates are unzoned. Rates differ by weight categories ranging from  
7 less than or equal to one-half pound, one-half pound to two pounds, and then by one  
8 pound increments up to a maximum weight of 70 pounds.

9           Express Mail commands a small share of the overnight delivery market, behind  
10 FedEx, UPS, and DHL. To the extent that Express Mail has any niche within this  
11 market, it is more heavily used by households than are competing products. Table 19  
12 below shows that in 2002, 28.5 percent of Express Mail was sent by households,  
13 compared to just 4.6 percent of the overnight packages sent via other delivery firms.

14

| <b>Table 19</b>   |                    |               |                    |
|---|--------------------|---------------|--------------------|
| <b>Breakdown of Express Mail by Sender and Recipient:<br/>Comparisons with Private Delivery Firms, 2002</b> |                    |               |                    |
|   | Sent by Businesses |               | Sent by Households |
|   | To Businesses      | To Households |                    |
| Express Mail  | 58.0%              | 13.5%         | 28.5%              |
| Private Firms   | 77.7%              | 17.7%         | 4.6%               |

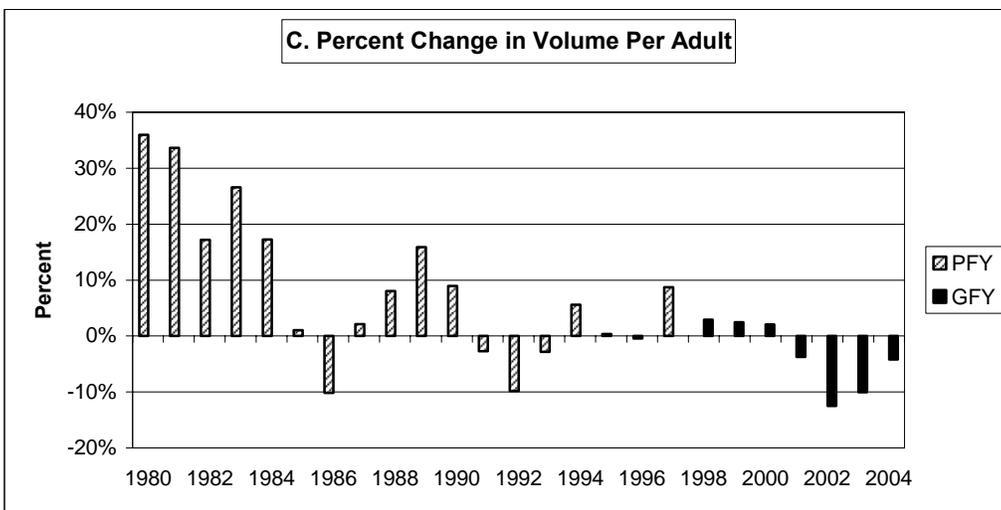
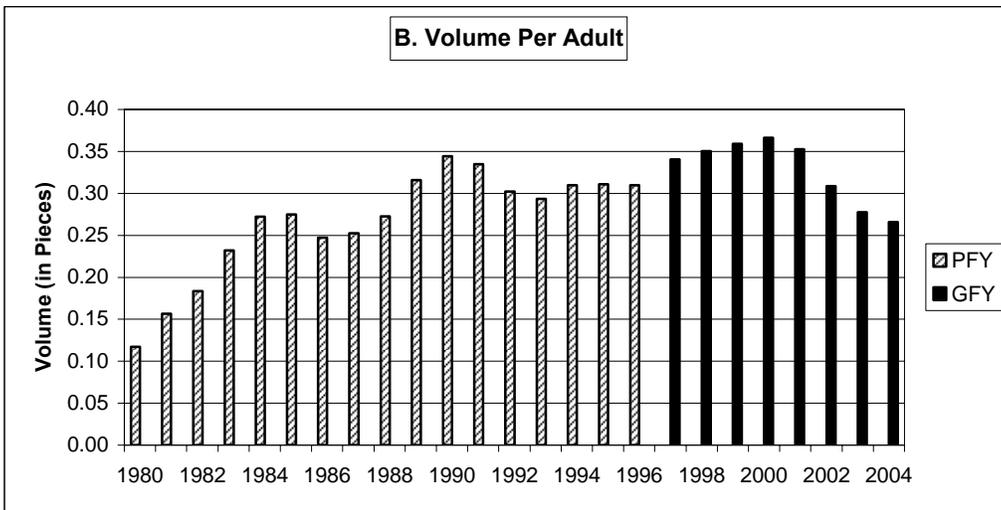
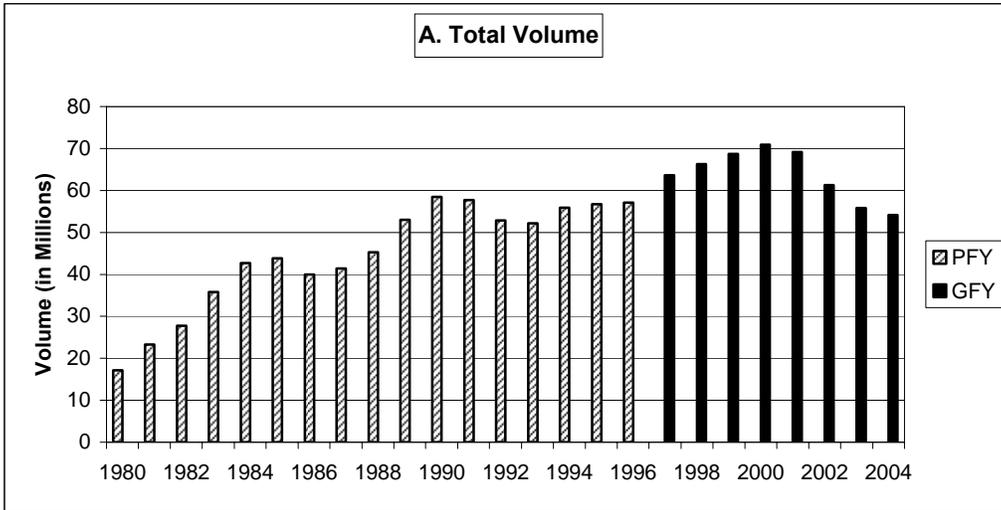
15           Source: Colography Group (2002), USPS (2002)

16

## 17           2.     Volume History

18           Figure 7 presents the volume history of Express Mail. Since 1980, Express Mail  
19 volume has more than tripled, rising from 17.1 million pieces to 54.1 million pieces in  
20 2004. Over the same time period, volume per adult has more than doubled. However,  
21 most of this growth occurred from 1980 to 1984. As seen in section C of Figure 7,

**Figure 7**  
**Express Mail Volume History**



1 volume per adult posted double-digit percentage gains from 1980 through 1984. The  
2 effect of the R84-1 rate increase can be seen on volume in 1985 and 1986, after which  
3 solid growth resumed. The negative impacts of the 1991 recession and R90-1 rate  
4 increase can be seen as well.

5 Volume per adult mostly grew during the later part of the 1990s, but the growth  
6 was noticeably slower than in earlier years. Since 2000, Express Mail volume and  
7 volume per adult have declined. In 2004, these two volume measures were 27 percent  
8 and 24 percent below their respective peaks of 2000.

### 9 **3. Factors Affecting Volume**

10 Except in its early years, Express Mail has not commanded a large share of the  
11 overnight (or expedited) delivery market that has long been dominated by FedEx. The  
12 long-term rise in Express Mail volume is mainly attributable to growth in the overnight  
13 market. During the 1980s, the overnight market grew from being a service used  
14 primarily for a few critical or emergency deliveries to a market where mailers commonly  
15 use overnight delivery services to send important materials. Within this growing  
16 overnight market, Express Mail's relative position was often determined by its rates, the  
17 rates for FedEx's overnight service, and the perceived differences in the two products'  
18 service reliability. Up until 1994, Express Mail rates were lower than those of FedEx  
19 (measured as an average revenue), but FedEx was viewed as having more reliable  
20 delivery.

21 Table 20 shows the overnight market shares from 1998 through 2004.<sup>5</sup> Evident  
22 from Table 20 is the increase in the UPS share of the overnight delivery market, which  
23 rose from 21.2 percent in 1998 to 28.2 percent in 2004. Over the same time period,  
24 Express Mail's market share declined, especially in the last few years.

---

<sup>5</sup> Data for DHL and Airborne are combined to reflect DHL's recent acquisition of Airborne.

| <b>Table 20</b>                                       |       |       |                  |                 |       |
|---|-------|-------|------------------|-----------------|-------|
| <b>Volume Shares of the Overnight Delivery Market</b> |       |       |                  |                 |       |
| Year  | FedEx | UPS   | Airborne/<br>DHL | Express<br>Mail | Other |
| 1998  | 45.8% | 21.2% | 25.3%            | 6.3%            | 1.5%  |
| 1999  | 45.2% | 23.1% | 24.2%            | 6.0%            | 1.4%  |
| 2000  | 45.1% | 24.4% | 23.1%            | 6.1%            | 1.3%  |
| 2001  | 45.0% | 25.1% | 22.5%            | 6.1%            | 1.2%  |
| 2002  | 44.3% | 26.3% | 22.3%            | 5.8%            | 1.3%  |
| 2003  | 44.3% | 27.8% | 21.4%            | 5.2%            | 1.2%  |
| 2004  | 44.3% | 28.2% | 21.1%            | 5.1%            | 1.2%  |

Source: Colography Group, USPS

1           Express Mail volumes were also harmed by the 9/11 terrorist attack which  
2 suspended operations for several days. The econometric analysis of Express Mail by  
3 Thomas Thress indicates that Express Mail volume was reduced about seven percent in  
4 the quarter following the 9/11 attacks.

5           Express Mail volumes have also probably been affected by the spread of the  
6 Internet and other technologies, but the impacts are likely to have had a mixed effect on  
7 Express Mail volumes. Fax transmission and, later, e-mail with attachment likely  
8 reduced use of the overnight delivery market. At the same time, the nature of the  
9 Internet world may have increased the importance of quick delivery of documents and  
10 other materials. As the IBM commercial observes – “it’s an on-demand world.” While  
11 this commercial is designed to promote greater use of technology, the “on-demand”  
12 nature of the business world probably contributed to the use of overnight delivery  
13 services.

14           Another positive impact of the Internet may come from growth in e-commerce,  
15 which has led to an increase in the delivery of packages, some of which are sent via  
16 Express Mail. Thus, it seems reasonable that e-mail has reduced the use of Express

1 Mail for overnight documents, but e-commerce has increased the use of Express Mail  
2 for overnight packages. Since packages represent a small share of Express Mail  
3 volume, it seems likely that the electronic diversion has had a net negative impact on  
4 volume, contributing to the recent negative trend in Express Mail volumes.

#### 5 **4. Recent Contributions to Volume**

6 Table 21 shows that during the four-year period ending in 2005Q1, the volume of  
7 Express Mail declined 23.37 percent. The table also presents the contributions of  
8 different factors to this four-year volume change, based on the econometric analysis of  
9 Thomas Thress.

| <b>Table 21</b>   |                                       |                                 |   |
|---|---------------------------------------|---------------------------------|---|
| <b>Contributions to Change in Express Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                                       |                                 |   |
| <b>Variable</b>   | <b>Percent Change<br/>in Variable</b> | <b>Estimated<br/>Elasticity</b> | <b>Effect of<br/>Variable on<br/>Volume</b> |
| Own-Price   | 0.1%                                  | -1.470                          | -0.12%                                      |
| FedEx Price   | -1.6%                                 | 0.420                           | -0.68%                                      |
| Employment  | -6.1%                                 | 1.286                           | -7.74%                                      |
| Econometric Trends  | -                                     | -                               | -20.01%                                     |
| Adult Population  | 5.2%                                  | 1.000                           | 5.21%                                       |
| Other Factors   | -                                     | -                               | -0.51%                                      |
| Total Change in Volume  | -                                     | -                               | -23.37%                                     |

#### 10 **a. Own-Price**

11 As would be expected of a product in a highly competitive market, Express Mail  
12 volumes are quite sensitive to price, as evidenced by the estimated own-price elasticity  
13 of -1.470. However, over the four-year period ending 2005Q1, the real price of Express  
14 Mail did not change much, rising just 0.1 percent. As a result, the volume of Express

1 Mail declined only 0.12 percent over the past four-year period due to increases in the  
2 real price of Express Mail.

3 **b. FedEx Price**

4 Express Mail volume is also affected by the prices of competing products,  
5 measured econometrically as the cross-price elasticity with FedEx's overnight delivery  
6 product. Over the past four years, the real price of FedEx's overnight delivery product  
7 decreased 1.6 percent. Applying the estimated cross-elasticity of 0.420 to this price  
8 change produces a 0.68 percent decline in Express Mail volume over the past four  
9 years. Therefore, neither the Express Mail own-price nor the FedEx cross-price explain  
10 much of the change in Express Mail volume because there was little net change in  
11 either of these prices over the past four year period.

12 **c. Employment**

13 Declines in employment per adult explain a 7.74 percent decline in Express Mail  
14 volume over the past four years. This result is found by applying the estimated  
15 employment elasticity of 1.286 to the 6.1 percent decline in employment per adult, as  
16 shown in Table 21.

17 **d. Econometric Trends**

18 The impacts on Express Mail volumes resulting from developments in the  
19 overnight delivery market are captured by two separate trend terms in the Express Mail  
20 equation. The first term is a positive trend reflecting overall growth in the overnight  
21 market over the past two decades. The second term is a negative trend term reflecting  
22 the recent increase in UPS activity in the overnight market. Combined, these two  
23 market trends explain a net decline in Express Mail volume of 20.01 percent over the  
24 past four years.

25

26

**e. Adult Population**

Increases in adult population explain a 5.21 percent increase in Express Mail volume over the past four years.

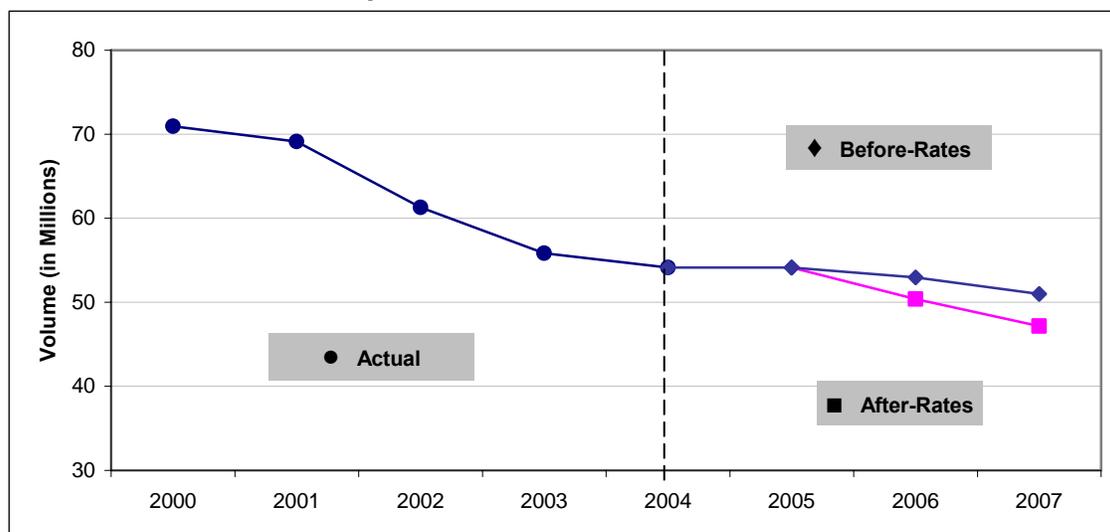
**f. Other Factors**

Table 21 shows that factors other those discussed above were responsible for a 0.51 percent reduction in Express Mail volume over the past four years. These other factors include the impact of differences in the seasonal pattern of the most recent year and the year occurring four years ago as well as other influences captured in the Base Year volume.

**5. Before- and After-Rates Volume Forecasts**

The before-rates and after-rates forecasts of Express Mail are presented in Figure 7A, along with the recent volume history. The forecasts are obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to decline, consistent with the recent volume history. Due to its relatively high own-price elasticity, the after-rates volumes are noticeably below the before-rates volumes. The before-rates Test Year (GFY 2006) forecast of Express Mail is 52.945 million pieces. The Test Year after-rates forecast is 50.388 million pieces.

**Figure 7A  
Express Mail Volume Forecasts**



## 1 **IV. PERIODICALS**

### 2 **A. Overview**

#### 3 **1. General Characteristics**

4 In GFY 2004, the total volume of Periodicals Mail was 9,136 million pieces,  
5 accounting for less than five percent of total mail volume. Periodicals Mail consists of  
6 newspapers, magazines, and other periodicals. Periodicals Mail is used solely by the  
7 publishers and registered agents of newspapers, magazines, and other periodical  
8 publications which meet the qualifications of the Domestic Mail Manual. To qualify for  
9 Periodicals rates the material to be mailed must be printed and issued at least four  
10 times per year. Periodicals are published for the purpose of disseminating information  
11 of a public character, such as news, or are devoted to literature, the sciences, arts, or  
12 some special industry. Also, to qualify for Periodicals rates, there must be a list of  
13 subscribers paying for or requesting the periodical, though exemptions are given for  
14 some organizations if there is no advertising other than that of the publisher.  
15 Publications consisting of over 75 percent advertising in more than half of the issues  
16 published in 12 months are not eligible for Periodicals rates. Periodicals are given  
17 expeditious distribution, dispatch, transit handling and delivery, preceded only by First-  
18 Class, Priority Mail and Express Mail. All Periodicals mailings must be presorted to at  
19 least the ZIP Code level.

#### 20 **2. Subclasses and Categories**

21 There are four subclasses of Periodicals Mail: Within-County, Regular, Nonprofit,  
22 and Classroom. The charge for Periodicals consists of a per-piece rate plus a pound  
23 rate. The pound rate is separated into a flat (not zoned) rate for editorial (non-  
24 advertising) portions of the publication and a zoned rate for advertising portions. The  
25 piece rate has several levels depending on the degree of presortation and destination

1 characteristics. These include basic, 3-digit, and 5-digit automation categories, as well  
2 as three carrier-route presortation categories: basic, high density, and saturation.

3 The Periodicals rate structure distinguishes between regular and preferred  
4 subclasses. Within-County, Nonprofit, and Classroom are preferred subclasses. Mail in  
5 these subclasses has historically been eligible for preferred or lower rates. The rate  
6 structure is further affected by the fact that the preferred rate components were subject  
7 to congressionally mandated phase-ins to higher rates, with different phase-in  
8 schedules. The routine phasing schedule has frequently been altered in response to  
9 congressional appropriations. As a result, preferred rates have experienced frequent  
10 rate changes.

### 11 **3. Composition of Periodicals Mail**

12 The largest subclass of Periodicals is Regular Rate mail, which had a 2004  
13 volume of 6,463 million pieces, followed by Nonprofit mail at 1,852 million pieces,  
14 Within-County mail at 759 million pieces, and Classroom mail at 62 million pieces.  
15 Table 22 shows the volume shares for each subclass of Periodicals Mail volume for  
16 selected years beginning in 1980.

17 Focusing on the data since 1990, the key observation is that the Within-County  
18 volume share has been declining while the Regular volume share has been increasing.  
19 There has also been a small decline in the share of Nonprofit Mail and an increase in  
20 the share of Classroom Mail, though this latter subclass still represents less than one  
21 percent of total Periodicals Mail volume.

| <b>Table 22</b>   |               |           |           |         |
|---|---------------|-----------|-----------|---------|
| <b>Subclass Shares of Total Periodicals Mail Volume</b> |               |           |           |         |
| Year  | Within-County | Nonprofit | Classroom | Regular |
| 1980 – PFY  | 13.5%         | 28.9%     | 0.7%      | 56.9%   |
| 1985 – PFY  | 17.7%         | 20.6%     | 0.4%      | 61.3%   |
| 1990 – PFY  | 12.9%         | 22.8%     | 0.4%      | 63.9%   |
| 1995 – PFY  | 8.8%          | 22.5%     | 0.6%      | 68.0%   |
| 2000 – GFY  | 8.7%          | 20.8%     | 0.6%      | 70.0%   |
| 2004 – GFY  | 8.3%          | 20.3%     | 0.7%      | 70.7%   |

1           A further breakdown of Periodicals Mail volume comes from Household Diary  
 2 Study data which present the composition of Periodicals Mail received by Households.  
 3 These data show a steady decline in the share of newspapers received through the mail  
 4 and a corresponding rise in the share of magazines received through the mail.

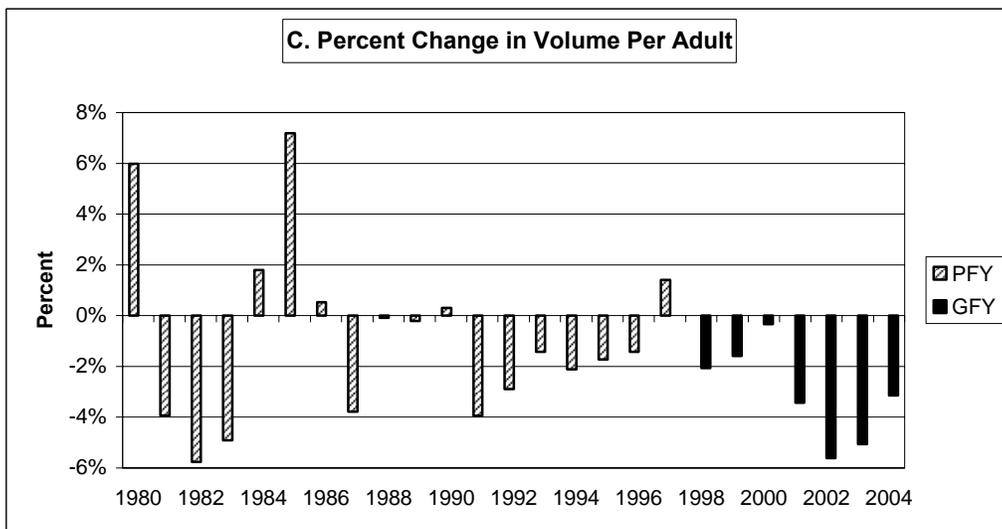
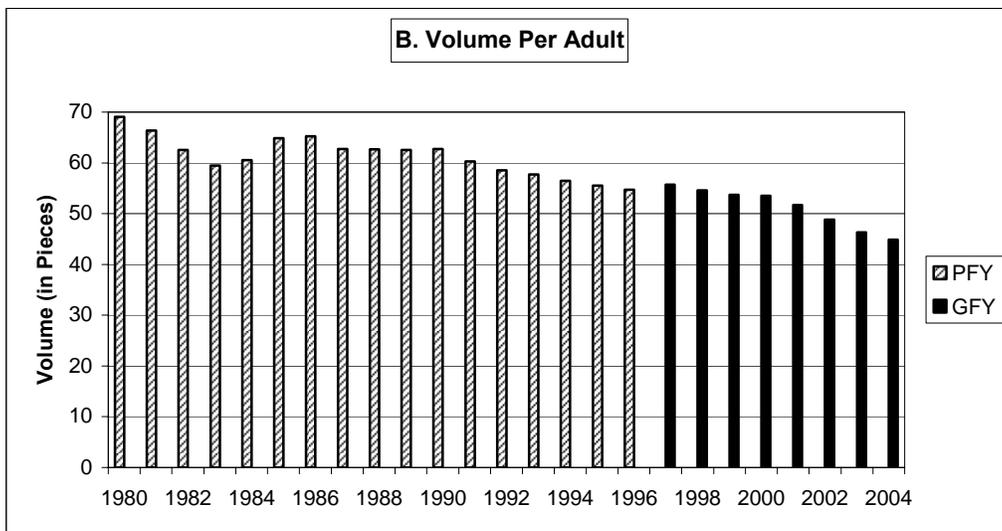
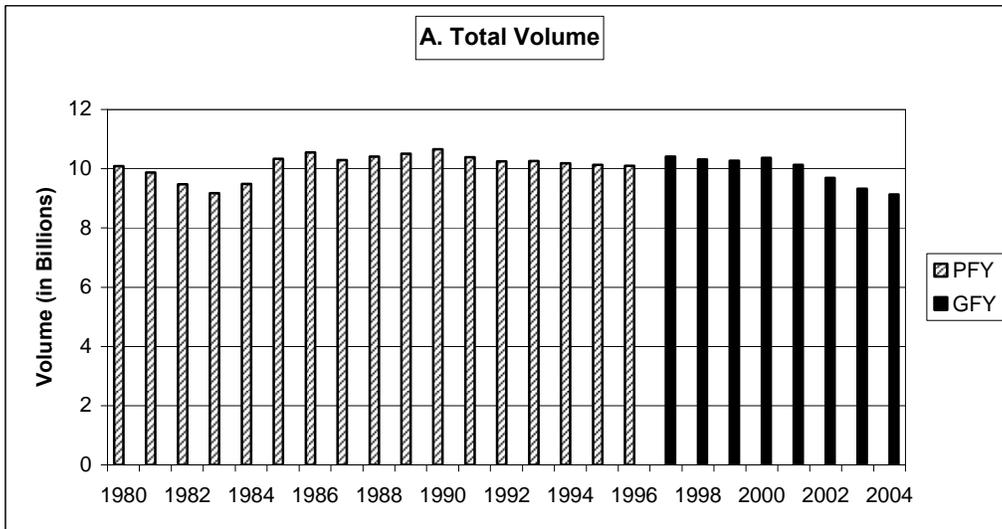
| <b>Table 23</b>   |            |           |
|---|------------|-----------|
| <b>Periodicals Mail Received by Households<br/>Newspaper and Magazine Volume Shares</b> |            |           |
| Year  | Newspapers | Magazines |
| 1987  | 39%        | 61%       |
| 1994  | 31%        | 69%       |
| 2003  | 24%        | 76%       |

Source: Household Diary Study  
 Note: Table excludes “other” Periodicals

5           **4. Volume History**

6           Figure 8 shows the volume history of total Periodicals Mail from 1980 through  
 7 2004. The figure shows that total volume has remained close to ten billion pieces per  
 8 year for much of this history, but recently it has declined, falling to 9.1 billion pieces in  
 9 2004. The 2004 total is just less than the 9.2 billion pieces of Periodicals Mail sent in  
 10 1983, and is the lowest annual volume total since at least 1980.

**Figure 8**  
**Total Periodicals Mail Volume History**



1 Section B of Figure 8 shows volume per adult, revealing a consistent decline over  
2 the years. Volume per adult has fallen from about 69 pieces per year in 1980 to under  
3 45 pieces per year in 2004, a 35 percent decline. Most of this decline in volume per  
4 adult has occurred since 1990.

5 Section C shows annual percentage changes in volume per adult. After some  
6 occasional increases in the early and mid-1980s, there have been only two years (1990  
7 and 1997) in which volume per adult increased. For much of the 1990s, Periodicals  
8 Mail volume per adult declined by about two percent per year. More recently, these  
9 declines have increased to between three and six percent per year.

## 10 **5. Factors Affecting Volume**

11 There are a number of general factors affecting Periodicals Mail volume which  
12 will be discussed here. Factors specific to the individual Periodicals subclasses will be  
13 discussed in the subclasses' respective sections of this chapter. General factors  
14 affecting Periodicals Mail volumes include impacts from changes in postal rates and the  
15 overall economy. However, neither of these factors sufficiently explains the long-term  
16 decline in Periodicals Mail volumes. Instead, these declines are attributable to a  
17 gradual decline in the readership of newspapers and magazines, along with declines in  
18 the number of periodicals in business. More recently, it appears that the Internet has  
19 begun to have a meaningful negative impact on the volumes of Periodicals Mail as well.  
20 Each of these factors will be discussed in turn.

### 21 **a. Postal Rates**

22 Postal rates are one factor explaining some of the historical decline in Periodicals  
23 Mail volumes. Since 1980, Periodicals Mail rates have increased more than most other  
24 postal rates and more than the rate of inflation. For example, since 1990, the real price  
25 of Periodicals Mail, calculated as a price index using 2004 subclass volumes as  
26 weights, has increased 14.5 percent. Thus, there has been some negative impact of

1 higher postal prices on the volume of Periodicals Mail. Still, there have been periods,  
2 including the most recent two-year period, during which real prices have declined but  
3 Periodicals volume per adult has declined as well. Therefore, while postal prices have  
4 had an impact on the Periodicals Mail volume history, they do not explain most of the  
5 consistent long-term decline in volume observed in Figure 8.

#### 6 **b. Overall Economy**

7 The volume history indicates that Periodicals Mail volume has also been affected  
8 by the overall economy. Rather large declines in volume per adult are observed during  
9 the recessions of 1981-1982, 1990-1991, and most recently, 2001. However, while  
10 declines in volume per adult are seen during recessions, volume per adult did not  
11 increase during periods of economic expansion. Note, for example, that following the  
12 1991 recession, Periodicals volume per adult continued an almost uninterrupted decline  
13 through the expansion of the 1990s. Therefore, economic factors cannot explain the  
14 long-term downward trend in Periodicals volume, though periods of economic recession  
15 clearly contribute to the magnitude of this overall volume decline.

#### 16 **c. Declines in Readership**

17 A more compelling explanation for the long-term decline in Periodicals Mail  
18 volumes is found in the behavior of newspaper and magazine readership. Readership  
19 has been declining for many years. According to data compiled from various editions of  
20 the *Statistical Abstract of the United States*, the number of hours spent reading  
21 newspapers declined 14 percent from 1990 to 2002. [U.S. Census Bureau, *Statistical*  
22 *Abstract of the United States: 2004 - 2005*, Table No. 1119 and 1998, Table No. 914.]  
23 Newspaper circulation has also been declining. According to the Newspaper  
24 Association of America (NAA), daily newspaper circulation declined more than ten  
25 percent from 1990 through 2003. [Newspaper Association of America, "U.S. Daily  
26 Newspaper Circulation." *2004 Facts about Newspapers: A Statistical Summary of the*

1 *Newspaper Industry*] The NAA also reports that the percentage of adults who are  
2 weekday readers of newspapers has declined from 66.9 percent in 1980 to 62.4 percent  
3 in 1990 to 54.1 percent in 2003.

4 A more in-depth analysis of newspaper readership is found in a study by Wolfram  
5 Peiser. [W. Peiser, "Cohort replacement and the downward trend in newspaper  
6 readership," *Newspaper Research Journal*, Vol. 21, No. 2, 11-22 (Spring 2000)]  
7 Peiser examines readership for selected age groups from 1972 through 1996. For  
8 people age 18 to 22, readership declined from 47 percent in 1972 to 18 percent in 1996.  
9 For people age 23 to 27, readership declined from 50 percent to 21 percent over the  
10 same time period, and for people age 28 to 32, the decline was from 66 percent to 24  
11 percent. Peiser's main conclusion, however, is that readership rates have declined  
12 across almost every age group.

13 Declines in newspaper readership and newspaper circulation have corresponded  
14 to declines in the percentage of households that receive newspapers by mail. The  
15 Household Diary Study indicates that in 2003, 24.4 percent of households received  
16 newspapers by mail, down from 36.4 percent in 1987. Total newspapers received by  
17 mail declined from 0.55 to 0.35 per household per week over the same time period.

18 The situation for magazines, however, is more stable. According to the  
19 Household Diary Study, the percentage of households receiving magazines through the  
20 mail has shown only a modest decline over time, as has the number of magazines  
21 received per household per week. Still, magazines must compete for attention with  
22 other media. Data compiled from the *Statistical Abstract of the United States* show that  
23 the number of hours spent reading magazines fell 16 percent from 1990 to 2002. [U.S.  
24 Census Bureau, *Statistical Abstract of the United States: 2004 - 2005*, Table No. 1119  
25 and 1998, Table No. 914.] And data from the Audit Bureau of Circulations show that  
26 paid magazine subscription circulation declined more than five percent between 2000

1 and 2003. [Magazine Publishers of America and Audit Bureau of Circulations, “Annual  
2 Combined Paid Circulation Per Issue of Audit Bureau of Circulations Magazines, 1970 –  
3 2003”]

#### 4 **d. Broadband Internet**

5 Broadband Internet access, with its “always on” feature and ability to quickly  
6 download pages from the Web, has emerged as a viable alternative to hard-copy  
7 newspapers and magazines. In fact, according to New York Times publisher Arthur  
8 Sulzberger, Jr, “Within our lifetimes, the distribution of news and information is going to  
9 shift to broadband.” [A. Bianco, J. Rossant, and L. Gard, “The Future of the New York  
10 Times,” *Business Week* No. 3916 64 – 71 (January 17, 2005)]

11 That future is already arriving for the Times, which has seen paid circulation for its  
12 print newspaper stagnate while the number of online readers has increased six-fold  
13 since late 1999. In fact, far more people view the New York Times online than in print,  
14 and every major daily paper has an online version of its print publication.

15 Other newspapers are feeling the pressure from the Internet. Anthony Bianco,  
16 author of the aforementioned Business Week article, notes that “new subscribers are  
17 increasingly hard to come by for all newspapers as advances in digital communications  
18 spur the proliferation of alternative sources of news and information.” Recently, the Los  
19 Angeles Times stopped producing its daily national print edition, saying that the Internet  
20 has made the paper copy irrelevant. [F. Ahrens, “L.A. Times to End National Edition,”  
21 *The Washington Post*, E.02 (December 3, 2004)]

22 Magazines have also been affected by the shift of readership to the Internet. One  
23 impact is that time spent online replaces time that could be spent reading magazines.  
24 As recently as a decade ago, time spent online was only three hours per person per  
25 year. The *Statistical Abstract of the United States* reports that by 2004, per capita time  
26 online is expected to exceed hours spent reading newspapers or hours spent reading

1 magazines [U.S. Census Bureau, *Statistical Abstract of the United States: 2004 - 2005*,  
2 "Table No. 1119] . Harris Interactive's May 2004 Poll found that four out of five people  
3 online report they view news online, and one-quarter of these people say their online  
4 viewing reduces their use of other media. [Harris Interactive Poll #35 (May 19, 2004)]

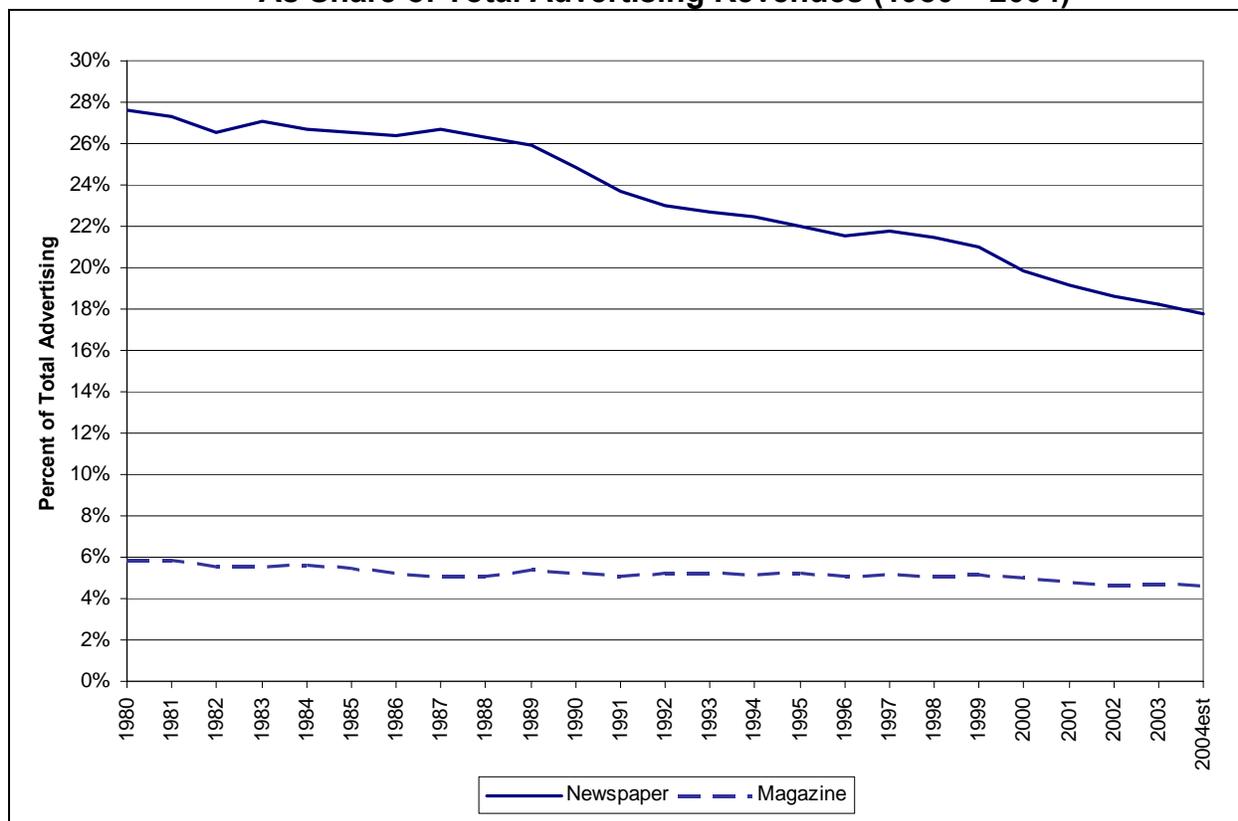
5 Over the past few years, Web sites have improved their visual appeal, making  
6 them appear more and more like magazines. Again, broadband plays a big role as it  
7 allows users to quickly navigate from section to section, track down archives, download  
8 articles for their personal collections, and do so, in most cases, absolutely free.  
9 Recently, there has been a vast increase in the number of "blogs," personalized  
10 Websites, some of which (e.g. the Drudge Report) have developed a sufficient following  
11 to be considered online magazines.

12 The magazine industry is clearly aware of the ongoing impact from the Internet. A  
13 survey of marketers by the Association of National Advertisers found that the Internet is  
14 seen as the third greatest threat to the magazine industry, behind circulation declines  
15 and advertising clutter. [M. Joss, "Outlook 2005", *Electronic Publishing* (January 2005)]

#### 16 **e. Industry Changes**

17 An impact of the growth of competing media has been the decline in these two  
18 industries' shares of advertising dollars. Chart B shows that the share of advertising  
19 spending going to the newspaper industry has declined from almost 28 percent in 1980  
20 to below 18 percent in 2004. The chart also shows that magazine advertising share  
21 has fallen as well. The data are from Robert Coen of Universal McCann. [R. Coen,  
22 "Insider's Report - Robert Coen Presentation on Advertising Expenditures," Universal  
23 McCann, (December 2004), and Web site link to historical advertising data to 1980 and  
24 beyond]

**Chart B**  
**Newspaper and Magazine Advertising Revenues**  
**As Share of Total Advertising Revenues (1980 – 2004)**



Source: Robert Coen-Universal McCann

1            In his review of the 2003 American Magazine Conference, Donald Kummerfeld, of  
2            *Magazine World* notes that the relative decline in magazine advertising revenues has  
3            caused some in the industry to wonder if the magazine business model is broken. “The  
4            CEOs agreed that this model has made the US consumer magazine industry overly  
5            dependent on ever increasing advertising revenues to offset the ever increasing cost of  
6            obtaining and retaining marginal magazine subscribers,” writes Kummerfeld. The model  
7            can be fixed, however, by increasing subscription prices and “cutting rate bases to  
8            eliminate marginal subscribers.” [Kummerfeld, Donald. “American Magazine  
9            Conference,” *Magazine World*]

1           There is evidence that the Internet is taking ad dollars away from newspapers and  
2 magazines. CNN Money reports that online classified ad web sites such as Craigslist  
3 are taking advertising dollars away from newspaper classified sections. [CNN Money,  
4 “Craigslist costing newspapers,” (December 28, 2004)] Consistent with this view, the  
5 NAA reports that newspaper classified advertising declined almost 20 percent from  
6 2000 to 2003, though a certain amount of that decline was no doubt due to the  
7 economy. [Newspaper Association of America, “U.S. Daily Newspaper Classified  
8 Advertising Expenditures,” *2004 Facts about Newspapers*]

9           Online advertising is also affecting magazines. Joe Fine, writing in the May 31,  
10 2004 issue of Advertising Age, finds that Google, the popular online search engine, is a  
11 threat to magazines. Fine quotes Reed Phillips, a partner at media investment bank  
12 DeSilva & Phillips, “They [Google] are taking ad-dollars from B2B and consumer  
13 magazine companies.” [J. Fine, “Google a threat to targeted magazines,” *Advertising*  
14 *Age* (May 31, 2004)]

15           And while many newspapers and magazines are embracing the online world, their  
16 print divisions are currently subsidizing their Internet activities. John Battle, co-founder  
17 of Wired and other magazine Web sites says, “The business model that seems to justify  
18 the expense of producing quality journalism is the one that isn’t growing, and the one  
19 that is growing – the Internet – isn’t producing enough revenue to produce journalism of  
20 the same quality.” [A. Bianco, et al, *Business Week*, op cit.]

21           On the positive side, there is evidence that both the newspaper and magazine  
22 advertising has started to recover. Robert Coen estimates that newspaper advertising  
23 revenues increased 4.8 percent in 2004, and he projects a 5.7 percent gain for 2005.  
24 Coen estimates that magazine advertising revenues increased 5.0 percent in 2004, and  
25 he projects a 7.3 percent increase for 2005. [R. Coen, “Insider’s Report - Robert Coen  
26 Presentation on Advertising Expenditures,” Universal McCann, (December 2004)]

1 Newspaper and magazine circulation numbers have stabilized as well. Therefore, it  
2 appears that both these industries are recovering from the recent recession, indicating  
3 that Periodicals Mail volumes in the future will follow their long-term historical trends  
4 more so than the recent pattern of substantial decline.

## 5 **6. Outline of the Remainder of This Chapter**

6 Section B of this chapter discusses Within-County Mail. The volume history of  
7 Within-County mail is reviewed and factors explaining volume trends are discussed.  
8 The contribution of different factors to the change in the volume of Within-County mail  
9 over the past four years is presented, drawing on the econometric analysis presented in  
10 the testimony of Thomas Thress. Finally, before- and after-rates Test Year forecasts of  
11 Within-County mail are presented.

12 Section C applies the same outline to Nonprofit Mail. Section D discusses  
13 Classroom Mail, and Section E discusses Regular Rate mail.

### 14 **B. Within-County Mail**

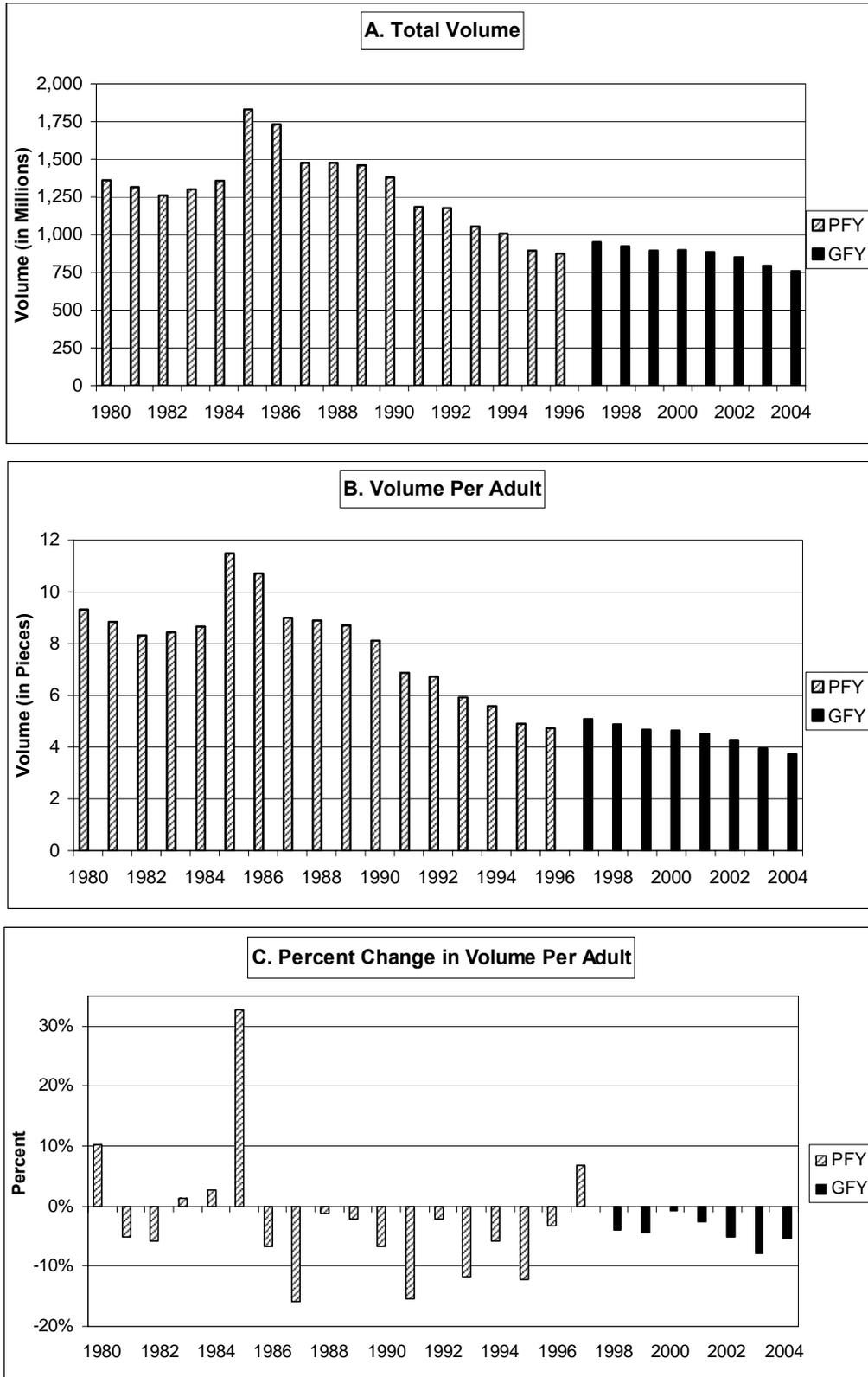
#### 15 **1. Definition**

16 Within-County rates are available for qualified Periodicals pieces which are  
17 addressed for delivery within the county where published. All periodicals mailed inside  
18 the county are charged rates which are lower than rates for similar mail traveling outside  
19 the county. Rates charged to mail traveling outside the county are referred to  
20 collectively as Outside-County rates.

#### 21 **2. Volume History**

22 Section A of Figure 9 shows that total Periodicals Within-County volume declined  
23 from 1,830 million pieces in 1985 to 760 million pieces in 2004. The large increase in  
24 volume in 1985 is connected with new reporting procedures introduced to reconcile  
25 volume estimates for the subclasses of what was then Second-Class Mail. Prior to  
26 1985, Within-County Mail was under-reported relative to the other subclasses. The

**Figure 9**  
**Periodicals Within-County Mail Volume History**



1 effect of the reporting procedure change was to increase estimated Within-County  
2 volume, while decreasing the estimated Nonprofit and Regular Rate volumes. Because  
3 of this change, the volume history beginning in 1985 is probably more relevant than the  
4 history before this change.

5 Section B of Figure 9 shows that In-County volume per adult has declined from  
6 11.5 pieces in 1985 to 3.7 pieces in 2004. Much of this decline in volume per adult  
7 occurred from 1985 to 1995. Section C shows that since 1985, there has been only  
8 one year in which In-County volume per adult has increased.

### 9 **3. Factors Affecting Volume**

10 Within-County Mail volumes are likely to have been affected by many of the  
11 same factors affecting all Periodicals as discussed in the previous section. More  
12 specifically, it is believed that a large portion of Within-County Mail consists of  
13 newspapers. Therefore, the aforementioned declines in newspaper readership,  
14 circulation, and advertising share are likely to have affected Within-County Mail volumes  
15 more than other Periodicals subclasses. A substantial portion of Within-County Mail is  
16 also likely to be weekly publications, along the lines of local newspapers. According to  
17 the 2003 Household Diary Study, the percentage of households receiving a weekly  
18 newspaper by the mail has declined from 25.6 percent in 1987 to 14.6 percent in 2003.  
19 The average number of such newspapers received through the mail has similarly  
20 declined, from 0.30 to 0.15 pieces per household per week, over the same time period.

21 Smaller publications might be more reliant on advertising revenues and therefore  
22 more sensitive to the long-term decline in newspaper advertising share. They might  
23 also be more sensitive to the economic business cycle. John Morton, of the American  
24 Journalism Review, writes, "The nature of newspaper ownership and management has  
25 changed dramatically in this decade. Newspapers, especially smaller ones, are sold

1 and swapped around as so many economic units.” [J. Morton, “Bad News about  
2 Newspaper Circulation,” *American Journalism Review*, (July/August 1999)]

3 On the other hand, Within-County Mail might be less vulnerable to the Internet as  
4 an alternative. Small local newspapers probably provide the kind of news and  
5 information not commonly available on the Internet.

6 **4. Recent Contributions to Volume**

7 Table 24 shows that over the four-year period ending in 2005Q1, the volume of  
8 Periodicals Within-County Mail declined 13.46 percent. Table 24 also presents the  
9 contributions of individual factors to this four-year volume change, based on the  
10 econometric analysis of Thomas Thress.

11 **a. Own-Price**

12 Table 24 shows that over the past four years, the real price of Within-County Mail  
13 increased 2.6 percent. The own-price elasticity of Within-County Mail is estimated to be  
14 -0.235. Applying this elasticity to the percentage increase in real price gives the result  
15 that Within-County volume declined 0.60 percent over the past four years due to this  
16 factor.

17

| <b>Table 24</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Periodicals Within-County Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 2.6%                          | -0.235                  | -0.60%                             |
| Employment  | -6.1%                         | 0.893                   | -5.44%                             |
| Econometric Trend   | -                             | -                       | -15.43%                            |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   | -                             | -                       | 3.49%                              |
| Total Change in Volume  | -                             | -                       | -13.46%                            |

1                   **b.     Employment**

2           Within-County volume is also affected by changes in the level of employment per  
3 adult. Table 24 shows that this employment variable decreased 6.1 percent over the  
4 past four years. Applying the estimated employment elasticity of 0.893 to this decline in  
5 employment per adult produces a 5.44 percent decline in volume. Therefore, the  
6 performance of the overall economy over the past four years explains a meaningful part  
7 of the recent decline in Within-County Mail volume.

8                   **c.     Econometric Trend**

9           The long-term decline in Within-County volumes, clearly seen in Figure 9, is  
10 explained econometrically by a time trend term. Table 24 shows that over the past four  
11 years, this econometric trend term explains a 15.43 percent decline in volume.

12                   **d.     Adult Population**

13           Increases in adult population explain a 5.21 percent increase in In-County Mail  
14 volume over the past four years.

15                   **e.     Other Factors**

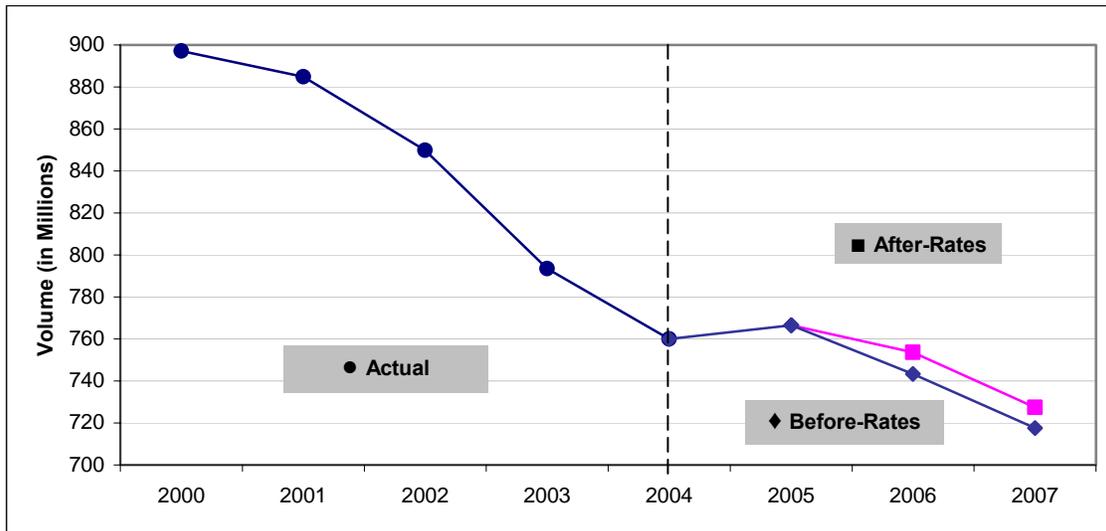
16           Other factors beyond those listed above were responsible for a 3.49 percent  
17 increase in Within-County volume over the past four years. Included in these other  
18 factors are seasonal differences as well as other influences captured in the Base Year  
19 volume.

20                   **5.     Before- and After-Rates Volume Forecasts**

21           The before-rates and after-rates forecasts of Within-County Mail are presented in  
22 Figure 9A, along with the recent volume history. The forecasts are obtained from  
23 Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to  
24 continue its historical decline. The before-rates Test Year (GFY 2006) forecast of  
25 Periodicals Within-County Mail volume is 743.285 million pieces. The Test Year after-

1 rates forecast is 753.578 million pieces, greater than the before-rates forecast because  
2 of a proposed decrease in Within-County rates.

**Figure 9A**  
**Periodicals Within-County Mail Volume Forecasts**



**C. Nonprofit Periodicals**

**1. Definition**

3 Periodicals sent by qualified nonprofit organizations and certain other  
4 organizations may be mailed as Nonprofit Periodicals Mail. The types of eligible  
5 nonprofit organizations are religious, educational, scientific, philanthropic, agricultural,  
6 labor, veterans, and fraternal. In addition to these organizations, certain other  
7 organizations may send publications at the Nonprofit rate if their publication falls into  
8 one of the following categories: (1) publications issued by and in the interest of  
9 associations of rural electric cooperatives, (2) one publication of the official highway or  
10 development agency of the state containing no advertising, (3) program announcements  
11 or guides published by an educational radio or television station, or (4) one conservation  
12 publication published by a state agency which is responsible for management and  
13 conservation of the fish or wildlife resources of that state.  
14  
15

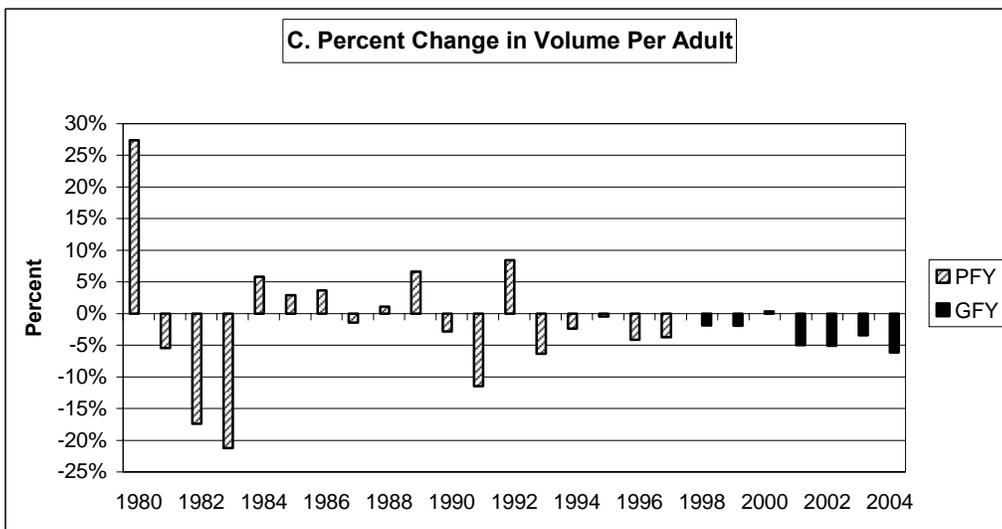
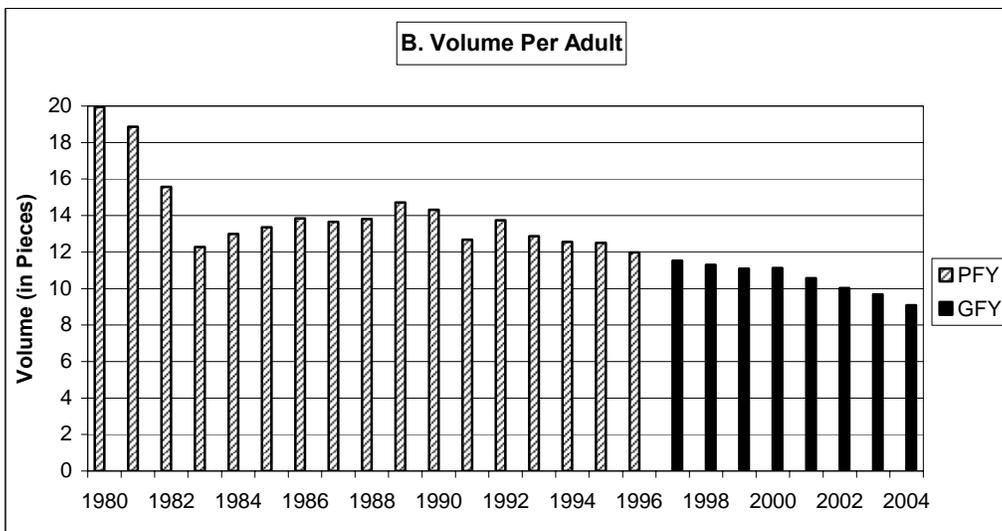
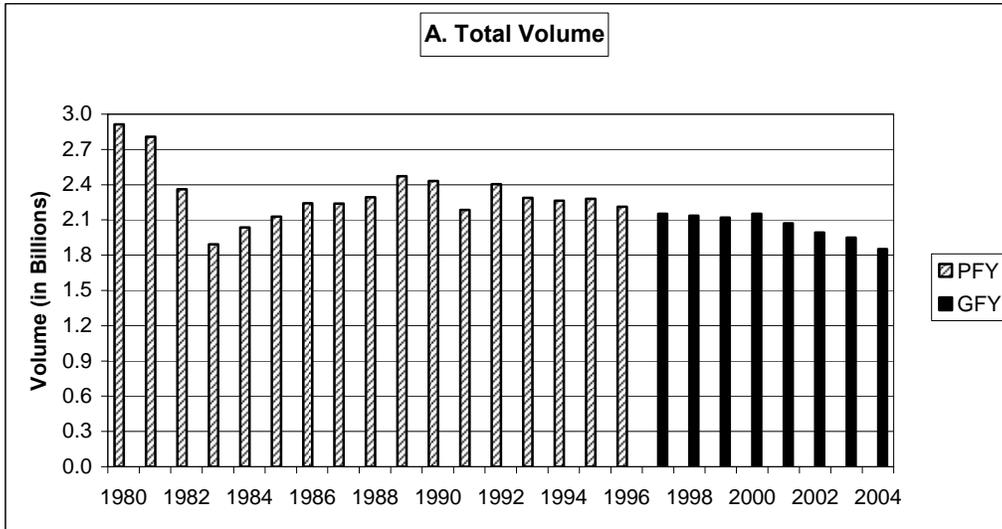
## 2. Volume History

1  
2 In 2004, Nonprofit Periodicals volume was 1,851 million pieces, about the same  
3 as in 1983, as illustrated in Figure 10. After some substantial declines in the early  
4 1980s, volume generally increased through the rest of the decade. Since then,  
5 Periodicals Nonprofit volume has been on a fairly steady decline.

6 Section B of Figure 10 shows that Periodicals Nonprofit volume per adult has  
7 fallen from 20.0 pieces in 1980 to 14.3 pieces in 1990 to 9.1 pieces in 2004. Section C  
8 of Figure 10 shows that volume per adult has declined in eleven of the last twelve years.  
9 This period of consistent decline is in contrast to the experience of the 1980s, when  
10 volume per adult rose in some years and fell in others.

11 Overall, the volume history of Periodicals Nonprofit Mail is similar to that of total  
12 Periodicals volume in that it is characterized by a long period of stagnation followed by a  
13 more recent period of decline.

**Figure 10**  
**Periodicals Nonprofit Mail Volume History**



### 3. Factors Affecting Volume

1  
2 Many of the same factors affecting Periodicals in general would be expected to  
3 affect Nonprofit Mail volumes as well. Since many nonprofit publications are linked to  
4 charitable activities, it is not surprising that there is a strong effect of the business cycle  
5 on volumes. Large declines in Nonprofit Mail volumes per adult are seen around the  
6 1981-1982 recession and the 1990-1991 recession. The impact of the most recent  
7 recession is less noticeable, as volumes had already been declining for many years.  
8 Still, the declines in volume per adult in 2001 and 2002 were larger than what was seen  
9 during most of the 1990s.

10 The Internet has also had some negative impact on Periodicals Nonprofit  
11 volumes. Meta Brophy of Consumers Union, publisher of *Consumer Reports*, says that  
12 e-mail has been a "huge success for us," according to the Alliance of Nonprofit Mailers  
13 Report from January 14, 2005. ["Direct Mail: Nonprofit Mail Numbers Decline," *The*  
14 *Non-Profit Times* (January 15, 2005)] *Consumer Reports* is now provided online,  
15 something many readers say they like even more than getting a print version. "It lends  
16 itself well to the Web," says Brophy. "We've done tests and it really works great for us,"  
17 Brophy said. Furthermore, a meaningful share of Nonprofit Mail comes from  
18 educational or scientific publishers, organizations that would be expected to also have  
19 online versions of their publications.

20 More generally, the shift away from reading is probably part of the reason for the  
21 long-term decline in Periodicals Nonprofit volumes.

### 4. Recent Contributions to Volume

22 Table 25 shows that over the past four years, the volume of Periodicals Nonprofit  
23 Mail declined 11.01 percent. The table also presents the contributions of individual  
24 factors to this volume decline, based on the econometric analysis of Thomas Thress.  
25  
26

**a. Own-Price**

Table 25 indicates that during the four-year period ending in 2005Q1, the real price of Nonprofit Mail increased 10.7 percent. The estimated own-price elasticity of -0.237 leads to a 2.37 percent decrease in Nonprofit Mail volume due to the change in the real postal price of this subclass over the past four years.

| <b>Table 25</b>   |                            |                      |                              |
|---|----------------------------|----------------------|------------------------------|
| <b>Contributions to Change in Periodicals Nonprofit Mail Volume For the Four Years Ending in 2005Q1</b> |                            |                      |                              |
| Variable  | Percent Change in Variable | Estimated Elasticity | Effect of Variable on Volume |
| Own-Price   | 10.7%                      | -0.237               | -2.37%                       |
| Employment  | -6.1%                      | 0.835                | -5.10%                       |
| Price of Paper – lag 2  | -0.7%                      | -0.306               | 0.20%                        |
| Price of Paper – lag 8  | 0.3%                       | -0.901               | -0.23%                       |
| Broadband Subscribers   | 18.4%                      | -0.332               | -5.46%                       |
| Econometric Trend   | -                          | -                    | -4.33%                       |
| Adult Population  | 5.2%                       | 1.000                | 5.21%                        |
| Other Factors   | -                          | -                    | 0.95%                        |
| Total Change in Volume  | -                          | -                    | -11.01%                      |

**b. Employment**

It is estimated that a one percent increase in employment per adult leads to a 0.835 percent increase in Nonprofit Mail volume, as shown in Table 25. Employment per adult declined 6.1 percent over the past four years, resulting in a 5.10 percent decline in volume due to this factor.

**c. Wholesale Price of Pulp and Paper**

Nonprofit Mail volume is affected by changes in paper prices, with higher paper prices raising the cost of producing nonprofit publications and leading to a decline in their volume. It is econometrically estimated that the price of paper affects Nonprofit

1 Mail volume with a lag of two quarters and with a lag of eight quarters. The specifics  
2 behind these variable choices are discussed in the testimony of Thomas Thress.

3 As shown in Table 25, the estimated elasticity of Nonprofit Mail volume with  
4 respect to the price of paper, lagged two quarters, is -0.306. Applying the 0.7 percent  
5 decline in the value of this variable over the past four years results in a 0.20 percent  
6 increase in the volume of Nonprofit Mail. Table 25 also shows that the estimated  
7 elasticity of Nonprofit Mail volume with respect to the price of paper, lagged eight  
8 quarters, is -0.901. The 0.3 percent increase in this variable over the past four years is  
9 estimated to have led to a 0.23 percent decline in Nonprofit Mail volume. Therefore, the  
10 combined impacts of changes in the price of paper over the past four years are roughly  
11 offsetting, meaning that this variable did not have much net impact on Nonprofit Mail  
12 volume during this time period.

#### 13 **d. Broadband Subscribers**

14 As discussed at the beginning of this chapter, the Internet has developed into an  
15 alternative to newspapers and magazines as a means for obtaining news, information,  
16 and entertainment. Specifically, it is found that the number of broadband subscribers is  
17 correlated with changes in the volume of Periodicals Nonprofit Mail volume. Table 25  
18 shows that over the past four years, a 5.46 percent decline in volume is attributed to  
19 increases in the number of broadband subscribers.

#### 20 **e. Econometric Trend**

21 In addition to the more recent impacts of the Internet on Periodicals volumes,  
22 there are also long-term influences that are responsible for a decline in the volume of  
23 Periodicals Nonprofit Mail volume. These longer-term influences, discussed earlier in  
24 this chapter, are explained econometrically by a negative trend term. Table 25 shows  
25 that over the past four years, a 4.33 percent decline in Nonprofit Mail volume is  
26 explained by this negative econometric trend.

**f. Adult Population**

Table 25 shows that growth in adult population contributed 5.21 percent to the volume of Periodicals Nonprofit Mail volume over the past four years.

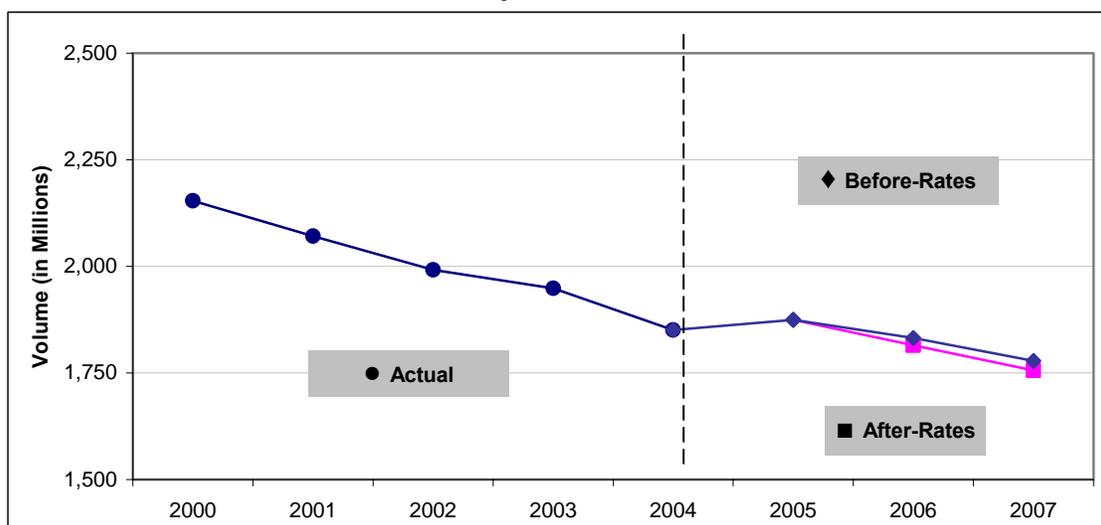
**g. Other Factors**

Beyond the variables specifically mentioned above, other factors were responsible for a 0.95 percent increase in Periodicals Nonprofit volume over the past four years. Included in these other factors are the impacts of seasonal variations as well as other influences captured in the Base Year volume of this subclass.

**5. Before- and After-Rates Volume Forecasts**

The before-rates and after-rates forecasts of Periodicals Nonprofit Mail are presented in Figure 10A, along with the recent volume history. The forecasts are obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to decline but, due to improvements in the economy, the decline is projected to be somewhat slower than the recent experience. The before-rates Test Year (GFY 2006) forecast of Periodicals Nonprofit Mail volume is 1,831.804 million pieces. The Test Year after-rates forecast is 1,814.995 million pieces.

**Figure 10A  
Periodicals Nonprofit Mail Volume Forecasts**



## **D. Classroom Mail**

### **1. Definition**

Classroom Mail consists of religious, educational or scientific publications intended for use in school classrooms. This mail is often sent to schools in large bundles during the school year, but mailed to individual students during the summer recess. The Classroom Mail rate schedule is identical to the rate schedule for Periodicals Nonprofit Mail.

### **2. Volume History**

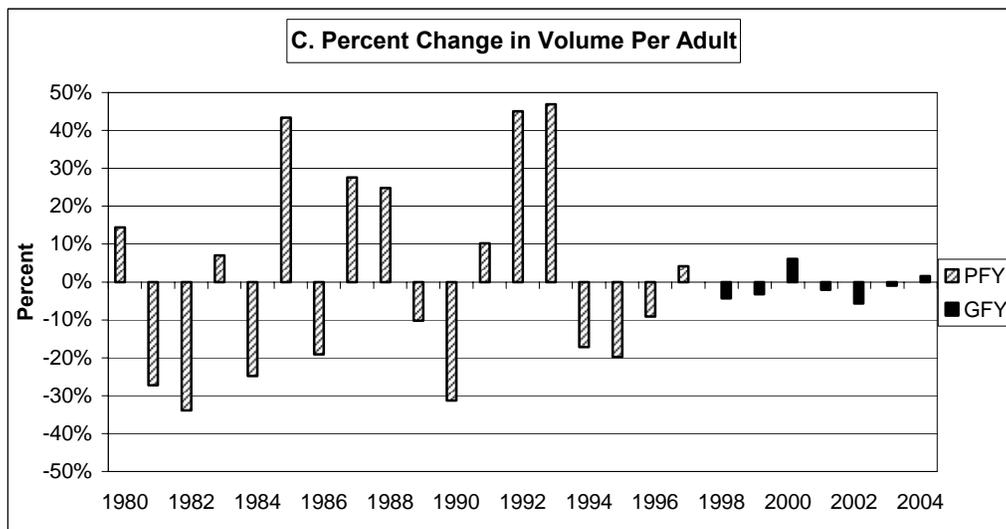
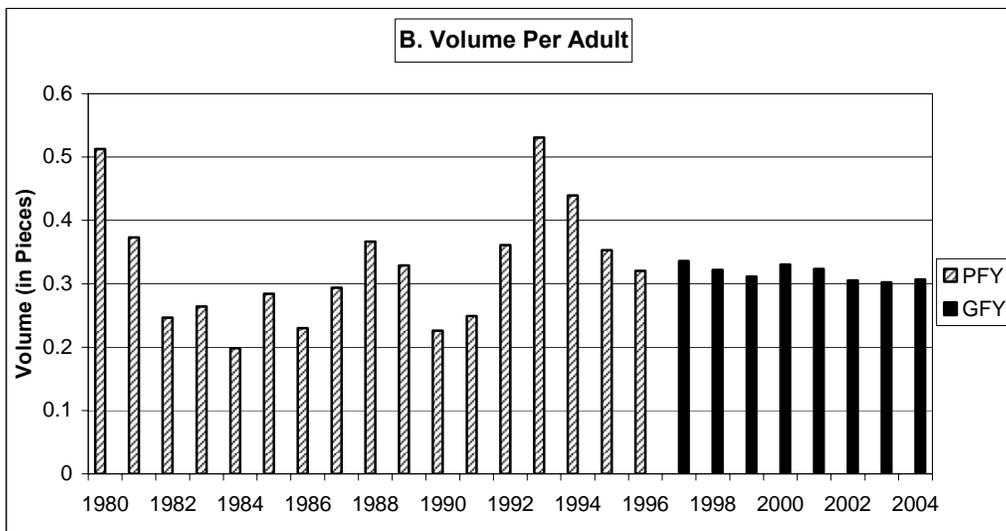
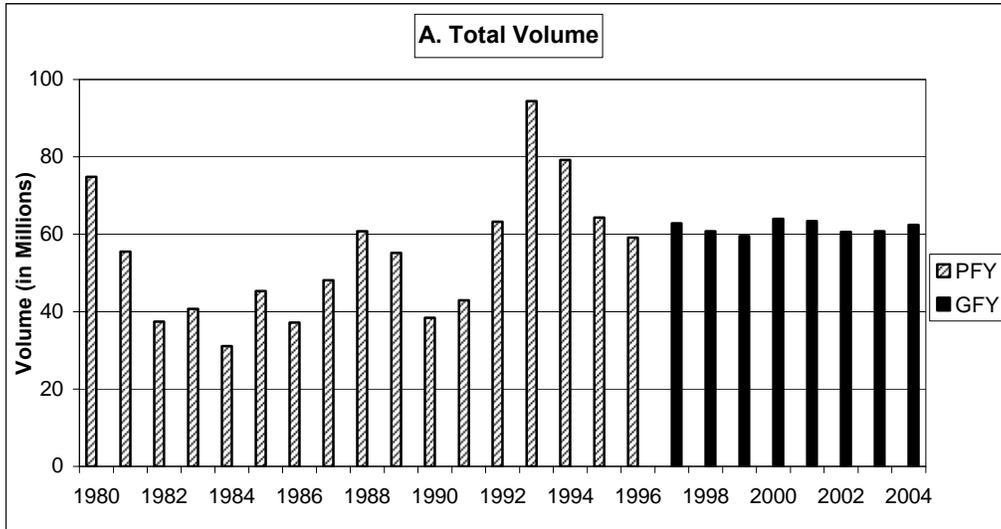
Figure 11 reveals that Classroom Mail volume exhibited considerable variation from 1980 through 1994. Since 1995, volume has remained relatively close to 60 million pieces per year. Increases in population, however, have caused volume per adult to decline over the past ten years, though it did increase in 2004.

### **3. Factors Affecting Volume**

The extreme variability of Classroom Mail volumes from 1980 through 1994 makes it difficult to ascertain the specific factors affecting the volume of this subclass. The fact that there is only a handful of classroom mailers, and that the content of this subclass is so specialized, means that the large volume changes are probably tied to unique circumstances occurring in any given year.

In general, one would expect Classroom Mail volumes to be negatively related to Classroom Mail postage rates and positively related to the growth in the economy. Because their rate schedules are currently identical, the volume of Classroom Mail is combined with the volume of Nonprofit Mail for the purposes of econometric estimation, as discussed in the testimony of Thomas Thress. Therefore, the estimated price and non-price elasticities of these two subclasses are identical.

**Figure 11**  
**Periodicals Classroom Mail Volume History**



1 More specifically, Classroom volumes can be expected to be correlated to school  
2 enrollment. According to the most recent edition of the *Statistical Abstract of the United*  
3 *States*, total public and private elementary and high school enrollment has been  
4 growing by a little more than one percent per year over the past two decades. [U.S.  
5 Census Bureau, *Statistical Abstract of the United States: 2004 - 2005*, Table No. 202]  
6 This is approximately the same growth rate as for adult population, the variable used in  
7 the econometric analysis of mail volumes.

8 It is also reasonable to think that the use of the Internet in schools has had a  
9 negative impact on Classroom Mail volumes. It is reported that 99 percent of public  
10 schools had Internet access in 2002, compared with just 50 percent in 1995.  
11 Furthermore, 79.2 percent of elementary and secondary schools (public and private)  
12 had high-speed Internet access. [U.S. Census Bureau, *Statistical Abstract of the United*  
13 *States: 2004 - 2005*, Tables No. 242 and 243]

#### 14 **4. Recent Contributions to Volume**

15 Table 26 shows that over the past four years, the volume of Periodicals Classroom  
16 Mail increased 4.80 percent. The table also presents the contributions of different  
17 factors to this four-year volume change. Note that the estimated elasticities for  
18 Classroom Mail are identical to those for Nonprofit Mail, as the volumes of two  
19 subclasses are combined for purposes of econometric estimation.

##### 20 **a. Own-Price**

21 Table 26 indicates that during the four-year period ending in 2005Q1, the real price  
22 of Classroom Mail increased 14.8 percent. The own-price elasticity of -0.237 leads to a  
23 3.21 percent decrease in Classroom Mail volume estimated to have been caused by the  
24 real price change in this subclass.

1                                   **b.    Employment**

2            It is estimated that a one percent increase in employment per adult leads to a  
3 0.835 percent increase in Classroom Mail volume, as shown in Table 26. Employment  
4 per adult declined 6.1 percent over the past four years, resulting in a 5.10 percent  
5 decline in volume due to this factor.

6

| <b>Table 26</b>   |                                       |                                 |   |
|---|---------------------------------------|---------------------------------|---|
| <b>Contributions to Change in Periodicals Classroom Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                                       |                                 |   |
| <b>Variable</b>   | <b>Percent Change<br/>in Variable</b> | <b>Estimated<br/>Elasticity</b> | <b>Effect of<br/>Variable on<br/>Volume</b> |
| Own-Price   | 14.8%                                 | -0.237                          | -3.21%                                      |
| Employment  | -6.1%                                 | 0.835                           | -5.10%                                      |
| Price of Paper – lag 2  | -0.7%                                 | -0.306                          | 0.20%                                       |
| Price of Paper – lag 8  | 0.3%                                  | -0.901                          | -0.23%                                      |
| Broadband Subscribers   | 18.4%                                 | -0.332                          | -5.46%                                      |
| Econometric Trend   | -                                     | -                               | -4.33%                                      |
| Adult Population  | 5.2%                                  | 1.000                           | 5.21%                                       |
| Other Factors   | -                                     | -                               | 19.93%                                      |
| Total Change in Volume  | -                                     | -                               | 4.80%                                       |

7                                   **c.    Wholesale Price of Pulp and Paper**

8            As is the case for Periodicals Nonprofit Mail, Classroom Mail volume is affected  
9 by changes in the price of paper, measured econometrically with a lag of two quarters  
10 and with a lag of eight quarters. Table 26 shows that changes in the price of paper  
11 lagged two quarters explains a 0.20 percent increase in Classroom Mail volume over  
12 the last four years, while changes in the price of paper lagged eight quarters explain a  
13 0.23 percent decrease in volume over the same time period.

1                                   **d.     Broadband Subscribers**

2           As discussed earlier, it is reasonable that the Internet in general, and broadband  
3 computer access in particular, can serve as a substitute for some Classroom Mail  
4 volume. Table 26 shows that a 5.46 percent decline in Classroom Mail volume is  
5 attributable to increases in the number of broadband subscribers over the past four  
6 years.

7                                   **e.     Econometric Trend**

8           The effect of long-term negative influences on the volume of Classroom Mail is  
9 measured econometrically by a trend term. Table 26 shows that over the past four  
10 years, a 4.33 percent decline in Nonprofit Mail volume is explained by this negative  
11 econometric trend.

12                                  **f.     Adult Population**

13           Table 26 shows that growth in adult population contributed 5.21 percent to the  
14 volume of Classroom Mail volume over the past four years.

15                                  **g.     Other Factors**

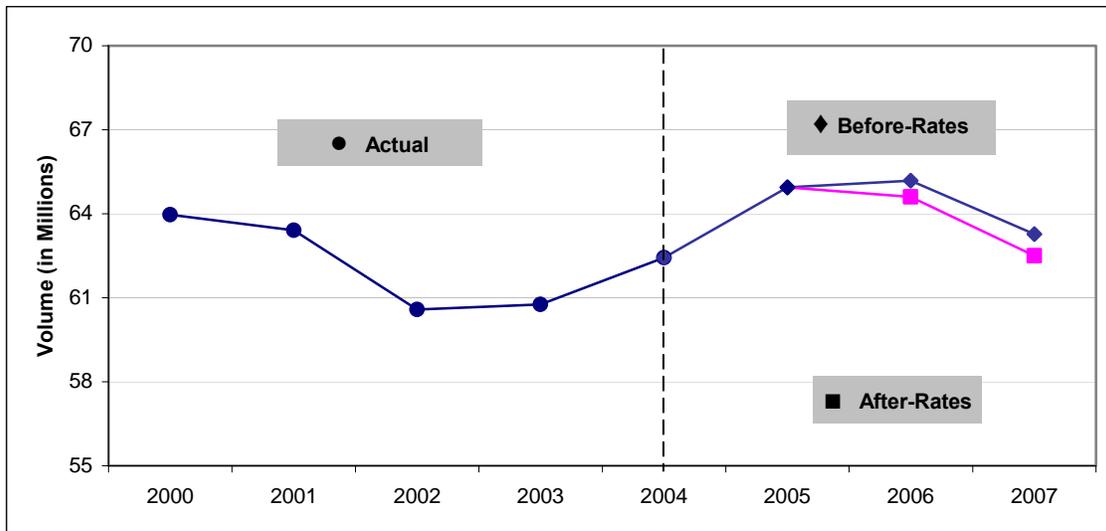
16           Beyond the variables specifically mentioned above, other factors were  
17 responsible for a 19.93 percent increase in Classroom Mail volume over the past four  
18 years. This large impact reflects the fact that over the past four years, Classroom Mail  
19 volumes have not behaved the same as Nonprofit Mail volumes. However, the volume  
20 impact of these other factors is captured in the Base Year volume and therefore is  
21 included in the volume forecast for Classroom Mail.

22                                  **5.     Before- and After-Rates Volume Forecasts**

23           The before-rates and after-rates forecasts of Classroom Mail are presented in  
24 Figure 11A, along with the recent volume history. The forecasts are obtained from  
25 Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume in the Test

1 Year (GFY 2006) is projected to be greater than in 2004. The before-rates Test Year  
 2 (GFY 2006) forecast of Classroom Mail is 65.183 million pieces. The Test Year after-  
 3 rates forecast is 64.598 million pieces.

**Figure 11A**  
**Periodicals Classroom Mail Volume Forecasts**



**E. Regular Rate Mail**

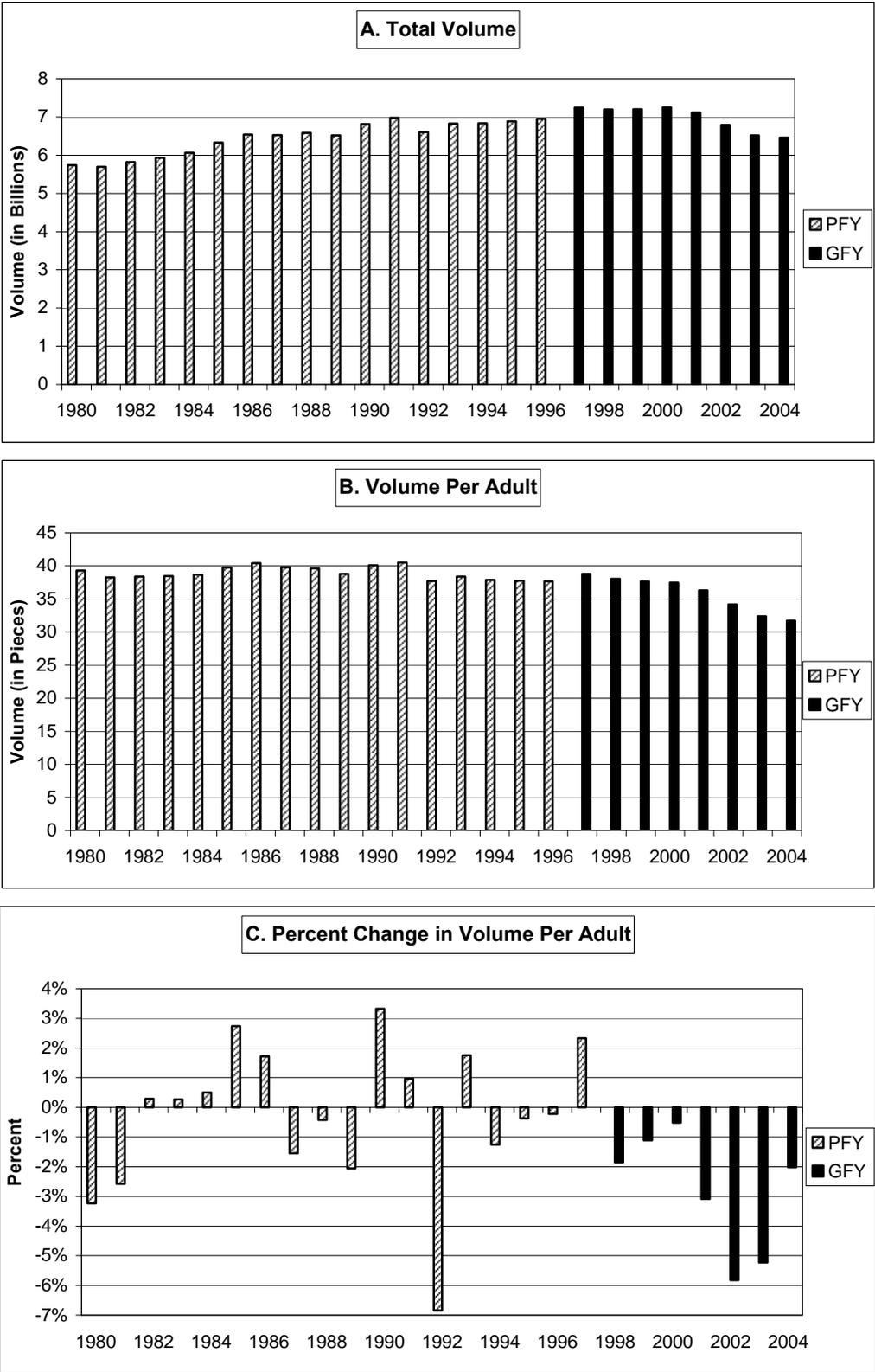
**1. Definition**

Regular Rate Mail, the largest subclass in Periodicals, consists primarily of weekly and monthly magazines as well as daily and less-frequently published newspapers not eligible for preferred rates.

**2. Volume History**

Figure 12 shows volumes for Regular Rate Mail from 1980 to 2004. Section A indicates that total volume trended upward during the 1980s and peaked around 2000 at 7.25 billion pieces. Since then volume has declined to its 2004 level of 6.5 billion pieces. Section B of Figure 12 shows that volume per adult has remained close to 40 pieces per year throughout most of the 1980s.

**Figure 12**  
**Periodicals Regular Rate Mail Volume History**



1           There was a noticeable decline in volume per adult in 1992, after which it  
2 remained relatively stable until 1997. Since 1997, volume per adult has been on a  
3 downward trend. Overall, volume per adult has declined from 40.1 pieces in 1990 to  
4 37.5 pieces in 2000 to 31.7 pieces in 2004.

5           The downward trend in volume per adult is clearly illustrated in section C of Figure  
6 12. Volume per adult has declined for the last seven years, with especially large  
7 decreases occurring in the last four years. Since 2000, Periodicals Regular volume per  
8 adult has declined 15 percent.

### 9                           **3. Factors Explaining Volume**

10           As Regular Rate Mail represents about 70 percent of total Periodicals volume,  
11 the factors explaining its volume history closely match those that were discussed at the  
12 beginning of this chapter. To briefly summarize, Periodicals Regular Rate Mail volume  
13 has been adversely affected by a long-term decline in the reading of newspapers and  
14 magazines. More recently, the Internet has emerged as a viable alternative to reading  
15 periodicals, particularly for people who have broadband access. On the brighter side,  
16 Robert Coen projects newspaper advertising to rise 5.7 percent in 2005 and magazine  
17 ad spending projected to increase 7.3 percent. Still, these gains would only begin to  
18 offset the long-term negative trend experienced by these two industries.

### 19                           **4. Recent Contributions to Volume**

20           Table 27 shows that over the four-year period ending in 2005Q1, the volume of  
21 Periodicals Regular Mail declined 12.20 percent. The table also presents the  
22 contribution of individual factors to this four-year volume decline, based on the  
23 econometric analysis of Thomas Thress.

#### 24                           **a. Own-Price**

25           Table 27 shows that the real price of Regular Mail increased 14.3 percent during  
26 the four-year period ending in 2005Q1. The estimated own-price elasticity of this

1 subclass is -0.193. Applying this elasticity to the 14.3 percent increase in real price  
2 gives an estimated decline in volume of 2.54 percent due to this factor.

| <b>Table 27</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Periodicals Regular Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 14.3%                         | -0.193                  | -2.54%                             |
| Employment – lag 3  | -5.7%                         | 0.420                   | -2.42%                             |
| Price of Paper  | -1.2%                         | -0.040                  | 0.05%                              |
| Broadband Subscribers   | 18.4%                         | -0.533                  | -8.61%                             |
| Econometric Trend   | -                             | -                       | -0.74%                             |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   | -                             | -                       | -3.31%                             |
| Total Change in Volume  | -                             | -                       | -12.20%                            |

3 **b. Employment**

4 Periodicals Regular Mail volume is affected by changes in employment per adult.  
5 The econometric analysis of Thomas Thress finds that the primary impact of  
6 employment on volume occurs after a three-quarter lag. Over the past four years,  
7 employment per adult lagged three quarters decreased 5.7 percent. Applying the  
8 estimated employment elasticity of 0.420 to this employment change results in a 2.42  
9 percent decline in volume due to this factor.

10 **c. Wholesale Price of Pulp and Paper**

11 The real price of paper declined 1.2 percent over the past four years. The  
12 elasticity of Regular Mail volume with respect to the real price of paper is estimated to  
13 be -0.040. Therefore, this decrease in real paper prices contributed 0.05 percent to the  
14 volume over the past four years.

1                                   **d.     Broadband Subscribers**

2                   As detailed earlier in this chapter, the Internet, particularly broadband Internet,  
3 has emerged as an important alternative to newspapers and magazines.  
4 Econometrically, increases in the number of broadband subscribers explain an 8.61  
5 percent decline in Periodicals Regular Mail volume over the past four years.

6                                   **e.     Econometric Trend**

7                   Long-term negative influences on Periodicals Regular Mail volume are measured  
8 econometrically by a time trend. However, as noted in the discussion presented at the  
9 beginning of this chapter, a large part of this negative trend is due to declines in the  
10 reading of newspapers and newspaper subscribers. It is believed that Regular  
11 Periodicals have a lower proportion of newspapers than, for example, Within-County  
12 Periodicals, so it is not surprising that this negative trend impact is smaller for the  
13 Regular subclass. In fact, as shown in Table 27, it is estimated that volume declined  
14 only 0.74 percent over the past four years due to long-term influences captured by the  
15 econometric trend term.

16                                   **f.     Adult Population**

17                   Growth in adult population explains a 5.21 percent increase in the volume of  
18 Regular Mail growth over the past four years.

19                                   **g.     Other Factors**

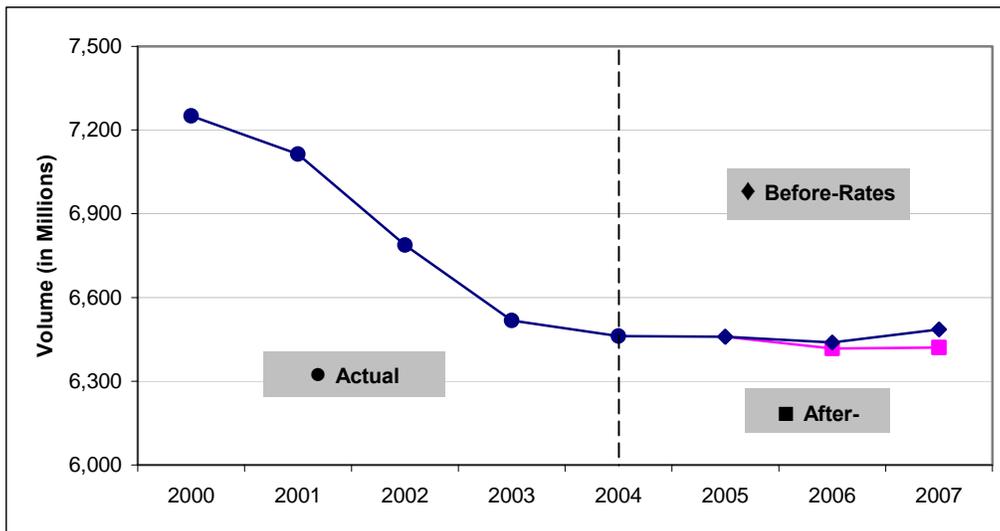
20                   As shown in Table 27, other factors beyond those specifically mentioned above  
21 explain a 3.31 percent decline in Periodicals Regular Mail volume over the past four  
22 years. Included in these other factors are the impact of changing seasonal patterns in  
23 volume as well as other influences included in the Base Year volume.

24                                   **5.     Before- and After-Rates Volume Forecasts**

25                   The before-rates and after-rates forecasts of Periodicals Regular Mail are  
26 presented in Figure 12A, along with the recent volume history. Volume is projected to

- 1 remain essentially flat over the next few years as improvements in the economy offset
- 2 the negative impacts discussed earlier in this section. The before-rates Test Year
- 3 (GFY 2006) forecast of Periodicals Regular Mail is 6,438.348 million pieces. The Test
- 4 Year after-rates forecast is 6,416.651 million pieces.

**Figure 12A**  
**Periodicals Regular Mail Volume Forecasts**



1 **V. STANDARD MAIL**

2 **A. Overview**

3 **1. General Characteristics**

4 In 2004, total Standard Mail volume was 95.6 billion pieces, just below the 97.9  
5 billion pieces of First-Class Mail. However, in the first quarter of 2005, Standard Mail  
6 volume exceeded First-Class Mail volume, as it also did in the last quarter of 2004.

7 Standard Mail contains mostly printed advertising, solicitation, and promotional  
8 materials, and also small parcels. Standard Mail includes matter not required to be  
9 mailed First-Class, and is subject to postal inspection. All Standard Mail must weigh  
10 less than 16 ounces. All Standard Mail must be presorted to the greatest degree  
11 possible within a single mailing.

12 Printed advertisements sent as Standard Mail come in a wide variety of forms,  
13 from single-page advertising circulars to multi-page color catalogs. Businesses, running  
14 from the very small to the extremely large, are the primary senders of Standard Mail.  
15 The scope of mailings also covers a wide range. High volume mailers may advertise a  
16 product in a Standard mailing to every known household in the country while a local  
17 business may use this same service to reach a selected audience within a single ZIP  
18 Code area. Standard Mail may be deferred at postal facilities in order to expedite the  
19 delivery of classes such as First-Class Mail and Periodicals. To minimize the effect of  
20 deferred status, some large volume Standard mailers go to extra lengths to reduce the  
21 amount of handling needed before their mail is delivered to its final destination. These  
22 extra lengths include the use of Postal Service approved barcodes (to speed  
23 processing) and dropshipping (to shorten transportation time).

24 **2. Subclasses and Categories**

25 There are four subclasses of Standard Mail: Regular, Enhanced Carrier-Route  
26 (ECR), Nonprofit, and Nonprofit ECR. Nonprofit and Nonprofit ECR are preferred

1 subclasses of Standard Mail, for which lower rates are provided to qualified mailers.  
2 Rates are based on a per-piece postage charge as well as a per pound charge for  
3 pieces weighing more than 3.3 ounces. Lower rates are provided to mailers who enter  
4 their mailings at the DBMC or DSCF. Senders of Standard ECR Mail can receive an  
5 additional discount for mail entered at the DDU.

6         Within Standard Regular Mail, there is a distinction between letter and nonletter  
7 mail, where nonletters consist of flats, parcels, and irregularly shaped pieces. There are  
8 six letter and four nonletter categories of Regular mail. The six letter categories are  
9 basic nonautomated, 3/5-digit nonautomated, and four automated letter categories:  
10 mixed AADC, AADC, 3-digit and 5-digit. The four nonletter categories are basic  
11 nonautomated, presort nonautomated, 3-digit automation, and 5-digit automation. To  
12 qualify for the automation discounts, mail must be automation compatible and 100  
13 percent delivery point barcoded. The same categories exist within Standard Nonprofit  
14 Mail as well.

15         Within Standard ECR Mail, there is also a distinction between letter and nonletter  
16 mail. There are four letter and three nonletter categories of ECR Mail. The four ECR  
17 letter categories are basic, high density, saturation, and automation basic. The three  
18 nonletter categories are basic, high density, and saturation. Automation letters must be  
19 automation compatible and 100 percent delivery point barcoded. The same categories  
20 exist within Nonprofit ECR Mail as well.

### 21                 **3.         Composition of Standard Mail**

#### 22                         **a.         By Subclass**

23         Standard Regular is the largest subclass within Standard Mail, with 2004 volume  
24 of 50,776 million pieces. The second largest subclass is ECR Mail at 30,345 million  
25 pieces. Nonprofit Mail volume in 2004 was 11,792 million pieces while Nonprofit ECR

1 volume was 2,650 million pieces. Table 28 shows subclass shares of total Standard  
2 Mail volume for selected years beginning in 1980.

3

| <b>Table 28</b>                                      |         |       |           |               |
|--|---------|-------|-----------|---------------|
| <b>Subclass Shares of Total Standard Mail Volume</b> |         |       |           |               |
| Year   | Regular | ECR   | Nonprofit | Nonprofit ECR |
| 1980 – PFY   | 49.9%   | 23.5% | 26.3%     | 0.3%          |
| 1985 – PFY   | 33.9%   | 45.0% | 17.4%     | 3.7%          |
| 1990 – PFY   | 37.6%   | 43.4% | 14.7%     | 4.2%          |
| 1995 – PFY   | 40.8%   | 42.0% | 13.0%     | 4.2%          |
| 2000 – GFY   | 47.8%   | 36.4% | 12.6%     | 3.2%          |
| 2004 – GFY   | 53.1%   | 31.8% | 12.3%     | 2.8%          |

4  
5 One interesting development revealed in Table 28 is the changing volume share  
6 of ECR mail, which was at one time the largest subclass of Standard Mail but is now  
7 quite a bit smaller than the Regular subclass. A similar pattern is shown for Nonprofit  
8 ECR, which grew considerably from 1980 to 1990, but has more recently declined as a  
9 share of total Standard Mail.

10 **b. Letters and Nonletters**

11 Another breakdown of Standard Mail is into letters and nonletters. Table 29  
12 below shows the letter and nonletter volume shares of Standard Mail subclasses in  
13 1994 and 2004. The data show that over this time period, the share of total Standard  
14 Mail that is letter mail did not change much, rising from 58.4 percent to 59.2 percent.  
15 However, within the individual subclasses, the finding is that Regular and Nonprofit Mail  
16 saw an increase in their letter share while ECR and ECR Nonprofit Mail saw an  
17 increase in their nonletter share.

18

19

| <b>Table 29</b>                                     |      |         |             |
|---|------|---------|-------------|
| <b>Letter and Nonletter Shares of Standard Mail</b> |      |         |             |
|   | Year | Letters | Non-Letters |
| Regular   | 1994 | 64.1%   | 35.9%       |
|   | 2004 | 75.3%   | 24.7%       |
| ECR   | 1994 | 44.6%   | 55.4%       |
|   | 2004 | 24.1%   | 75.9%       |
| Nonprofit   | 1994 | 81.0%   | 19.0%       |
|   | 2004 | 83.1%   | 16.9%       |
| Nonprofit ECR                                       | 1994 | 77.0%   | 23.0%       |
|   | 2004 | 45.2%   | 54.8%       |
| Total Standard                                      | 1994 | 58.4%   | 41.6%       |
|   | 2004 | 59.2%   | 40.8%       |

1 **c. Automation and Nonautomation**

2 A third breakdown of Standard Mail is into the automation and nonautomation  
3 categories. Table 30 below shows the automation and nonautomation volume shares of  
4 Standard Mail in 1994 and 2004. Here the observation is that the share of Standard  
5 Mail that is automated increased from 23.9 percent in 1994 to 62.1 percent in 2004.  
6 However, the increase in the automation share is almost entirely due to growth in the  
7 automation of non-ECR Standard Mail, which in 2004 was virtually all automated. Less  
8 than ten percent of Standard ECR Mail was automated in 2004. The rate schedule  
9 does not provide much incentive for ECR mailers to automate their mailings, explaining  
10 the low percentage of ECR Mail that is automated.

| <b>Table 30</b>   |      |              |           |
|---|------|--------------|-----------|
| <b>Nonautomated and Automated Shares of Standard Mail</b> |      |              |           |
|   | Year | Nonautomated | Automated |
| Regular   | 1994 | 51.0%        | 49.0%     |
|   | 2004 | 6.7%         | 93.3%     |
| ECR   | 1994 | 100.0%       | 0.0%      |
|   | 2004 | 93.7%        | 6.3%      |
| Nonprofit   | 1994 | 65.8%        | 34.2%     |
|   | 2004 | 16.7%        | 83.3%     |
| Nonprofit ECR   | 1994 | 100.0%       | 0.0%      |
|   | 2004 | 92.4%        | 7.6%      |
| Total Standard  | 1994 | 76.1%        | 23.9%     |
|   | 2004 | 37.9%        | 62.1%     |

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**d. Industry of Sender**

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A fourth breakdown of Standard Mail is by industry of sender. The Household Diary Study provides data on the industries that sent Standard Mail to households. Table 31 shows the breakdown by industry of sender for 1987, 1994, and 2004. The data show that there has been an increase in Standard Mail sent by the financial industry. In 1987 and 1994, twelve percent of Standard Mail sent to households came from the financial industry. In 2004, this figure had risen to 25 percent, with most of this rise due to increased mailings from the credit card industry.

10

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Table 31 also shows that there has been a decline in the share of Standard Mail sent by merchants, from 63 percent in 1987 and 1994 to 42 percent in 2004. Standard Mail sent by the service industry has increased as have mailings coming from more than one organization, sometimes referred to as “marriage mailings.”

| <b>Table 31</b>  |             |             |             |
|--|-------------|-------------|-------------|
| <b>Standard Mail Sent to Households, by Industry of Sender</b> |             |             |             |
|  | 1987        | 1994        | 2004        |
| <b>Total Financial</b>   | <b>12%</b>  | <b>12%</b>  | <b>25%</b>  |
| Credit Card  | 3%          | 3%          | 11%         |
| Other Financial  | 9%          | 9%          | 14%         |
| <b>Total Merchants</b>   | <b>63%</b>  | <b>63%</b>  | <b>42%</b>  |
| Mail-Order Company   | 16%         | 21%         | 16%         |
| Department/Specialty Store                                     | 24%         | 21%         | 17%         |
| Other Merchants  | 23%         | 21%         | 9%          |
| <b>Total Services</b>  | <b>7%</b>   | <b>7%</b>   | <b>12%</b>  |
| <b>Social/Charitable/Political/Nonprofit</b>                   | <b>3%</b>   | <b>3%</b>   | <b>5%</b>   |
| <b>Detached Label</b>  | <b>8%</b>   | <b>9%</b>   | <b>5%</b>   |
| <b>Not from One Organization</b>                               | <b>6%</b>   | <b>3%</b>   | <b>11%</b>  |
| <b>Total Standard Mail to Households</b>                       | <b>100%</b> | <b>100%</b> | <b>100%</b> |

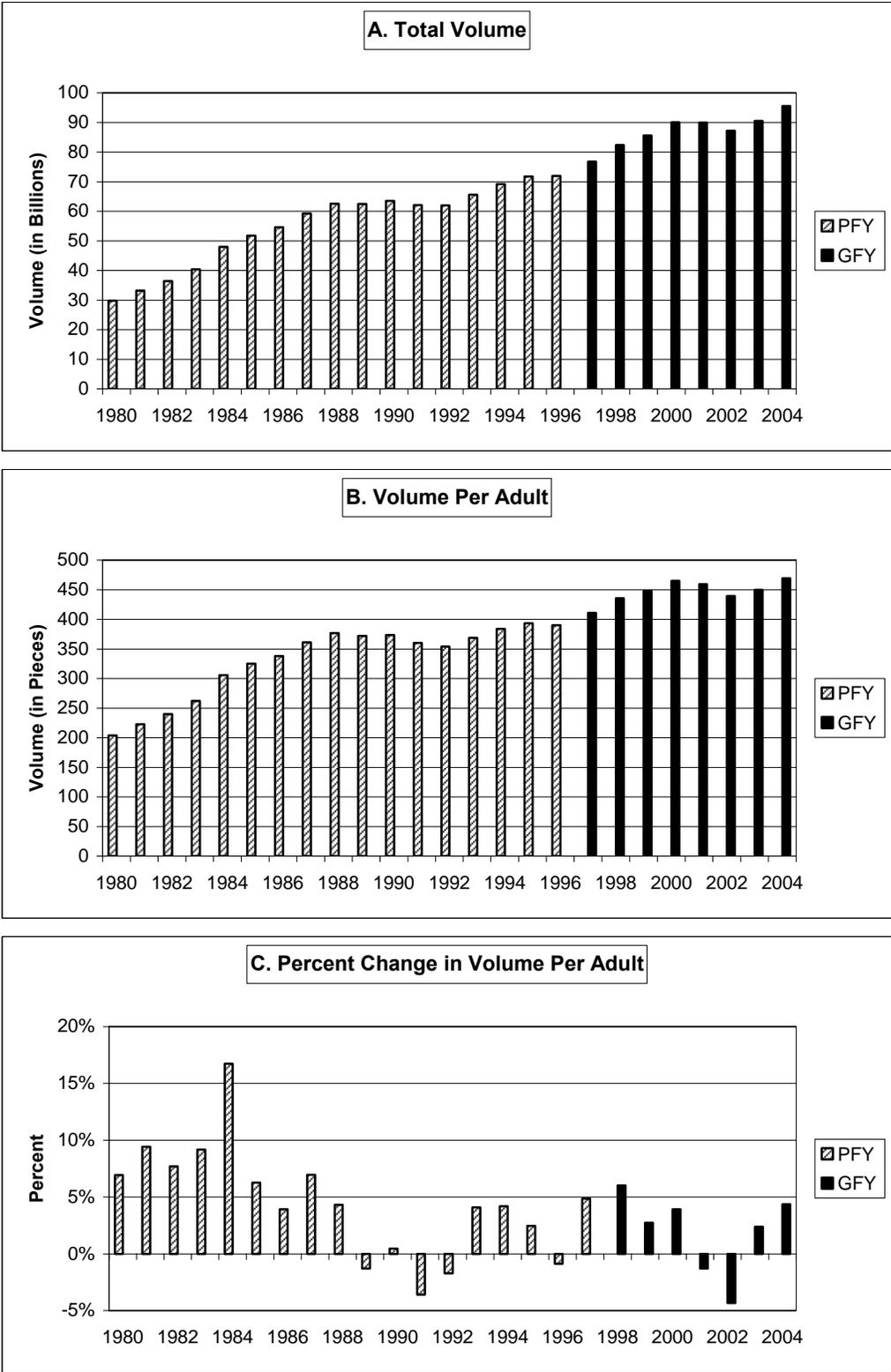
Source: Household Diary Study

#### 4. Volume History

Figure 13 shows the volume history of total Standard Mail from 1980 through 2004. Standard Mail has shown growth throughout its volume history, interrupted temporarily by coincident rate increases and economic slumps. Total Standard Mail volume has increased from 29.7 billion pieces in 1980 to 63.5 billion pieces in 1990 to 95.6 billion pieces in 2004.

Section B of Figure 13 shows that volume per adult has similarly increased, rising from 204 pieces in 1980 to 374 pieces in 1990 to 469 pieces in 2004, a total increase of 131 percent over the period shown in Figure 13. Section C of Figure 13 shows annual percentage changes in volume per adult. Again, the overall growth in Standard Mail volume is evidenced. This was especially true from 1980 through 1988. Volume per adult declined in three of the four years from 1989 through 1992, but since then, volume

**Figure 13**  
**Total Standard Mail Volume History**



1 per adult has increased in nine of the last twelve years. The decline in volume per adult  
2 in 2002, however, was the largest since at least 1980.

### 3 **5. Factors Affecting Volume**

4 This section discusses factors affecting Standard Mail in general. Factors  
5 affecting the individual subclasses of Standard Mail are discussed in the individual  
6 subclass sections of this chapter.

#### 7 **a. Postal Rates**

8 Although postal rates affect the volume of Standard Mail, changes in postal rates  
9 do not explain the long-term trends in Standard Mail volume shown in Figure 13. An  
10 index of the real price of Standard Mail (calculated as a weighted average of the  
11 individual subclass prices, using 2004 volumes as weights) was essentially the same in  
12 2004 as in 1980. The real price of the two nonprofit subclasses did increase  
13 considerably over this time period, but this impact was offset by a small decline in the  
14 real price of the much larger commercial subclasses of Standard Mail. Therefore, while  
15 postal prices certainly affect Standard Mail volumes during different phases of the rate  
16 cycle, real postal prices do not explain long-term trends in Standard Mail volume.

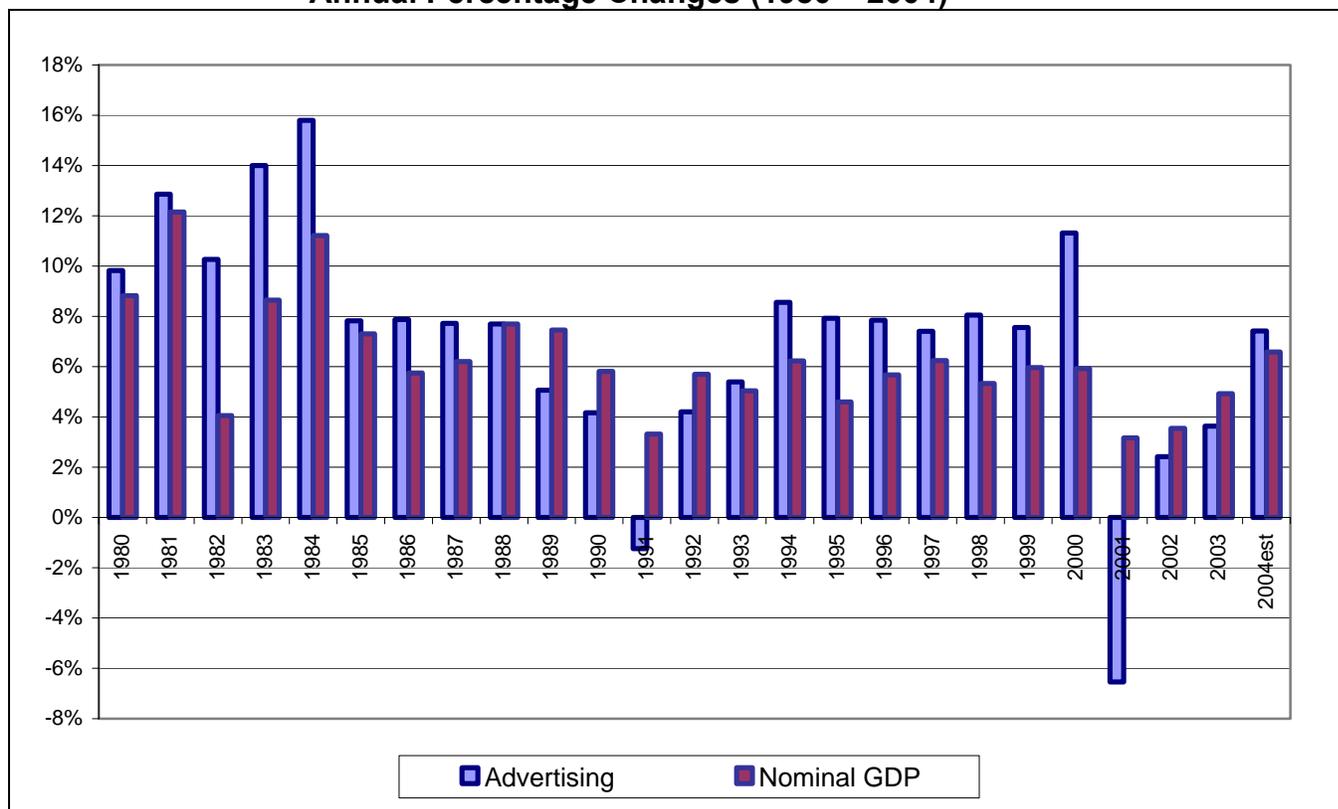
#### 17 **b. Overall Advertising**

18 As Standard Mail is used for advertising, it stands to reason that Standard Mail  
19 volumes are related to overall advertising spending. Chart C shows annual percentage  
20 changes in total advertising spending from 1980 through 2004, based on data compiled  
21 by Robert Coen of Universal McCann. [R. Coen, "Insider's Report - Robert Coen  
22 Presentation on Advertising Expenditures," Universal McCann, (December 2004), and  
23 Web site link to historical advertising data to 1980 and beyond] Chart C also shows  
24 annual percentage changes in nominal GDP over the same period.

25

26

**Chart C**  
**Advertising Spending and Nominal GDP**  
**Annual Percentage Changes (1980 – 2004)**



Sources: Robert Coen-Universal McCann, Econstats.com

1  
2  
3  
4 Comparing Chart C with Figure 13, several similarities are found. Total advertising  
5 and Standard Mail volume both grew strongly in the 1980s, as did the overall economy.  
6 The decline in Standard Mail volume in the late 1980s and early 1990s corresponds to a  
7 slowdown and then absolute decline in total advertising spending over the same period.  
8 Further similarities are seen in recent years. Total advertising spending and Standard  
9 Mail volumes both showed solid gains in the late 1990s and in 2000, and both slumped  
10 with the onset of the 2001 recession. The data show that total advertising spending  
11 declined during the recession in 2001, but Standard Mail volume did not decline until  
12 2002, although to some extent this is because the Standard Mail data are presented in  
13 government fiscal years so that GFY 2002 actually began in October 2001. The

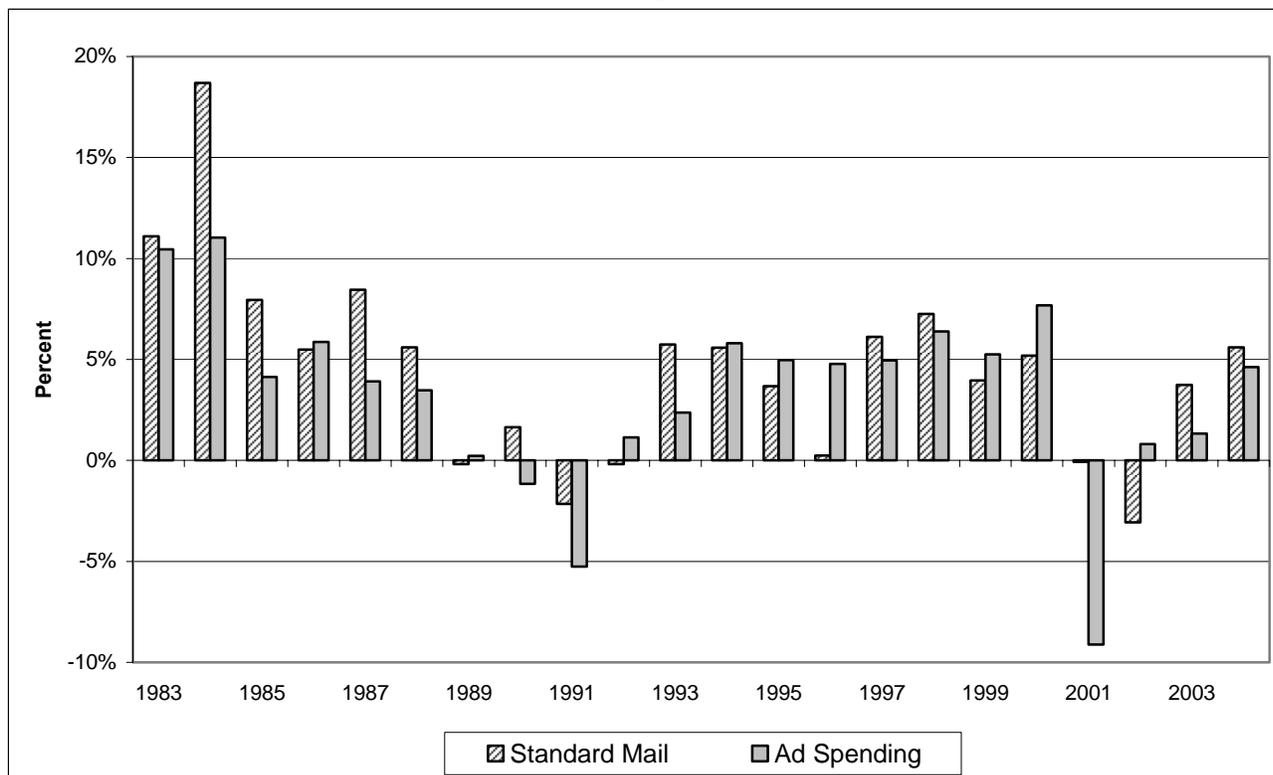
1 economic recovery of 2003 and strong economic growth in 2004 coincide with solid  
2 increases in total advertising spending and similarly solid increases in Standard Mail  
3 volumes, as seen in Figure 13.

4 This recent experience of Standard Mail volumes is illuminating, particularly in  
5 comparison to the experience of First-Class Mail and Periodicals discussed in previous  
6 chapters. Like most postal products, Standard Mail volume declined in 2002, no doubt  
7 because of the combined impacts of two postal rate increases, a recession, and any  
8 additional negative effects resulting from 9/11 and the subsequent sending of anthrax  
9 through the mail. But in 2003 and 2004, Standard Mail volumes, unlike the volumes of  
10 First-Class or Periodicals Mail, increased, as would be expected given stable postal  
11 rates and a recovering economy. Thus, the evidence does not support the view that the  
12 decline in Standard Mail volume in 2002 represented any kind of fundamental change to  
13 this product's historical volume trend.

14 In general, then, Standard Mail volumes are related to total advertising spending  
15 which, in turn, is related to growth in GDP. However, the volumes of the individual  
16 subclasses of Standard Mail are more closely tied to specific economic indicators and/or  
17 components of GDP, as detailed in the econometric testimony of Thomas Thress.

18 The link between Standard Mail volumes and advertising spending is clearly shown  
19 in Chart D. Chart D presents annual percentage changes in total Standard Mail volume  
20 and real advertising spending (real spending is used because volume is a "real"  
21 measure). Total advertising spending and Standard Mail volume both showed strong  
22 growth after the 1981-1982 recession (though Standard Mail volume grew during the  
23 recession as well). Growth rates of both these variables slowed in the late 1980s and  
24 declined during the 1990-1991 recession. Total advertising spending and Standard Mail  
25 volume together experienced consistent growth in the 1990s, until the large drops  
26 associated with the 2001 recession and advertising market slump.

**Chart D**  
**Standard Mail Volume and Real Advertising Spending**  
**Annual Percent Changes (1981 – 2004)**

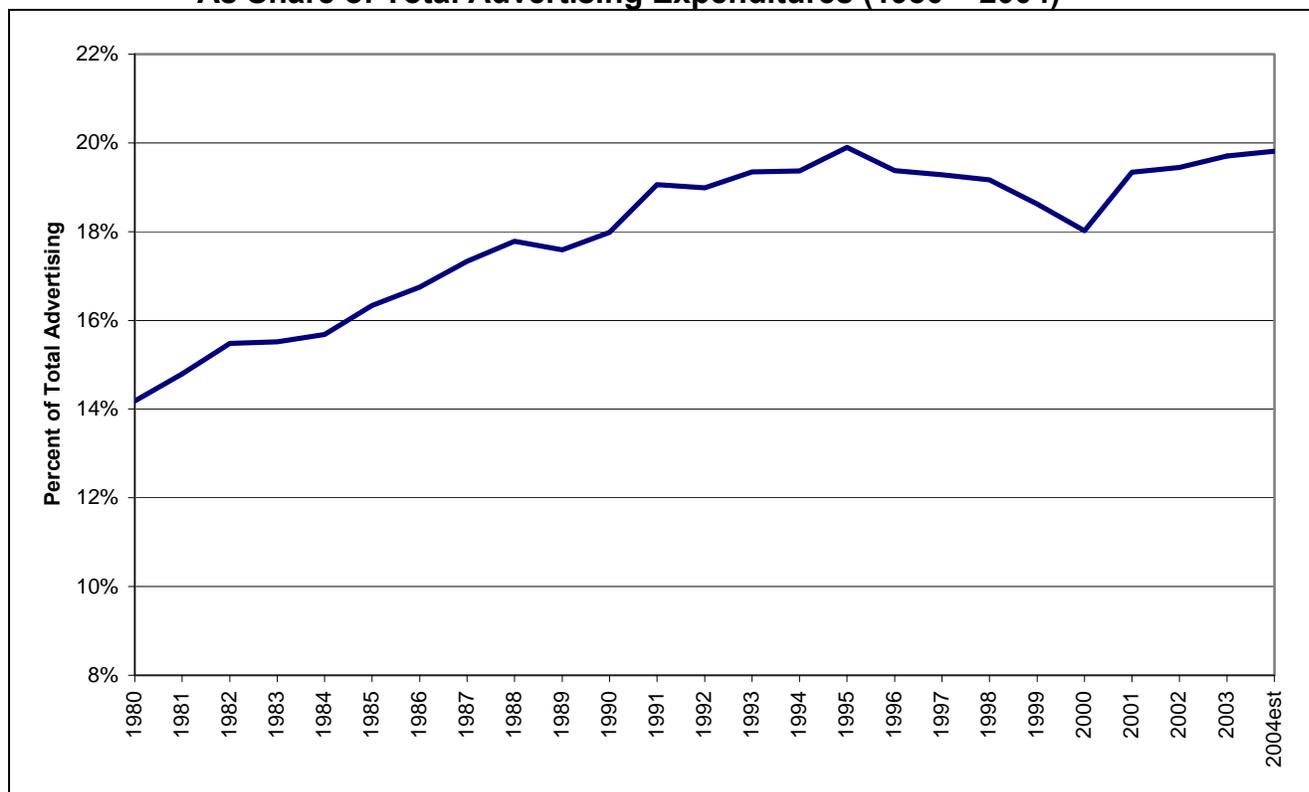


Sources: USPS, Robert Coen – Universal McCann

1 **c. Strengths of Standard Mail**

2 While Standard Mail volumes are tied to overall advertising spending, closer  
 3 analysis reveals that direct mail advertising, which is largely Standard Mail, has been  
 4 gaining relative to other forms of advertising. Chart E shows direct mail advertising  
 5 spending as a share of total advertising spending from 1980 through 2004, again relying  
 6 on data compiled by Robert Coen.

**Chart E**  
**Direct Mail Advertising Expenditures**  
**As Share of Total Advertising Expenditures (1980 – 2004)**



Source: Robert Coen – Universal McCann

1            Since 1980, the direct mail share of total advertising spending has increased  
2 from about 14 percent to close to 20 percent. The increase in direct mail’s share of total  
3 advertising mirrors the declines in the newspaper and magazine advertising shares  
4 presented in the Periodicals chapter of this testimony. To cite one specific example,  
5 The Associated Press recently reported that direct mail is “generating a windfall for the  
6 industry’s biggest company (ADVO)” and, according to the AP, ADVO attributes part of  
7 their growth to the decline in newspaper readership, which is causing retailers to switch  
8 to direct mail. [Associated Press, “Advo Seeks Greater Growth” (September 27, 2004)]  
9            Much of the growth in the direct mail advertising share occurred during the 1980s,  
10 a period during which Standard Mail volumes also grew strongly. The decline in the

1 direct mail share from 1995 to 2000 is mainly attributable to the explosive growth in  
2 Internet advertising during this time period. Internet advertising increased from virtually  
3 nil to more than three percent of total advertising spending in 2000, and at least some of  
4 this spending on Internet advertising came at the expense of direct mail advertising.  
5 However, the collapse of the Internet advertising market in 2001 and 2002 appears to  
6 have returned direct mail to its upward climb as a share of total advertising spending.

7       The long-term growth of direct mail advertising, both in absolute terms and relative  
8 to other forms of advertising, is attributable to some specific strengths of direct mail.  
9 Among the advantages of direct mail are the following: 1) the ability to target messages  
10 to a specific locality; 2) the ability to target messages to specific customers; 3) low fixed  
11 costs which allow smaller companies to engage in direct mail campaigns; 4) the ability  
12 of messages to be recipient-specific; and 5) greater ability to measure advertising  
13 effectiveness.

14       The fact that direct mail can be targeted to specific ZIP codes gives it advantages  
15 over other forms of advertising. ZIP Codes often contain a fairly homogenous  
16 household demographic (in terms of household income, for example). Therefore,  
17 advertising that might appeal to higher income households can be sent to high-income  
18 ZIP codes, whereas advertising that appeals to households with more moderate  
19 incomes can be sent to other ZIP codes. Television and radio advertising, in contrast,  
20 tend to be delivered to a more diverse audience, thereby reducing the effectiveness of  
21 these advertising media. Targeting by location can be especially appealing for local  
22 businesses that can send a mailing to every household within a specified area, thereby  
23 concentrating advertising resources into their most effective use. One organization that  
24 offers this type of service is Altavision Geographics ([www.altageo.net](http://www.altageo.net)), which offers  
25 sophisticated customer mapping software. The software allows an advertiser to see

1 where customers are located, offers a response analysis that tells where the customers  
2 are who purchase products, a market share analysis that shows how well an advertiser  
3 is reaching customers in specific neighborhoods, and direct mail targeting that gives a  
4 map (and zip codes or carrier routes) of customers having different characteristics.

5 Beyond being able to target specific locations, direct mail advertising can be  
6 targeted to specific customers. For example, a bank can advertise various extra  
7 services to its current account holders, and a store can send advertising to its recent  
8 customers. This kind of targeting is facilitated by vast improvements in database  
9 marketing technology which provide advertisers with a wealth of information about  
10 individuals including their past shopping activities, along with various demographic data.  
11 Over time, technological improvements have lowered the cost of collecting and  
12 processing this information, increasing the cost-effectiveness of direct mail advertising.

13 A third advantage of direct mail advertising is that in comparison with many other  
14 advertising media, it exhibits low fixed costs which make it accessible to almost any  
15 business. A television ad campaign is a major undertaking beyond the scope of most  
16 companies. Advertising in major magazines can also be prohibitively costly. But an  
17 effective direct mail advertising campaign can be created for a few thousand dollars or  
18 less.

19 A fourth advantage of direct mail advertising is that the advertising messages can  
20 be tailored to a specific recipient. For example, a credit card company can offer a  
21 different interest rate or other credit terms to different customers, based on their  
22 individual credit histories. A store can offer a discount to some of its customers, but not  
23 others, by sending coupons through the mail to selected households. In contrast, a  
24 newspaper advertisement would tend to include the same offer to all customers.

25 A fifth advantage of direct mail advertising is that its effectiveness can be more  
26 accurately measured than many other forms of advertising. The marketer's maxim – "I

1 know half my advertising budget is wasted, I just don't know which half" – reflects the  
2 difficulty of determining the return on advertising investment. How many more cars did  
3 this television ad sell? How many new customers were acquired from that magazine  
4 ad? But direct mail advertising effectiveness can be measured because marketers  
5 know who received advertising and who did not, and can track customer purchases  
6 following a direct mail campaign. Perhaps the simplest example is the number of  
7 people who redeem a coupon sent through the mail.

#### 8 **d. The Internet**

9 The relation between the Internet and Standard Mail is evolving. Initially, Internet  
10 advertising acted primarily as a substitute or replacement for direct mail. For example,  
11 as shown in Chart E above, direct mail's share of total advertising spending declined  
12 from 1995 to 2000, during the period in which Internet advertising increased to more  
13 than three percent of total advertising. During this period, marketers poured money  
14 into Internet advertising, and some of this spending came at the expense of direct mail  
15 and other forms of advertising.

16 Internet advertising fell sharply following the dot.com crash of 2001. According to  
17 the Interactive Advertising Bureau (IAB), online advertising spending declined from  
18 about \$8 billion in 2000 to \$6 billion in 2002. Since 2002, however, the industry has  
19 rebounded and the IAB estimates that in 2004, online ad spending will reach \$9.6  
20 billion. [Interactive Advertising Bureau press release, February 22, 2005]

21 This recent increase in online ad spending does not appear to be having the same  
22 impact on the mail as it did in the 1990s. One reason is because the Internet has  
23 developed into a complement to as well as a substitute for direct mail. Marilyn Much of  
24 Investor's Business Daily says, "Mail-order and online channels work in tandem. The  
25 catalog stimulates demand and drives traffic to the Web site, while the Web site is an  
26 alternate, more convenient way for consumers to order." [M. Much, "Mail Order

1 Survives, Thrives,” Investor’s Business Daily (February 18, 2005)] As another example,  
2 the owner of one company analyzed the relationship between the Internet and catalogs.  
3 She had watched Internet sales increase and catalog response rates decrease. But  
4 when the ordering process was studied in detail, it was found that approximately 60  
5 percent of online orders came from addresses that received catalogs. Also, those who  
6 had received catalogs made larger orders than those who had not. [T. Powers, “Don’t  
7 Throw Away Your Paper Catalog Just Yet!,” Direct Marketing Association Web Site  
8 (February 4, 2004)]

9 Another observation is that one result of the increase in the online population is  
10 that the Internet is, in many ways, a less targeted advertising channel than it was in the  
11 past. Five years ago, knowing that Jane Doe used the Internet would tell a marketer  
12 that she was likely to have a fairly high level of education and income. Today, with a  
13 solid majority of Americans online, the Internet population is naturally more similar to the  
14 U.S. population as a whole. As a result, marketers can not simply rely on the Internet to  
15 channel their advertising messages to a well-defined target audience.

16 Nonetheless, it must be recognized that the Internet is a fairly new advertising  
17 medium, only about a decade old. Advertisers are still learning how to make online and  
18 e-mail advertising more effective. As such, it is certainly possible that sometime in the  
19 not too distant future, Internet advertising will develop into a more direct alternative to  
20 Standard Mail. For the time being, however, it appears that the current rebound in  
21 Internet advertising will have modest and mixed impacts on Standard Mail.

22 **e. Do-Not-Call and Can-Spam**

23 Recent restrictions on telemarketing activity have probably helped increase  
24 Standard Mail volumes. “Do Not Call” legislation [Telephone Consumer Protection Act]  
25 allows consumers to request that they not be subject to unsolicited telephone  
26 marketing, within certain proscribed guidelines (e.g., companies that have a business

1 relationship with the consumer can continue to market by telephone). According to the  
2 U.S. Federal Trade Commission, over 50 million Americans had already registered for  
3 “Do Not Call” when the legislation took effect on October 1, 2003. The number of  
4 registrants increased to 64 million in October 2004 and reached more than 85 million in  
5 February 2005.

6 According to a survey conducted by the Direct Marketing Association, the  
7 percent of companies that used telemarketing to contact potential customers declined  
8 from 34 percent before the “Do Not Call” legislation took effect to 27 percent after the  
9 law was enacted. Meanwhile, the share of companies using direct mail to seek new  
10 customers rose from 68 percent to 76 percent. [R. Romell, “Do-Not-Call Lists Work in  
11 Favor for Milwaukee-based Direct Mail Firms,” Knight Ridder Tribune Business News  
12 (December 4, 2004)]

13 Can-Spam legislation [Controlling the Assault of Non-Solicited Pornography and  
14 Marketing Act of 2003] took effect January 1, 2004, and imposed restrictions on the  
15 sending of unsolicited e-mail advertising messages, known as “spam.” It seems  
16 reasonable that this law also has had some positive impact on Standard Mail volumes.  
17 Laws also exist that limit or prohibit telemarketing to cell phone numbers and the  
18 sending of unsolicited fax advertising.

19 The most likely effect of these legislative acts has been to increase Standard  
20 Mail volumes over the most recent year. As such, the positive impacts are included in  
21 the Base Year volumes of the various Standard Mail subclasses, and their impacts are  
22 therefore included in the Test Year volume forecasts.

## 23 **6. Outline of Remainder of the Chapter**

24 Section B of this chapter discusses Standard Regular Mail. The volume history of  
25 Standard Regular Mail is reviewed and factors explaining volume trends are discussed.  
26 The contribution of different factors to the change in the volume of Standard Regular

1 Mail over the past four years is presented, drawing on the econometric analysis  
2 presented in the testimony of Thomas Thress (USPS-T-7). Finally, before- and after-  
3 rates Test Year forecasts of Standard Regular Mail are presented, relying on  
4 information contained in Attachment A of Mr. Thress's testimony.

5 Section C applies the same outline to ECR Mail. Section D discusses Nonprofit  
6 Mail, and Section E discusses Nonprofit ECR Mail.

## 7 **B. Standard Regular Mail**

### 8 **1. Definition**

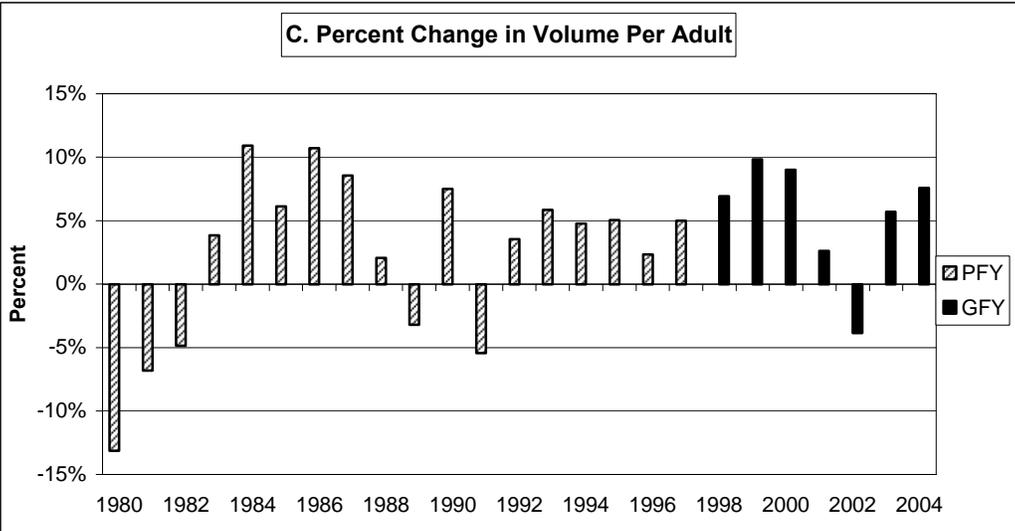
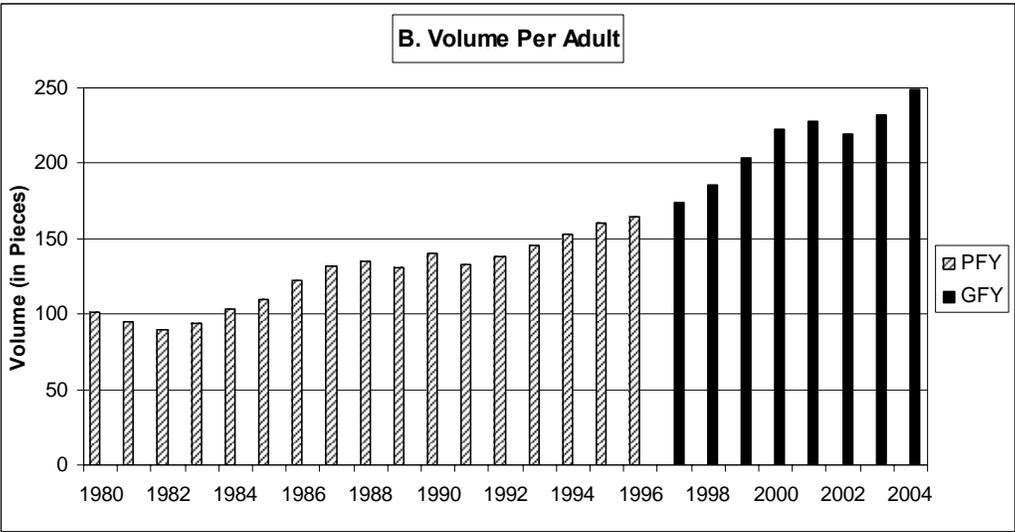
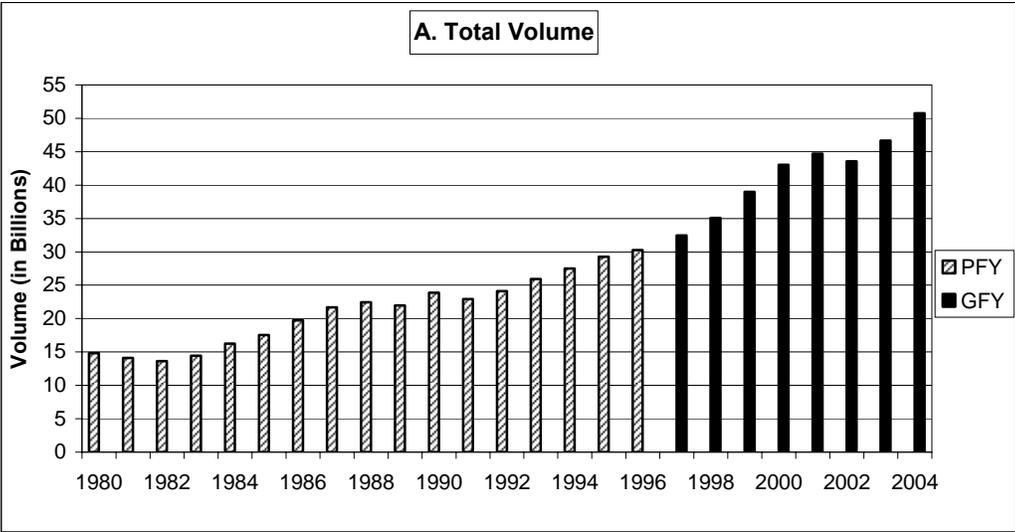
9 The Standard Regular subclass was created as part of the MC95-1 classification  
10 reform. Standard Regular Mail contains what was previously known as Noncarrier-route  
11 Third-Class Bulk Regular Mail. To qualify for the Standard Regular subclass, mailings  
12 must contain at least 200 pieces (or 50 pounds) presorted at least to the 3-digit ZIP  
13 Code. Each piece must weigh less than one pound.

14 Within Standard Regular Mail, there is a distinction between letter and nonletter mail,  
15 where nonletters consist of flats, parcels, and irregularly shaped pieces. There are six letter  
16 categories of Regular Mail: basic nonautomated, 3/5-digit nonautomated, and four  
17 automated letter categories: mixed AADC, AADC, 3-digit and 5-digit. The four nonletter  
18 categories are basic nonautomated, presort nonautomated, 3-digit automation, and 5-digit  
19 automation. To qualify for the automation discounts, mail must be automation compatible  
20 and 100 percent delivery point barcoded.

### 21 **2. Volume History**

22 Figure 14 shows the Standard Regular Mail volume history from 1980 through  
23 2004. During this time period, Standard Regular volume increased from 14.8 billion  
24 pieces to 50.8 billion pieces. Section B of Figure 14 shows that volume per adult has  
25 increased from 101.6 pieces in 1980 to 249.4 pieces in 2004, an average annual growth  
26 rate of just less than four percent.

**Figure 14**  
**Standard Regular Mail Volume History**



1           Section C of Figure 14 shows annual percent changes in Standard Regular  
2 volume per adult. Volume per adult fell in the early 1980s, but then grew solidly for  
3 most of the rest of that decade. Double-digit percentage increases in volume per adult  
4 occurred in 1984 and 1986. After some up and down years, Standard Regular volume  
5 per adult rose for ten straight years from 1992 through 2001, with particularly big  
6 increases occurring in 1999 and 2000. Standard Regular volume per adult fell nearly  
7 four percent in 2002, but in the last two years, volume per adult has increased 5.7  
8 percent and 7.6 percent, respectively.

### 9                           **3. Factors Affecting Volume**

10           As Standard Regular Mail represents more than half of total Standard Mail, the  
11 factors cited above explaining trends in total Standard Mail volume apply to Standard  
12 Regular volumes as well. Thus, increases in total advertising spending and – usually –  
13 coincident increases in economic activity would lead to increases in Regular Mail  
14 volumes.

15           One distinguishing feature of Regular Mail is that it tends to be more narrowly  
16 targeted than ECR Mail. The density requirements for the Regular subclass are lower  
17 than for the ECR subclass, indicating that advertising mailers are sending advertising to  
18 only certain households within a given ZIP Code. Another observation that supports  
19 this argument is that, for most mailings, Standard Regular postage is greater than ECR  
20 postage, so advertising mailers are apparently trading off this higher cost against the  
21 expectation of a higher return. A higher return follows from a higher response rate to  
22 Standard Regular advertising mail, consistent with the view that this mail is more likely  
23 to be sent to specific targeted households.

24           Therefore, the technological advancements that have improved the effectiveness  
25 of direct mail targeting can be expected to more strongly affect Regular Mail than ECR

1 Mail. These increased benefits are apparent in the rising Regular Mail volumes that  
2 have been seen over the past two decades.

3 The more targeted nature of Regular Mail also makes it a more unique  
4 advertising product than ECR Mail, or for that matter, other forms of advertising which  
5 are less targeted. As such, Regular Mail volumes would be expected to be less  
6 affected by competitive pressures than ECR Mail volumes since there are fewer close  
7 substitutes for this advertising product. It is not surprising, then, that the econometric  
8 evidence shows that Regular Mail has a lower own-price elasticity than ECR Mail, or  
9 that it is econometrically unaffected by developments affecting other forms of  
10 advertising such as newspaper advertising or the Internet.

#### 11 4. Recent Contributions to Volume

12 Table 32 shows that over the four-year period ending in 2005Q1, Standard  
13 Regular Mail volume increased 18.07 percent. Table 32 also presents the contribution  
14 of each factor to this four-year volume change, based on the econometric analysis of  
15 Thomas Thress.

| <b>Table 32</b>  |                               |                         |                                    |
|--|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Standard Regular Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable   | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price  | 10.2%                         | -0.267                  | -2.56%                             |
| Workshared Letter Price  | -0.1%                         | 0.075                   | -0.01%                             |
| First-Class Cards  | -19.0%                        | -0.009                  | 0.18%                              |
| Retail Sales   | 5.6%                          | 0.104                   | 0.57%                              |
| Investment - lag 1   | -1.0%                         | 0.228                   | -0.24%                             |
| Econometric Trend  | -                             | -                       | 13.67%                             |
| Adult Population   | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors  | -                             | -                       | 0.82%                              |
| Total Change in Volume   | -                             | -                       | 18.07%                             |

1                   **a.     Own-Price**

2           The long-run own-price elasticity of Standard Regular mail is estimated at -0.267,  
3 meaning that a one percent increase in real price is estimated to cause a 0.267 percent  
4 decrease in mail volume. Table 32 shows that the real price of Standard Regular mail  
5 increased 10.2 percent over the past four years. Applying the estimated elasticity to the  
6 price increase yields a 2.56 percent decrease in volume.

7                   **b.     Workshared Letters Price**

8           Advertising mailings can be sent either as First-Class or Standard Regular Mail.  
9 Substitution between these two categories is captured with a variable measuring the  
10 average discount of Standard Regular Mail compared with First-Class workshared letter  
11 mail, i.e., how much cheaper it is to send a typical advertising piece as Standard Mail  
12 versus First-Class workshared mail. As this price difference increases, Standard Mail  
13 becomes even less expensive than First-Class workshared mail, and it would be  
14 expected that some advertising mail sent as First-Class workshared mail would shift into  
15 Standard Regular Mail.

16           The elasticity of Standard Regular Mail volume with respect to this price  
17 difference is estimated to be 0.075. However, over the past four years, the real price  
18 difference between First-Class workshared and Standard Regular mail declined only 0.1  
19 percent. Therefore, a small, 0.01 percent decline in Standard Regular Mail volume is  
20 attributed to this factor.

21                   **c.     First-Class Cards**

22           A variable measuring the percentage of Standard Regular letter mail that would  
23 be cheaper to send as First-Class cards is used to model the shift of advertising volume  
24 between these two subclasses. Table 32 shows that over the past four years, this  
25 variable declined 19.0 percent. In other words, over the past four years, there was a  
26 decline in the percentage of Standard Regular Mail volume that could be sent more

1 cheaply as First-Class cards. Applying the estimated elasticity of -0.009 to this 19.0  
2 percent decline gives the result that, over the past four years, Standard Regular Mail  
3 volume increased 0.18 percent due to this variable.

#### 4 **d. Retail Sales**

5 Since direct mail is sent to encourage households to make purchases,  
6 advertisers often base their mailing decisions on levels of retail sales. Therefore, real  
7 retail sales per adult are included in the econometric analysis of Standard Regular  
8 volumes. The estimated elasticity of Standard Regular volume with respect to retail  
9 sales is 0.104. Therefore, the 5.6 percent increase in real retail sales per adult over the  
10 past four years is estimated to have contributed a 0.57 percent increase in the volume  
11 of Standard Regular Mail.

#### 12 **e. Investment Spending**

13 Advertising can be seen as a form of investment, since advertisers are  
14 expending resources now in the hope of generating increases in revenues in the future.  
15 Therefore, real investment spending per adult is included in the econometric analysis of  
16 Standard Regular Mail volumes. The estimated elasticity of Standard Regular mail  
17 volume with respect to real investment spending per adult is 0.228. Table 32 shows  
18 that over the past four years, real investment spending per adult declined 1.0 percent.  
19 Therefore, this variable is estimated to have reduced Standard Regular Mail volume by  
20 0.24 percent over the past four years.

#### 21 **f. Econometric Trend**

22 As discussed earlier in this chapter, direct mail advertising has grown in  
23 importance over the past two decades, due to its various advantages over other forms  
24 of advertising. This growth in direct mail advertising has naturally led to an increase in  
25 the use of Standard Regular Mail. The impact on Standard Regular Mail volume is  
26 measured econometrically by a trend term. Table 32 shows that over the past four

1 years, this trend term explains a 13.67 percent increase in Standard Regular Mail  
2 volume.

3 **g. Adult Population**

4 The rate of growth of the adult population is estimated to have contributed a 5.21  
5 percent increase in the volume of Standard Regular Mail.

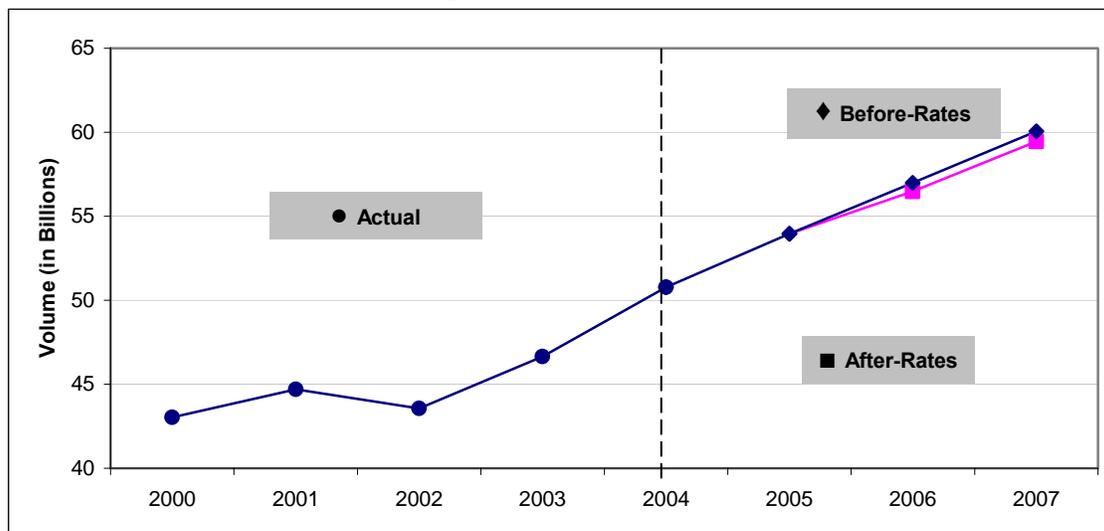
6 **h. Other Factors**

7 Other factors beyond those described above were responsible for a 0.82 percent  
8 increase in the volume of Standard Regular Mail over the past four years. These other  
9 factors include the impact of differences in the seasonal pattern of the most recent year  
10 and the year occurring four years ago, as well as other recent influences (e.g., the  
11 impact of telemarketing restrictions) captured in the Base Year volume of Standard  
12 Regular Mail.

13 **5. Before- and After-Rates Volume Forecasts**

14 The before-rates and after-rates forecasts of Standard Regular Mail are  
15 presented in Figure 14A, along with the recent volume history. The forecasts are  
16 obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). Volumes  
17 are projected to continue their pattern of growth, reflecting both the long-term positive  
18 influences discussed earlier in this section, and the positive impact of improvements in  
19 the overall economy and the advertising market. The before-rates Test Year (GFY  
20 2006) forecast of Standard Regular Mail is 56,985.773 million pieces. The Test Year  
21 after-rates forecast is 56,478.638 million pieces.

**Figure 14A  
Standard Regular Mail Volume Forecasts**



**C. Standard Enhanced Carrier Route Mail**

**1. Definition**

The Standard Enhanced Carrier Route subclass was created as part of the MC95-1 classification reform. To qualify for the Standard Enhanced Carrier Route subclass, mailings must contain at least 200 pieces (or 50 pounds), and each piece must be part of a group of ten or more pieces to one carrier route. Each piece must weigh less than one pound.

Within Standard ECR Mail, there is also a distinction between letter and nonletter mail where nonletters consist of flats, parcels, and irregularly shaped pieces. There are four letter and three nonletter categories of ECR Mail. The four ECR letter categories are basic, high density, saturation, and automation basic. The three nonletter categories are: basic, high density, and saturation. Automation letters must be automation compatible and 100 percent delivery point barcoded.

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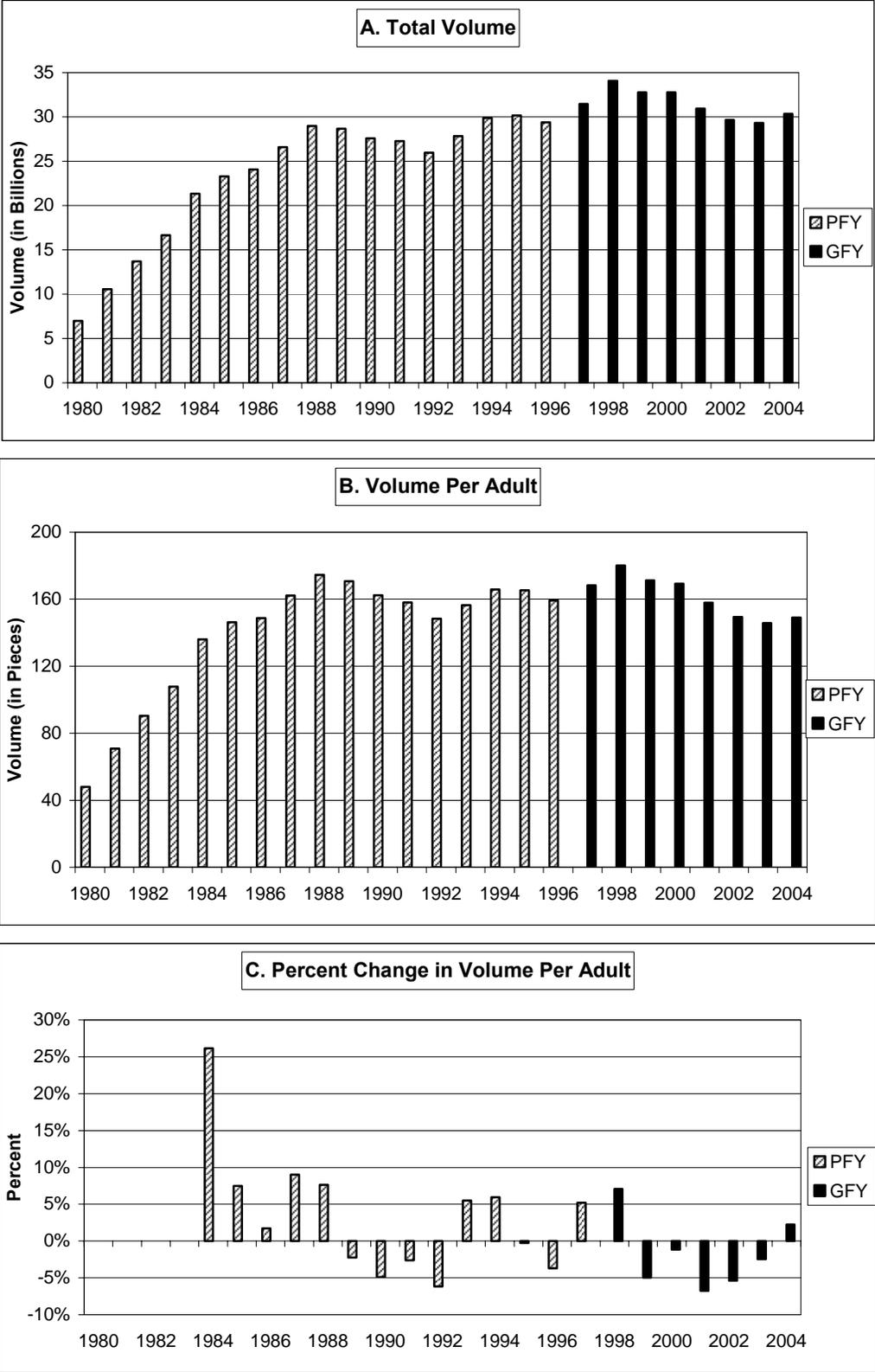
## 2. Volume History

Figure 15 shows the total volume of Standard ECR Mail beginning in 1980, the first full year after the carrier-route presort discount was introduced, through 2004. ECR Mail volume increased rapidly in its early years of existence, rising from 7.0 billion pieces in 1980 to 29.0 billion pieces in 1988. Since then, however, volume has been relatively flat, with 2004 volume of 30.3 billion pieces being only about five percent more than volume in 1988. Looking at the intervening years, ECR mail volume peaked in 1998, and has since declined, though it did increase in 2004.

Section B of Figure 15 shows ECR volume per adult. Volume per adult increased from 47.9 pieces in 1980 to 174.6 pieces in 1988. Since 1988, volume per adult has moved up and down, reaching a peak of 180.2 pieces in 1998. By 2004, ECR volume per adult had fallen to 149.1 pieces.

Section C of Figure 15 shows annual percent changes in volume per adult. The data begin in 1984 because the large annual increases in volume per adult in the early 1980s create a distorted look at the history of this volume measure. Section C also shows that ECR volume per adult has undergone substantial increases and decreases in its history. Volume per adult increased solidly for several years before declining from 1989 through 1992. Volume per adult then grew solidly in 1993 and 1994, declined in 1995 and 1996, and grew solidly again in 1997 and 1998. Beginning in 1999, ECR volume per adult declined for five straight years before rising again in 2004.

**Figure 15**  
**Standard ECR Mail Volume History**



1                   **3.     Factors Affecting Volume**

2                   ECR Mail tends to be less finely targeted than Regular Mail. For example, an  
3 advertiser who sends a mailing to every household within a given ZIP Code would most  
4 likely be sending an ECR mailing. Therefore, ECR Mail has not benefited from the  
5 increased effectiveness of direct mail targeting and, in fact, it has likely been harmed.  
6 Mailers can more easily offset the cost disadvantage of Regular Mail versus ECR Mail  
7 by limiting their mailings to a specific subset of households. This process would result  
8 in some ECR volume shifting into Regular volume due to the resulting decline in mailing  
9 density.

10                  Because ECR mailings can be saturation mailings, they are more likely to  
11 compete with other forms of “blanket” advertising that reaches a wide swath of the  
12 consumer market. Newspaper advertising, for example, would tend to be fairly un-  
13 targeted, as the same advertisements are typically included in the newspapers of all  
14 subscribers.

15                  The history of ECR volumes, therefore, can be best explained as being a two-  
16 part story. Initially, ECR Mail was a low cost alternative to Regular Mail and to other  
17 forms of advertising. Moreover, technological advancements lowered the cost of  
18 preparing ECR Mail and satisfying the subclass's greater density requirements. During  
19 this period, ECR Mail volumes grew considerably, overtaking Standard Regular as the  
20 largest subclass of Standard Mail.

21                  Eventually, improvements in database marketing information enabled marketers  
22 to increase the effectiveness of their targeting, making high-density ECR mailings less  
23 attractive. During this period, ECR volumes declined.

24  
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26

**4. Recent Contributions to Volume**

Table 33 shows that over the four-year period ending in 2005Q1, the volume of Standard ECR Mail decreased 4.87 percent. Table 33 also presents the contributions of individual factors to this four-year volume change, based on the econometric analysis of Thomas Thress.

| <b>Table 33</b>  |                               |                         |                                    |
|--|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Standard ECR Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable   | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price  | 3.1%                          | -1.093                  | -3.32%                             |
| Retail Sales   | 5.6%                          | 0.454                   | 2.51%                              |
| Investment –lag 2  | -2.5%                         | 0.233                   | -0.58%                             |
| Price of Direct Mail<br>Advertising –lag 4   | -6.4%                         | -0.483                  | 3.25%                              |
| Price of Newspaper<br>Advertising  | 10.3%                         | 1.353                   | 14.25%                             |
| Internet Advertising<br>Share  | 0.4%                          | -0.689                  | -0.26%                             |
| Econometric Trend  | -                             | -                       | -15.34%                            |
| R2000-1 Dummy  | -                             | -                       | -8.59%                             |
| Adult Population   | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors  | -                             | -                       | 0.80%                              |
| Total Change in Volume   | -                             | -                       | -4.87%                             |

**a. Own-Price**

The volume of ECR Mail is sensitive to postage price. A one percent increase in the real own-price is estimated to elicit a 1.093 percent decrease in mail volume. Table 33 shows that real own-price increased 3.1 percent over the past four years, leading to a 3.32 percent decrease in volume after applying the estimated own price elasticity.

1                   **b.     Retail Sales**

2           Retail sales expenditures also influence the volume of ECR Mail. It is estimated  
3 that the elasticity of ECR Mail volume with respect to real retail sales per adult is 0.454.  
4 Therefore, the 5.6 percent increase in real retail sales is estimated to have contributed a  
5 2.51 percent increase in the volume of Standard ECR Mail over the past four years.

6                   **c.     Investment**

7           The elasticity of Standard ECR Mail volume with respect to real private  
8 investment per adult, lagged two quarters, is estimated to be 0.233. Real private  
9 investment per adult, lagged two quarters, decreased 2.5% over the four-year period  
10 ending in 2005Q1. Applying the elasticity to this percentage decrease indicates that  
11 Standard ECR volume decreased 0.58% over this period due to this variable.

12                   **d.     Price of Direct Mail Advertising**

13           The estimated elasticity of ECR Mail volume with respect to the real price of  
14 direct-mail advertising is -0.483. Table 33 shows that the price of direct-mail advertising  
15 has decreased by 6.4 percent over the past four years. Therefore, this decline in the  
16 cost of direct mail advertising is estimated to have caused Standard ECR Mail volume  
17 to increase 3.25 percent over the past four years.

18                   **e.     Price of Newspaper Advertising**

19           Newspaper advertising is a possible alternative to sending Standard ECR Mail.  
20 The estimated elasticity of ECR Mail volume with respect to the cost per thousand of  
21 newspaper advertising is 1.353. Table 33 shows that the price of newspaper  
22 advertising, as reported by the Bureau of Labor Statistics, increased 10.3 percent in real  
23 terms over the past four years. This percentage increase, combined with the estimated  
24 elasticity, gives the result that ECR Mail volume increased 14.25 percent over the past  
25 four years due to increases in the real price of newspaper advertising.

26

**f. Internet Advertising Share**

Internet advertising is another possible alternative to sending Standard ECR Mail. The estimated elasticity of ECR volume with respect to the Internet's share of total advertising spending is -0.689. However, as Table 33 shows, over the four-year period ending in 2005Q1, there was not much net change in the Internet's share of total advertising. Therefore, this variable is estimated to have reduced ECR Mail volume by only 0.26 percent over this time period

**g. Econometric Trend**

As seen in Figure 14, and as discussed earlier in this section, ECR Mail volume has been declining relative to Regular Mail volume as advertisers are increasingly relying on the more targeted mail. These influences are accounted for by a time trend in the econometric analysis. Table 33 shows that over the past four years, this time trend explains a 15.34 percent decline in ECR Mail volume.

**h. R2000-1 Dummy**

The unexpected decline in Standard ECR volume following the R2000-1 rate case is explained econometrically by a dummy variable. Table 33 shows that an 8.59 percent decline in volume is attributed to this variable.

**i. Adult Population**

Increases in adult population explain a 5.21 percent increase in Standard ECR Mail volume over the past four years.

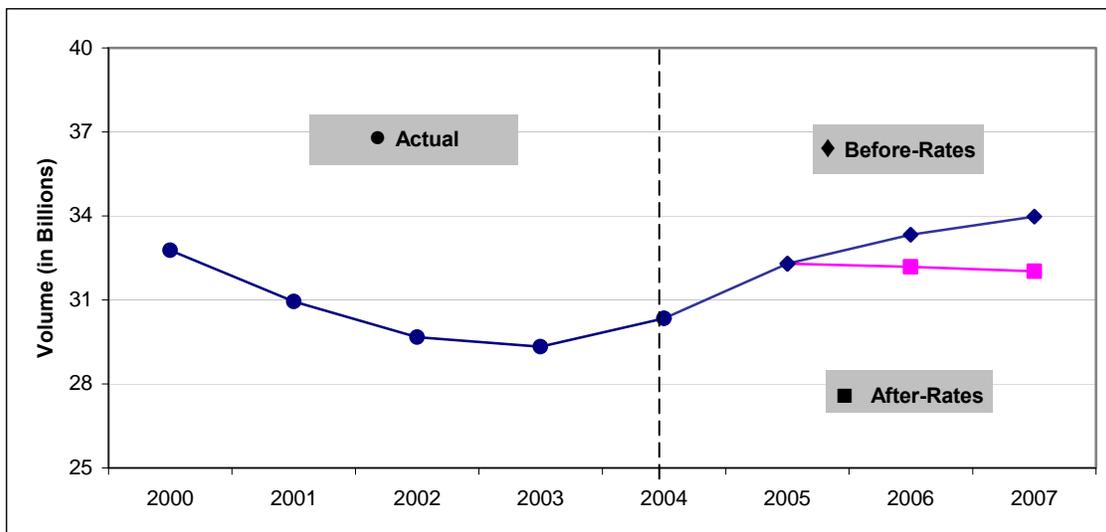
**j. Other Factors**

Other factors beyond those described above were responsible for a 0.80 percent increase in the volume of Standard ECR Mail over the past four years. These other factors include the impact of differences in the seasonal pattern as well as other recent influences (e.g., the impact of telemarketing restrictions) captured in the Base Year volume of Standard ECR Mail.

1                   **5.     Before- and After-Rates Volume Forecasts**

2                   The before-rates and after-rates forecasts of Standard ECR Mail are presented in  
3                   Figure 15A, along with the recent volume history. The forecasts are obtained from  
4                   Attachment A of the testimony of Thomas Thress (USPS-T-7). In the before-rates  
5                   forecast, volume is projected to continue its recent pattern of growth. In the after-rates  
6                   forecast, volume is projected to remain flat from 2005 through 2007. The before-rates  
7                   Test Year (GFY 2006) forecast of Standard ECR Mail is 33,328.906 million pieces. The  
8                   Test Year after-rates forecast is 32,187.100 million pieces.

**Figure 15A**  
**Standard ECR Mail Volume Forecasts**



## **D. Standard Nonprofit Mail**

### **1. Definition**

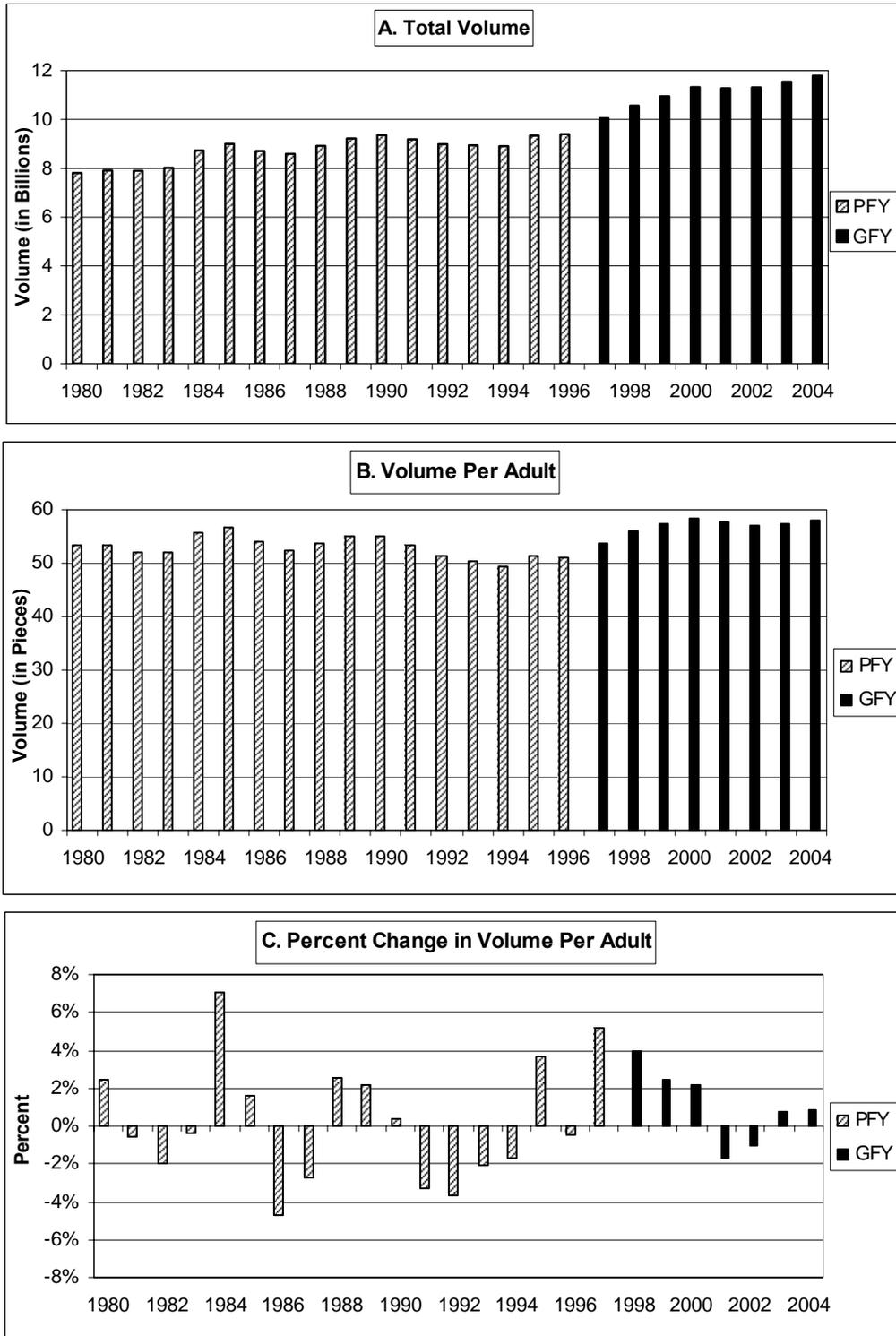
Standard Nonprofit Mail is sent at reduced rates by authorized charitable organizations, educational institutions, and professional associations. This category of mail is also used for alumni mailings, membership-drive activities and for nonprofit organization newsletters and magazines that have too much advertising to qualify for Periodicals Nonprofit rates or find Standard Nonprofit rates more favorable. Standard Nonprofit Mail has the same rate categories as Standard Regular Mail.

### **2. Volume History**

Figure 16 shows the volume history of Standard Nonprofit Mail from 1980 through 2004. During this time period, volume increased from 7.8 billion pieces to 11.8 billion pieces. Volume grew modestly through 1994, when it reached 8.9 billion pieces. Over the past decade, Standard Nonprofit volume has increased at a much faster pace, as shown in Figure 16.

Section B of Figure 16 shows that Standard Nonprofit volume per adult has remained at just above 50 pieces per year for most of its volume history. Volume per adult in 2004 was 57.9 pieces, just above the 1980 value of 53.5 pieces. Looking at annual percent changes in volume per adult shows the variable nature of Standard Nonprofit Mail volume. Since 1980, volume per adult has increased in thirteen years and it has decreased in twelve years.

**Figure 16**  
**Standard Nonprofit Mail Volume History**



1                   **3. Factors Affecting Volume**

2                   Unlike Standard Regular and ECR Mail, postal rates have had a long-term  
3 impact on Standard Nonprofit Mail volumes. Partially as a deliberate intent of the Postal  
4 Reorganization Act, rates for Standard Nonprofit Mail have increased in real terms since  
5 enactment of that legislation. From 1980 to 1990, the real postage cost of Standard  
6 Nonprofit Mail increased by about 50 percent. It is not surprising that during this time  
7 period, Standard Nonprofit Mail volume per adult declined, as seen in Figure 16. Over  
8 the past decade, real postage rates have remained constant, and it is during this period  
9 that Nonprofit Mail volumes increased.

10                  Beyond the impacts of postal rates, Standard Nonprofit volumes have been  
11 helped by the same technological advancements that have contributed to the volume of  
12 the commercial Standard subclasses. Improvements in targeting, for example, have  
13 made nonprofit mailings more effective. A study by Vertis, a provider of targeted  
14 advertising services, found that direct mail was the most effective media for solicitation  
15 by charities. The study also found that 73 percent of Generation Y adults (born 1977-  
16 94) and 63 percent of Generation X adults (born 1965-76) responded to direct mail  
17 offerings from charity, fundraising and nonprofit groups. [Vertis, "Nonprofit Direct Mail  
18 Readership is on the Rise" (January 25, 2005)].

19                  Nonprofit mailings are also closely tied to the political election cycle. Nonprofit  
20 groups aligned with various political causes send large quantities of mail during the  
21 spring primary election cycle and the November general election cycle.

22                  Cutting against Standard Nonprofit volumes is the increase in online solicitation.  
23 The Alliance of Nonprofit Mailers reports that following the South Asian Tsunami, there  
24 was a huge increase in online charitable donations. [Alliance of Nonprofit Mailers'

1 (January 26, 2005)] The use of the Internet for political solicitations was evident during  
2 the 2004 primary and general election campaigns.

3 **4. Recent Contributions to Volume**

4 Table 34 shows that over the four-year period ending in 2005Q1, the volume of  
5 Standard Nonprofit Mail increased 4.38 percent. Table 34 also presents the  
6 contributions of individual factors to this four-year volume change, based on the  
7 econometric analysis of Thomas Thress. Note that for purposes of econometric  
8 estimation, the volumes of Nonprofit and Nonprofit ECR Mail are combined. Therefore,  
9 the estimated elasticities shown in Table 34 for Nonprofit Mail are identical to those that  
10 will be shown in Table 35 for Nonprofit ECR Mail.

| <b>Table 34</b>  |                               |                         |                                    |
|--|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Standard Nonprofit Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable   | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price  | 4.7%                          | -0.319                  | -1.47%                             |
| Retail Sales   | 5.6%                          | 0.430                   | 2.37%                              |
| 2000 Election Year   | -                             | -                       | -2.38%                             |
| Adult Population   | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors  | -                             | -                       | 0.76%                              |
| Total Change in Volume   | -                             | -                       | 4.38%                              |

11 **a. Own-Price**

12 Over the past four years, the real price of Standard Nonprofit Mail increased 4.7  
13 percent. Applying the estimated own-price elasticity of -0.319 gives the result that, over  
14 the past four years, Standard Nonprofit Mail volume decreased 1.47 percent due to this  
15 increase in its real postage price.

1                           **b.     Retail Sales**

2                   Since Standard Nonprofit Mail is sent to solicit charitable contributions, it stands  
3 to reason that its volume would be tied to the state of the economy. Econometrically,  
4 the impact of the economy on Standard Nonprofit Mail volume is measured by real retail  
5 sales per adult. Table 34 shows that the estimated elasticity of volume with respect to  
6 this variable is 0.430. Therefore, the 5.6 percent increase in real retail sales per adult  
7 over the past four years is estimated to have contributed 2.37 percent to the volume of  
8 Standard Nonprofit Mail.

**c.     2000 Election Year**

9                   The econometric equation for Standard Nonprofit Mail includes several variables  
10 measuring the impacts of presidential and congressional election campaigns. However,  
11 with one exception, these variables do not affect volume over the past four year period  
12 because the most recent year and the year occurring four years earlier were both  
13 presidential election years. Therefore, the econometrically estimated impacts are the  
14 same in the most recent year and the year beginning four years earlier, and no net  
15 contribution was made over this time period.

16                  The one exception to this rule is shown in Table 34. The econometric analysis  
17 indicates that the 2000 election campaign had an unusually strong effect on Standard  
18 Nonprofit Mail volume. Since this impact was part of the volume occurring four years  
19 ago, but not part of the volume in the past year, the variable has a negative impact on  
20 volume over the four year period of 2.38 percent.

21                  Note, however, that the different election variables will affect the forecast of  
22 Standard Nonprofit Mail because the Test Year occurs during a different phase of the  
23 election cycle than the Base Year.

24

1                                   **d.     Adult Population**

2                   Increases in adult population explain a 5.21 percent increase in Standard  
3 Nonprofit Mail volume over the past four years.

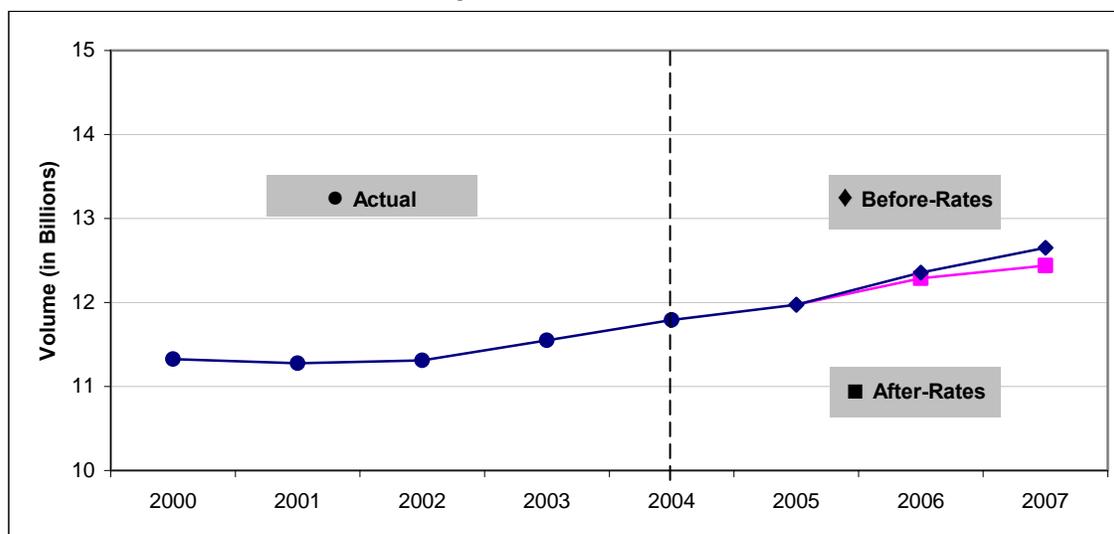
4                                   **e.     Other Factors**

5                   Other factors beyond those described above were responsible for a 0.76 percent  
6 increase in the volume of Standard Nonprofit Mail over the past four years. These other  
7 factors include the impact of differences in the seasonal pattern of the most recent year  
8 and the year occurring four years ago, as well as other recent influences captured in the  
9 Base Year volume of Standard Nonprofit Mail.

10                                   **5.     Before- and After-Rates Volume Forecasts**

11                   The before-rates and after-rates forecasts of Standard Nonprofit Mail are  
12 presented in Figure 16A, along with the recent volume history. The forecasts are  
13 obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is  
14 projected to continue to grow, though the rate of growth will be somewhat mitigated by  
15 the absence of a presidential election in the forecast period shown. The before-rates  
16 Test Year (GFY 2006) forecast of Standard Nonprofit Mail is 12,355.554 million pieces.  
17 The Test Year after-rates forecast is 12,289.469 million pieces.

**Figure 16A**  
**Standard Nonprofit Mail Volume Forecasts**



**E. Standard Nonprofit ECR Mail**

**1. Definition**

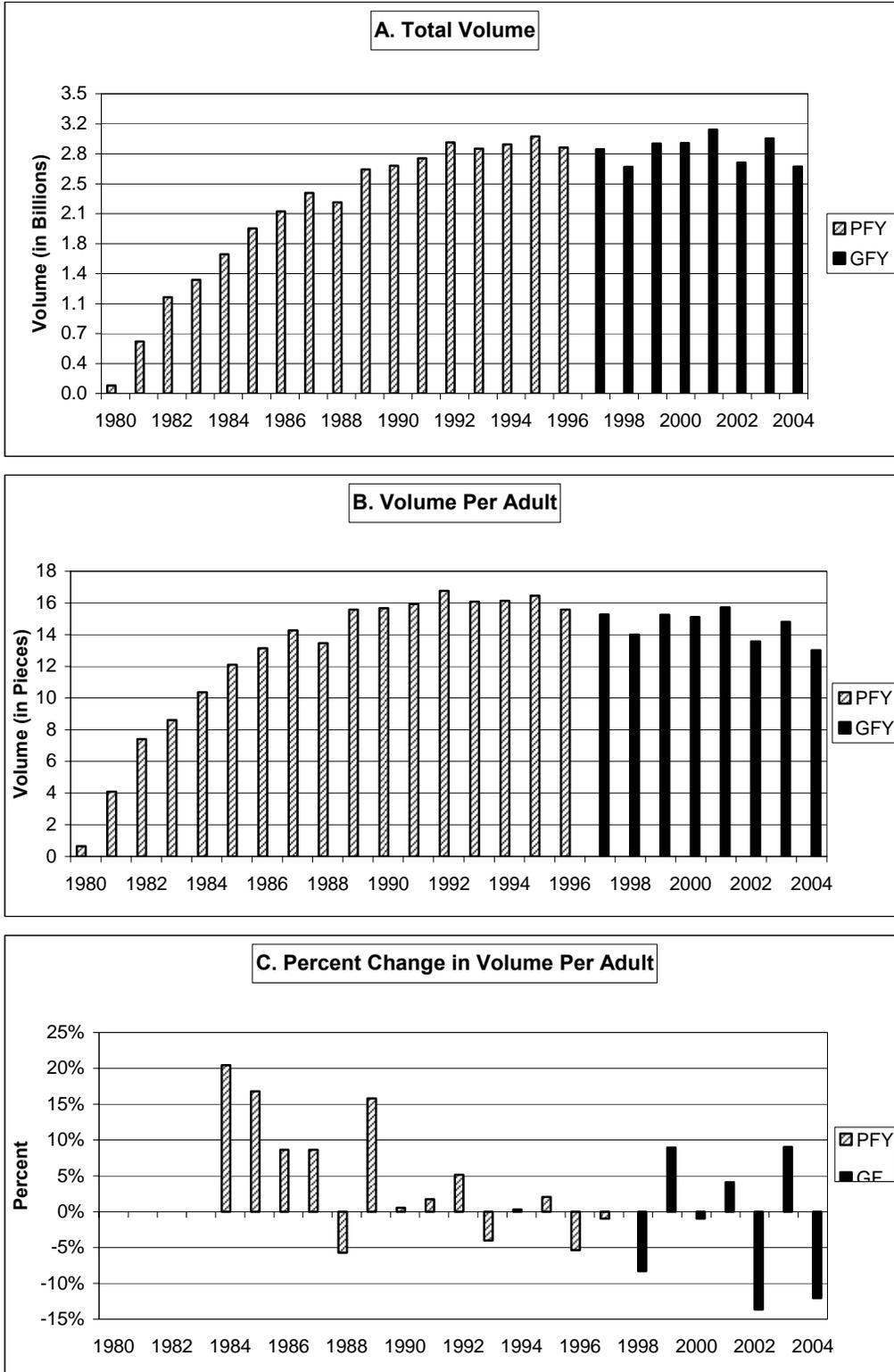
Standard Nonprofit ECR Mail has the same general characteristics as mail sent in the Nonprofit subclass, except that ECR mail must satisfy higher density requirements. The categories of Nonprofit ECR Mail are the same as for the Standard ECR Mail, described earlier in this chapter.

**2. Volume History**

Figure 17 shows the volume history of Standard Nonprofit ECR mail, which was known as Nonprofit Carrier-route Mail prior to classification reform. Following the introduction of the carrier-route discount for Nonprofit Mail in 1980, volume grew rapidly, rising to 3.0 billion pieces in 1995. Volume fell to 2.6 billion pieces in 1998 but recovered to reach 3.1 billion pieces in 2001. Since then, volume has declined to 2.7 billion pieces in 2004, about the same as it was fifteen years earlier.

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**Figure 17**  
**Standard Nonprofit ECR Mail Volume History**



1 Section B of Figure 17 shows that volume per adult reached its peak of almost 17  
2 pieces in 1992. In 2004, volume per adult was about 13 pieces. Section C of Figure 17  
3 shows annual percent changes in volume per adult. The data begin in 1984 because  
4 the large annual increases in volume per adult in the early 1980s create a distorted look  
5 at the history of this volume measure. Through 1987, volume per adult continued to  
6 show solid annual increases. Since that time, the history has been mixed, with volume  
7 per adult increasing in nine years and decreasing in eight others. The last three years  
8 have been particularly volatile, with volume per adult falling, rising, and then falling  
9 again by fairly large percentage amounts.

### 10 **3. Factors Affecting Volume**

11 Standard Nonprofit ECR postage rates have increased over time, though most of  
12 the increase has occurred recently, corresponding to a time when mail volumes have  
13 declined. The link between the election cycle and mail volumes, discussed in the  
14 Standard Nonprofit Mail section, is likely to apply to Nonprofit ECR Mail as well.

15 Like Standard ECR Mail volume, Standard Nonprofit ECR Mail volume has also  
16 probably been reduced by the increase in targeting, as it would cause some mailings to  
17 shift into the Standard Nonprofit subclass. In fact, the volume history for Nonprofit ECR  
18 Mail is quite similar to the volume history of Regular ECR Mail, with volumes growing  
19 following the introduction of the ECR subclass, and then declining as improvements in  
20 targeting made high density ECR mailings less cost effective.

### 21 **4. Recent Contributions to Volume**

22 Table 35 shows that over the four-year period ending in 2005Q1, the volume of  
23 Standard Nonprofit ECR Mail decreased 6.17 percent. Table 35 also presents the  
24 contributions of individual factors to this four-year volume change, based on the  
25 econometric analysis of Thomas Thress. Note that for purposes of econometric

1 estimation, the volumes of Nonprofit and Nonprofit ECR Mail are combined. Therefore,  
2 the estimated elasticities shown in Table 35 for Nonprofit ECR Mail are identical to  
3 those that were shown earlier in Table 34 for Nonprofit Mail.

4

| <b>Table 35</b>  |                               |                         |                                    |
|--|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Standard Nonprofit ECR Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable   | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price  | 18.8%                         | -0.319                  | -5.36%                             |
| Retail Sales   | 5.6%                          | 0.430                   | 2.37%                              |
| 2000 Election Year   |                               |                         | -2.38%                             |
| Adult Population   | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors  |                               |                         | -5.70%                             |
| Total Change in Volume   |                               |                         | -6.17%                             |

5

6

**a. Own-Price**

7 Over the past four years, the real price of Standard Nonprofit ECR Mail increased  
8 18.8 percent. Applying the estimated own-price elasticity of -0.319 gives the result that  
9 volume declined 5.36 percent over the past four years due to this increase in price.

10

**b. Retail Sales**

11 Table 35 shows that over the past four years, real retail sales per adult increased  
12 5.6 percent, which combined with an estimated elasticity of 0.430, gives the result that  
13 the volume of Nonprofit ECR volume increased 2.37 percent due to this factor.

14

**c. 2000 Election Year**

15 As explained in the discussion of Nonprofit Mail volumes, the econometric  
16 equation includes several variables measuring the impacts of presidential and

1 congressional election campaigns. However, with one exception, these variables do not  
2 affect volume over the past four year period because the most recent year, and the year  
3 occurring four years earlier were both presidential election years. The one exception to  
4 this rule is shown in Table 35. The econometric analysis indicates that the 2000  
5 election campaign had an unusually strong effect on Nonprofit Mail volume. Since this  
6 impact was part of the volume occurring four years ago, but not part of the volume in the  
7 past year, the variable has a negative impact on volume over the four year period of  
8 2.38 percent.

9 Note, however, that the different election variables will affect the forecast of  
10 Nonprofit ECR Mail because the Test Year occurs during a different phase of the  
11 election cycle than the Base Year.

#### 12 **d. Adult Population**

13 Increases in adult population explain a 5.21 percent increase in Nonprofit ECR  
14 Mail volume over the past four years.

#### 15 **e. Other Factors**

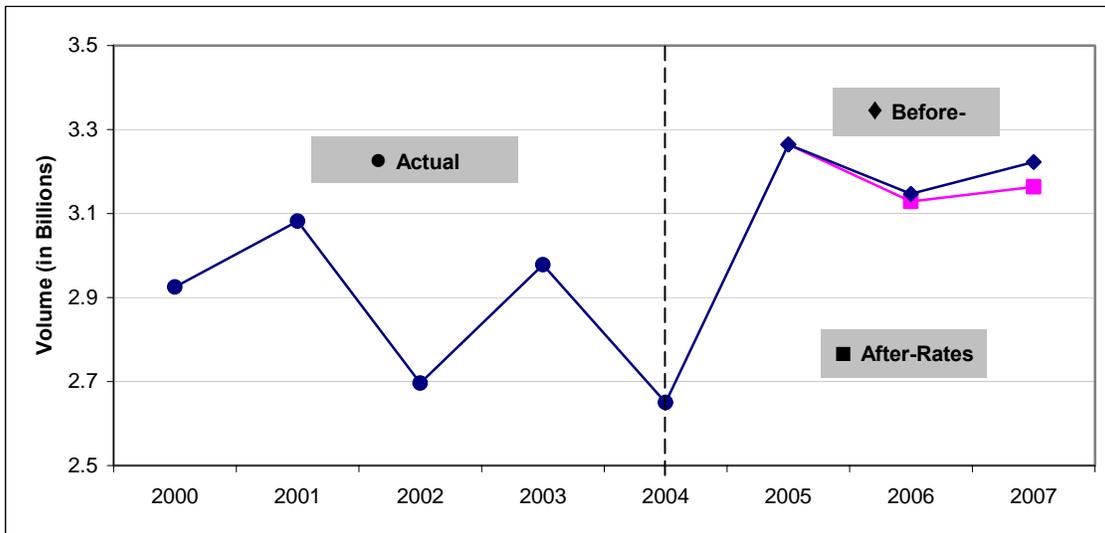
16 Other factors beyond those described above were responsible for a 5.70 percent  
17 increase in the volume of Standard Nonprofit Mail over the past four years. These other  
18 factors include the impact of differences in the seasonal pattern of the most recent year  
19 and the year occurring four years ago, as well as other recent influences captured in the  
20 Base Year volume of Standard Nonprofit Mail.

### 21 **5. Before- and After-Rates Volume Forecasts**

22 The before-rates and after-rates forecasts of Standard Nonprofit ECR Mail are  
23 presented in Figure 17A, along with the recent volume history. The forecasts are  
24 obtained from Attachment A of the testimony of Thomas Thress. Volume is projected to  
25 continue its erratic pattern, but will be greater in the Test Year (GFY 2006) than in 2004.

- 1 The before-rates Test Year (GFY 2006) forecast of Standard Nonprofit ECR Mail
- 2 volume is 3,147.175 million pieces. The after-rates forecast is 3,128.857 million pieces.

**Figure 17A**  
**Standard Nonprofit ECR Mail Volume Forecasts**



1 **VI. PACKAGE SERVICES MAIL**

2 **A. Overview**

3 **1. General Characteristics**

4 Package Services Mail is a less expensive alternative for sending mail pieces  
5 weighing less than 70 pounds are not accepted under Periodicals restrictions. In  
6 general, Package Services Mail tends to contain tangible objects (e.g., merchandise,  
7 household items) rather than correspondence. Package Services can also be used as  
8 a less expensive means of sending educational, cultural, and recreational material such  
9 as books, manuscripts, films, and records without regard to minimum weight  
10 restrictions. Package Services Mail is subject to deferred service, with no guaranteed  
11 delivery schedule. Return and forwarding are made at an additional charge only upon  
12 request of the sender or addressee.

13 **2. Subclasses and Categories**

14 There are four subclasses in Packages Services: Parcel Post, Bound Printed  
15 Matter, Media Mail, and Library Rate Mail. Rates for Parcel Post and Bound Printed  
16 Matter are determined by weight and distance to destination, measured by specific  
17 zones. Rates for Media Mail and Library Rate Mail are determined by weight only,  
18 without regard to distance.

19 Parcel Post rates are based on eight distance zones with charges varying by the  
20 pound from one pound or less to the 70-pound weight limit. In 1981, an intra-BMC  
21 discount per piece became effective for parcels sent and delivered within the same Bulk  
22 Mailing Center (BMC) service area. Also in 1981, a surcharge per piece was placed on  
23 parcels sent and delivered outside the same BMC service area, if the parcels are non-  
24 machinable and must be handled manually because of excessive size, weight density,  
25 fragility or packaging. A destination BMC rate structure was introduced in 1991 for bulk

1 mail, and in 1999 discounts were also introduced for bulk mail entered at the destination  
2 SCF and DU. In this testimony Parcel Post is divided into two categories: destination  
3 entry and non-destination entry.

4 Bound Printed Matter weighs between one and fifteen pounds. Content may  
5 consist of advertising, promotional, directory, or editorial material. Prior to 1999, this  
6 subclass had a maximum weight of ten pounds.

7 Media Mail consists largely of books, printed matter, and sound recordings.  
8 Rates are based on the weight of each addressed piece without regard to zone. Media  
9 Mail can be entered as single-piece or in one of two bulk presort categories. Presort  
10 level A is for parcels sorted to the 5-digit level. Presort level B is for parcels sorted to  
11 the BMC Library Rate is considered a preferred subclass. Historically, its rates have  
12 been slightly lower than for Media Mail.

### 13 3. Composition of Package Services Mail

14 In Postal Year 2004, the four subclasses of Package Services Mail had a  
15 combined volume of 1,131.9 million pieces. Bound Printed Matter is the largest  
16 subclass by volume (553.7 million pieces), followed by Parcel Post (375.6 million  
17 pieces), Media Mail (186.2 million pieces), and Library Rate (16.4 million pieces) in  
18 2004. Table 36 presents the subclass shares of Package Services Mail for selected  
19 years beginning in 1980.

20 Table 36 reveals two interesting developments over the years. First, the  
21 combined volume share of the two zoned subclasses (Parcel Post and Bound Printed  
22 Matter) has increased from about 50 percent of total Package Services Mail in 1980 to  
23 more than 80 percent in 2004. Second, while the Parcel Post subclass share in 2004  
24 was almost identical to its share in 1980, in the intervening years, Parcel Post volume  
25 share fell considerably and then rebounded.

| <b>Table 36</b>                                       |                    |                             |                   |                          |
|---|--------------------|-----------------------------|-------------------|--------------------------|
| <b>Subclass Shares of Total Package Services Mail</b> |                    |                             |                   |                          |
| <b>Year</b>   | <b>Parcel Post</b> | <b>Bound Printed Matter</b> | <b>Media Mail</b> | <b>Library Rate Mail</b> |
| 1980 – PFY  | 32.9%              | 18.3%                       | 39.3%             | 9.5%                     |
| 1985 – PFY  | 26.4%              | 36.8%                       | 28.8%             | 8.0%                     |
| 1990 – PFY  | 19.4%              | 51.9%                       | 22.5%             | 6.2%                     |
| 1995 – PFY  | 26.8%              | 48.0%                       | 22.2%             | 3.1%                     |
| 2000 – GFY  | 28.7%              | 49.6%                       | 19.1%             | 2.5%                     |
| 2004 – GFY  | 33.1%              | 49.0%                       | 16.5%             | 1.5%                     |

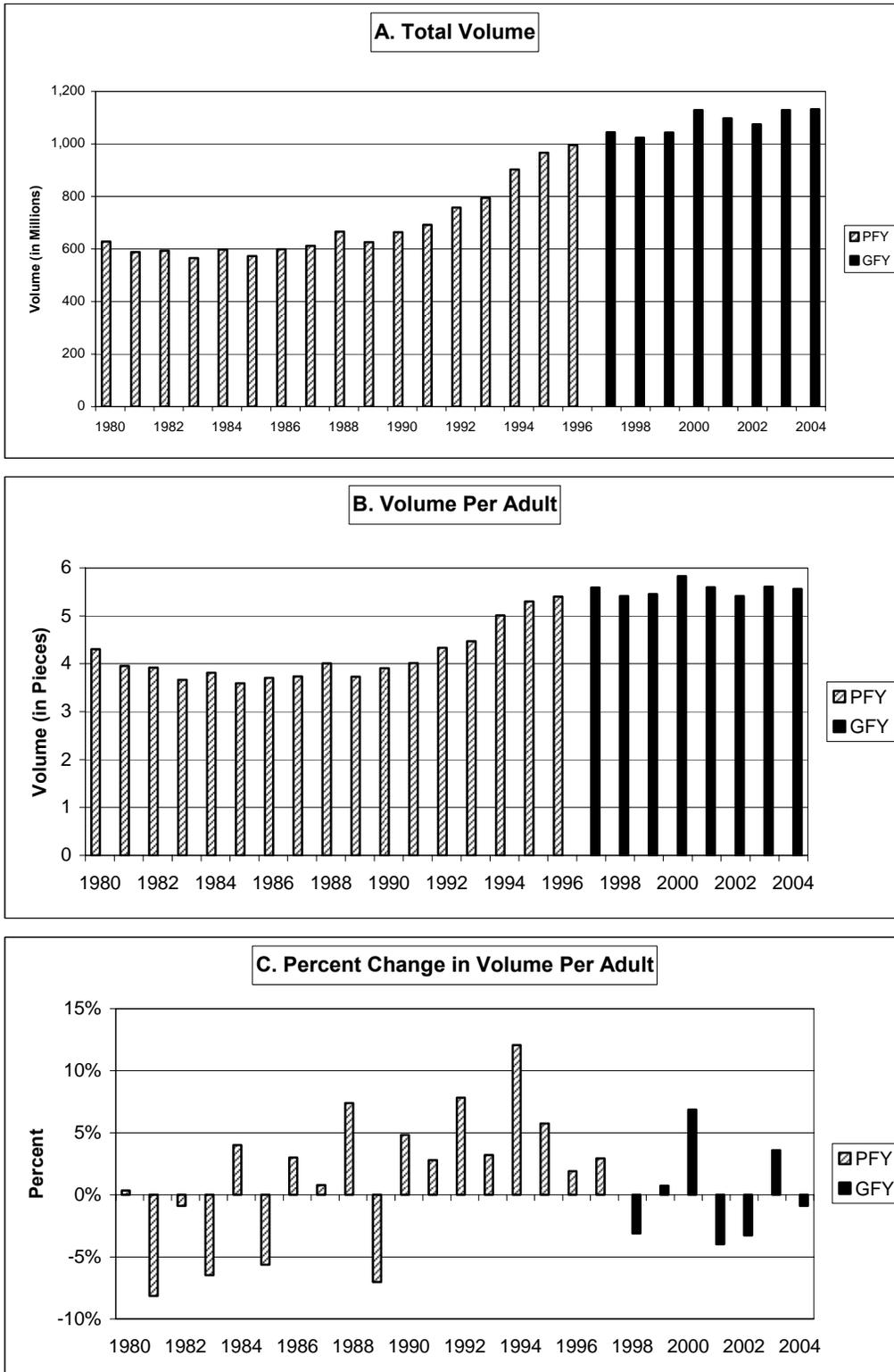
**4. Volume History**

Figure 18 shows total Package Services volume from 1980 through 2004. Throughout the 1980s, total volume remained close to 0.6 billion pieces. Beginning in 1990, volume began to grow, exceeding 1.1 billion pieces in 2000. Volume has remained close to that level since that time.

The impact of population growth is visible in Section B of Figure 18. During the period in which total Package Services volume remained essentially constant, volume per adult declined due to the increase in adult population. Similarly, after rising throughout most of the 1990s, volume per adult has declined since reaching 5.8 pieces in 2000.

Section C of Figure 18 shows annual percentage changes in volume per adult. After some fairly large up and down swings in the 1980s, volume per adult increased from 1990 through 1997. Volume per adult has declined, however, in four of the last seven years.

**Figure 18**  
**Total Package Services Volume History**



1                   **5. Factors Affecting Volume**

2                   Table 36, which presented the Package Services volume shares since 1980,  
3 shows that the four subclasses have behaved quite differently over the years.  
4 Therefore, it is not particularly instructive to examine volume trends in Package  
5 Services as a whole. Instead, factors affecting the volumes of each individual subclass  
6 will be examined.

7                   **6. Outline of Remainder of Chapter**

8                   Section B of this chapter examines Parcel Post. The section begins with a  
9 review of the Parcel Post volume history. Within this discussion, Parcel Post volumes  
10 are divided into non-destination entry and destination entry Parcel Post. For both of  
11 these categories, recent volumes are examined and factors affecting volumes are  
12 discussed. The contribution of individual factors to the four-year change in volumes is  
13 presented, based on the econometric analysis of Thomas Thress. Finally, before- and  
14 after-rates volume forecasts are presented for the two Parcel Post categories, taken  
15 from Attachment A of the testimony of Thomas Thress.

16                  Section C discusses Bound Printed Matter. Section D discussed Media Mail and  
17 Section E discusses Library Rate Mail.

18                  **B. Parcel Post Mail**

19                   **1. Definition**

20                  Parcel Post Mail is Package Services Mail that is not eligible for lower rates  
21 under one of the other three Package Services Mail subclasses. Packages weighing  
22 between one and 70 pounds and not exceeding 130 inches in length plus girth are  
23 currently accepted for Parcel Post.

24  
25

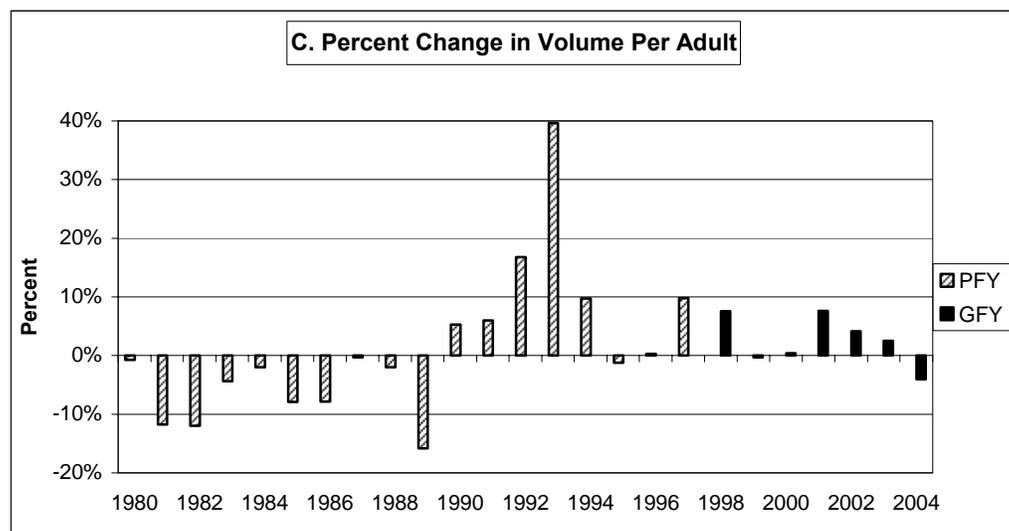
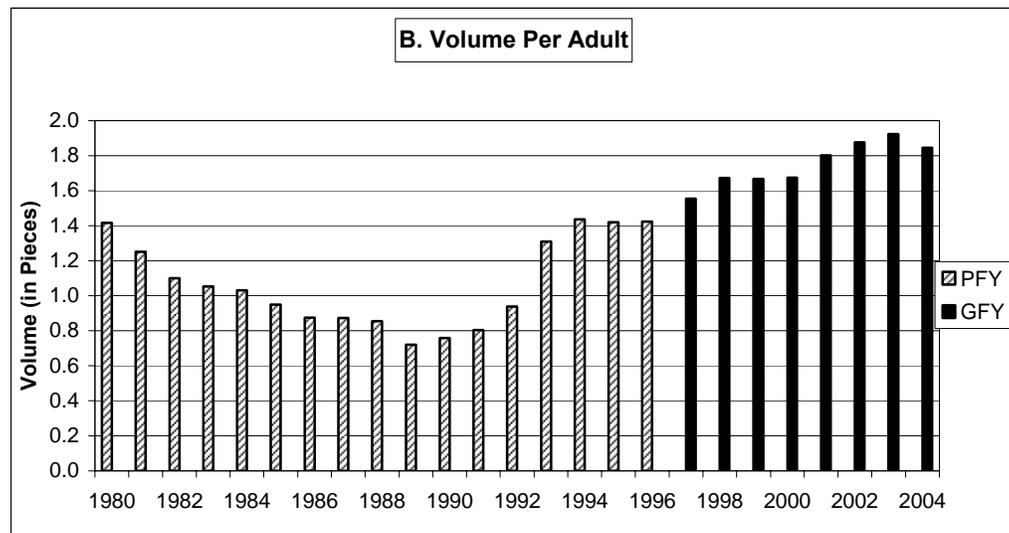
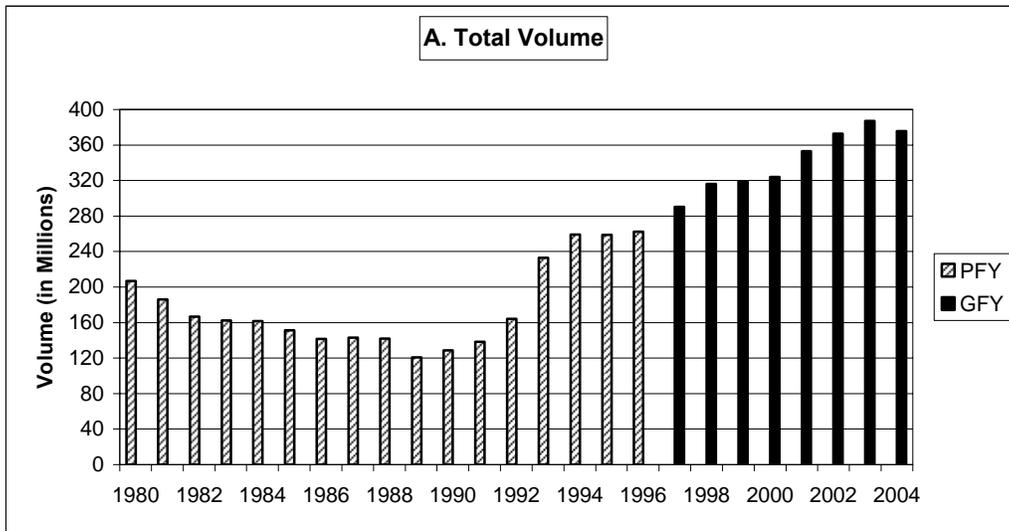
1                   **2.     Volume History**

2                   **a.     Total Parcel Post Volume**

3                   The history of total Parcel Post volume from 1980 through 2004 is shown in  
4 Figure 19. Parcel Post volume declined from about 207 million pieces in 1980 to 121  
5 million pieces in 1989, a decline of more than 40 percent. [Volume had been declining  
6 for years prior to 1980, as well.] During the 1990s, Parcel Post volume experienced a  
7 recovery, rising to 259 million pieces by 1994. After remaining flat for a few years,  
8 volume resumed its increase until reaching 386.9 million pieces in 2003. Volume  
9 declined to 375.6 million pieces in 2004, but the 2004 volume total was still three times  
10 the volume level in 1989.

11                  Volume per adult declined throughout the 1980s, with some years showing  
12 double-digit percentage declines. The 40 percent jump in volume per adult in 1993 is  
13 mainly attributable to rapid growth in destination entry Parcel Post, to be discussed  
14 presently. Since 1993, on a year-by-year basis, volume per adult has usually risen or  
15 remained the same, though it did decline four percent in 2004.

**Figure 19**  
**Parcel Post Volume History**



1                                   **b.     Category Volumes**

2                   Table 37 presents the volumes of destination entry and non-destination entry  
3 Parcel Post from 1990 to 2004. By 1995, destination entry Parcel Post volume was  
4 greater than non-destination entry volume, which was about the same in 1995 as it had  
5 been in 1990. By 2000, three-quarters of total volume was sent as destination entry  
6 Parcel Post. That share has declined somewhat since then, but in 2004, destination  
7 entry accounted for more than 70 percent of total Parcel Post volume.

8

| <b>Table 37</b>                     |                       |            |                   |            |
|-------------------------------------|-----------------------|------------|-------------------|------------|
| <b>Parcel Post Category Volumes</b> |                       |            |                   |            |
| (in millions)                       |                       |            |                   |            |
| Year                                | Non-Destination Entry |            | Destination Entry |            |
|                                     | Volume                | Percentage | Volume            | Percentage |
| 1990 – PFY                          | 128.700               | 100.0%     | 0.000             | 0.0%       |
| 1991 – PFY                          | 133.474               | 96.4%      | 4.983             | 3.6%       |
| 1992 – PFY                          | 141.756               | 86.3%      | 22.447            | 13.7%      |
| 1993 – PFY                          | 131.594               | 56.5%      | 101.252           | 43.5%      |
| 1994 – PFY                          | 139.235               | 53.8%      | 119.737           | 46.2%      |
| 1995 – PFY                          | 125.001               | 48.3%      | 133.844           | 51.7%      |
| 1996 – PFY                          | 103.795               | 39.5%      | 158.699           | 60.5%      |
| 1997 – GFY                          | 107.860               | 37.1%      | 182.618           | 62.9%      |
| 1998 – GFY                          | 106.435               | 33.7%      | 209.713           | 66.3%      |
| 1999 – GFY                          | 96.520                | 30.3%      | 222.463           | 69.7%      |
| 2000 – GFY                          | 79.892                | 24.6%      | 244.274           | 75.4%      |
| 2001 – GFY                          | 97.805                | 27.7%      | 255.341           | 72.3%      |
| 2002 – GFY                          | 108.625               | 29.2%      | 263.966           | 70.8%      |
| 2003 – GFY                          | 105.536               | 27.3%      | 281.408           | 72.7%      |
| 2004 – GFY                          | 109.963               | 29.3%      | 265.655           | 70.7%      |

1                   **3. Factors Affecting Volume**

2                   The recovery of Parcel Post volumes in the 1990s is clearly linked to the  
3 introduction of destination entry discounts in February 1991. Over time, the discounts  
4 for destination entry Parcel Post categories have been increased, further contributing to  
5 volume increases. In addition, over most of this same period, UPS increased its  
6 ground service rates by more than inflation, leading to some shifts in volume toward  
7 Parcel Post. Part of the UPS rate increase was the result of surcharges attached to  
8 residential deliveries, which gave Parcel Post a price advantage for business-to-  
9 household and household-to-household deliveries.

10                  The growth in consolidators, companies that combine shipments from more than  
11 one customer to gain volume discounts, has also contributed to increases in Parcel Post  
12 volume. Consolidators often make use of destination entry Parcel Post, relying on  
13 private truck transportation for long-distance shipments, and using the Postal Service  
14 for the “last mile” of delivery.

15                  Non-destination entry Parcel Post volume declined in the years immediately  
16 following the introduction of destination entry discounts. The declines in non-destination  
17 entry volume in 1999 and 2000 were partly due to the introduction of delivery  
18 confirmation for Priority Mail in March 1999. Electronic delivery confirmation for Priority  
19 Mail was provided at no additional charge. For some packages, Priority Mail with  
20 electronic delivery confirmation was less expensive than Parcel Post with delivery  
21 confirmation. This added feature made Priority Mail a more attractive alternative and  
22 caused some mailers to shift from non-destination entry Parcel Post to Priority Mail.  
23 The increase in non-destination entry Parcel Post in 2001 and 2002 is attributable to the  
24 introduction of a minimum one-pound rate in January 2001.

1 Parcel Post volume has also been affected by some of the same factors affecting  
2 Priority Mail, discussed in Chapter III of this testimony. For example, the entry of  
3 FedEx into ground delivery market has resulted in a more competitive market  
4 environment in the last few years.

5 Another factor affecting destination entry Parcel Post volume was the  
6 introduction of UPS Basic service in 2003. UPS Basic is a low cost, ground service,  
7 without guaranteed delivery times. As such, it has many of the same features as Parcel  
8 Post and has cut into destination entry volumes.

9 **4. Recent Contributions to Non-Destination Entry Volume**

10 Table 38 shows that over the four-year period ending in 2005Q1, the volume of  
11 non-destination entry Parcel Post increased 47.98 percent. Table 38 also presents the  
12 contributions of individual factors to this four-year volume change, based on the  
13 econometric analysis of Thomas Thress.

| <b>Table 38</b>  |                            |                      |                              |
|--|----------------------------|----------------------|------------------------------|
| <b>Contributions to Change in Non-Destination Entry Parcel Post Volume For the Four Years Ending in 2005Q1</b> |                            |                      |                              |
| Variable   | Percent Change in Variable | Estimated Elasticity | Effect of Variable on Volume |
| Own-Price  | 19.6%                      | -0.382               | -6.62%                       |
| UPS Ground Price   | 13.8%                      | 0.443                | 5.89%                        |
| R2000-1 Change   | -                          | -                    | 34.19%                       |
| Adult Population   | 5.2%                       | 1.000                | 5.21%                        |
| Other Factors  | -                          | -                    | 6.00%                        |
| Total Change in Volume   | -                          | -                    | 47.98%                       |

1                   **a.     Own-Price**

2                   The own-price elasticity of non-destination entry Parcel Post volume is estimated  
3 to be -0.382. As shown in Table 15, the real price of non-destination entry Parcel Post  
4 increased 19.6 percent over the past four years. Applying the estimated long-run price  
5 elasticity to this change in real price leads to a volume decline of 6.62 percent.

6                   **b.     UPS Price**

7                   The volume of non-destination entry Parcel Post is also influenced by UPS  
8 Ground prices, an important competitor. The estimated cross-price elasticity of non-  
9 destination entry Parcel Post volume with respect to UPS Ground price is 0.443.  
10 Applying this elasticity to the 13.8 percent real increase in UPS Ground prices over the  
11 past four years leads to a 5.89 percent increase in non-destination entry Parcel Post  
12 volume.

13                   **c.     R2000-1 Change**

14                   In R2000-1, the Postal Service began allowing mailers to use Parcel Post for  
15 mailings weighing less than one pound. This led to an increase in non-destination entry  
16 volume, beyond any impacts that resulted from changes in the R2000-1 rates. Note  
17 the large percentage increase in non-destination entry volume in 2001, as shown in  
18 Table 37. The effect on volume from the introduction of the one-pound rate is  
19 measured by a dummy variable. Table 38 shows that this variable explains a 34.19  
20 percent increase in the volume of non-destination entry Parcel Post.

21                   **d.     Adult Population**

22                   Increases in adult population explain a 5.21 percent increase in non-destination  
23 entry Parcel Post volume over the past four years.

24

25

1 **e. Other Factors**

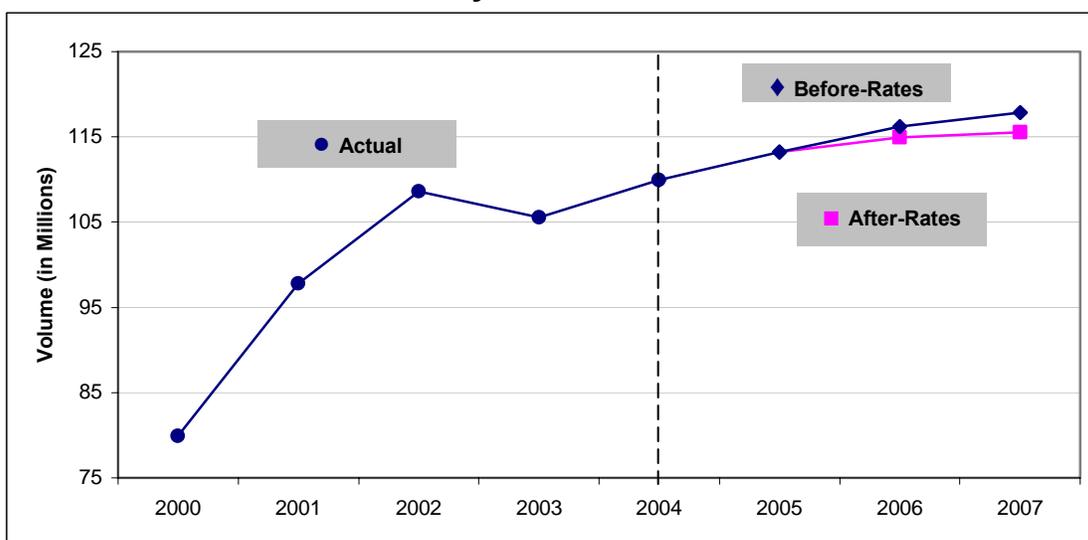
2 Table 38 shows that in addition to the effects of variables considered above,  
3 other factors were responsible for a 6.00 percent increase in the volume of non-  
4 destination entry Parcel Post mail over the past four years. Included in these other  
5 factors are seasonal variations and influences included in the Base Volume of non-  
6 destination entry Parcel Post.

7 **5. Before- and After-Rates Volume Forecasts**

8 Figure 19A presents the before- and after-rates volume forecasts of non-  
9 destination entry Parcel Post volume, along with the recent history of actual volumes.

10 The forecasts are obtained from Attachment A of the testimony of Thomas  
11 Thress (USPS-T-7). Non-destination entry Parcel Post is projected to continue its  
12 recent pattern of modest growth. The before-rates Test Year (GFY 2006) forecast of  
13 non-destination entry Parcel Post is 116.209 million pieces. The Test Year after-rates  
14 forecast is 114.911 million pieces.

**Figure 19A  
Non-Destination Entry Parcel Post Volume Forecasts**



**6. Recent Contributions to Destination Entry Volume**

Table 39 shows that over the four-year period ending in 2005Q1, the volume of destination entry Parcel Post increased 5.38 percent. The table also presents the contributions of individual factors to this four-year volume change, based on the econometric analysis of Thomas Thress (USPS-T-7).

**a. Own-Price**

Destination entry Parcel Post is more price-elastic than non-destination entry Parcel Post, reflecting the greater degree of competition this product faces in the parcel delivery market. The estimated own-price elasticity is -1.351. However, over the past four years, the real price of this product increased just 0.7 percent so that the volume was reduced by only 0.94 percent due to this factor.

| <b>Table 39</b>  |                            |                      |                              |
|--|----------------------------|----------------------|------------------------------|
| <b>Contributions to Change in Destination Entry Parcel Post Volume For the Four Years Ending in 2005Q1</b> |                            |                      |                              |
| Variable   | Percent Change in Variable | Estimated Elasticity | Effect of Variable on Volume |
| Own-Price  | 0.7%                       | -1.351               | -0.94%                       |
| UPS/FedEx Price  | 4.0%                       | 1.821                | 7.43%                        |
| R2001-1  | -                          | -                    | 12.03%                       |
| Dummy beginning 2003Q4   | -                          | -                    | -9.22%                       |
| Econometric Trend beginning 2003Q4   | -                          | -                    | -7.64%                       |
| Adult Population   | 5.2%                       | 1.000                | 5.21%                        |
| Other Factors  | -                          | -                    | 0.22%                        |
| Total Change in Volume   | -                          | -                    | 5.38%                        |

1                                   **b.     UPS/FedEx Price**

2             The volume of destination entry Parcel Post is also affected by the prices of its  
3 main competitors, UPS and FedEx. This effect is measured as a cross-price elasticity  
4 with a weighted average of the UPS and FedEx ground service prices. Over the past  
5 four years, this UPS/FedEx price increased 4.0 percent, after adjusting for inflation. The  
6 estimated cross-price elasticity is 1.821. Therefore the 4.0 percent increase in real  
7 price is estimated to have contributed 7.43 percent to destination entry Parcel Post  
8 volume over the past four years.

9                                   **c.     R2001-1**

10            In the R2001-1 case, the Postal Service introduced a one-pound rate for Parcel  
11 Post mailings. This led to an increase in destination entry volume, beyond any other  
12 impacts from the R2001-1 rate change. It is estimated that as a result of this new rate  
13 initiative, the volume of destination entry Parcel Post increased 12.03 percent.

14                                  **d.     2003Q4 Dummy Variable**

15            New competitive pressures, including the introduction of UPS Basic service in  
16 2003, acted to reduce destination entry Parcel Post volume. This effect is partly  
17 captured by a dummy variable beginning in 2003Q4. Table 39 shows that this variable  
18 accounts for a 9.22 percent decline in destination entry Parcel Post volume.

19                                  **e.     2003Q4 Econometric Trend**

20            In addition to the initial decline in destination entry Parcel Post volume measured  
21 by the dummy variable discussion above, there has been a continued gradual decline in  
22 destination entry volume due to increasing competition in the ground package delivery  
23 market. Table 39 shows that it is estimated that there has been a further 7.64 percent

1 decline in destination entry Parcel Post volume resulting from ongoing competitive  
2 pressure.

3 **f. Adult Population**

4 Table 39 shows that growth in adult population explains a 5.21 percent increase  
5 in the volume of destination entry Parcel Post over the past four years.

6 **g. Other Factors**

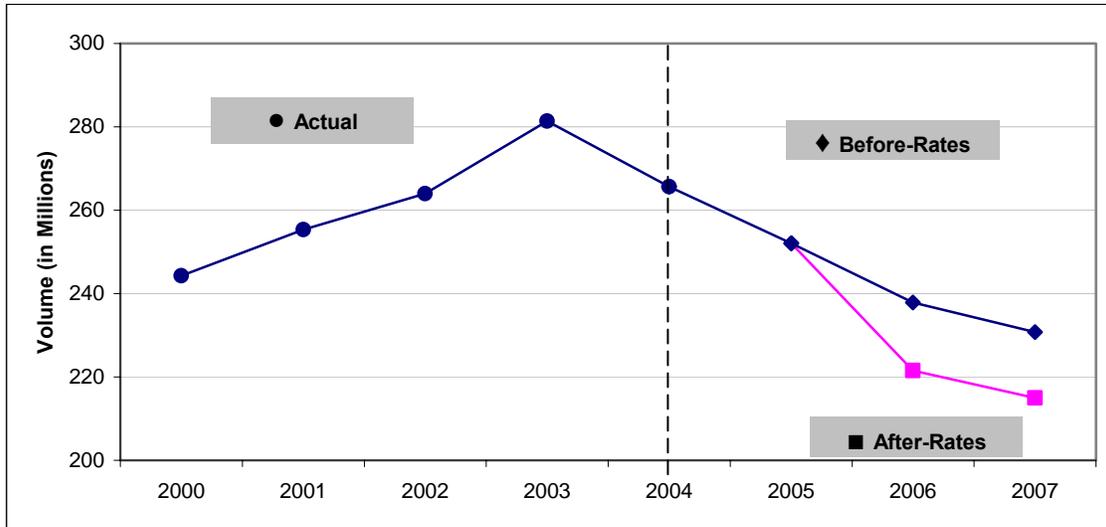
7 Other factors were responsible for a 0.22 percent increase in volume over the  
8 past four years. Included in these other factors are seasonal variations and influences  
9 captured in the Base Volume of destination entry Parcel Post.

10 **7. Before- and After-Rates Volume Forecasts**

11 Figure 19B presents the before- and after-rate volume forecasts of destination  
12 entry Parcel Post, along with the recent history of actual volumes. The forecasts are  
13 obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7).

14 Destination-entry Parcel Post is projected to continue its recent pattern of  
15 decline. Moreover, due to the highly competitive market in which destination-entry  
16 Parcel Post operates, the after-rates forecast is projected to be noticeably below the  
17 before-rates forecast. The before-rates Test Year (GFY 2006) forecast of destination  
18 entry Parcel Post is 237.852 million pieces. The Test Year after-rates forecast is  
19 221.536 million pieces.

**Figure 19B**  
**Destination Entry Parcel Post Volume Forecasts**



1

2

**C. Bound Printed Matter**

3

**1. Definition**

4

Bound printed matter is advertising, promotional, directory or editorial material weighing between one and fifteen pounds and bound by permanent fastenings including staples, spiral binding, glue, or stitching. Its text must be at least 90 percent printed (not handwritten), and cannot be personal correspondence. As in the case of Parcel Post, rates are determined by weight and zone. Bulk mailings account for the vast majority of Bound Printed Matter volume. The pieces sent in a bulk mailing must be identical except with special authorization. They must be permit-imprinted and/or meter-stamped and presorted according to ZIP Code.

12

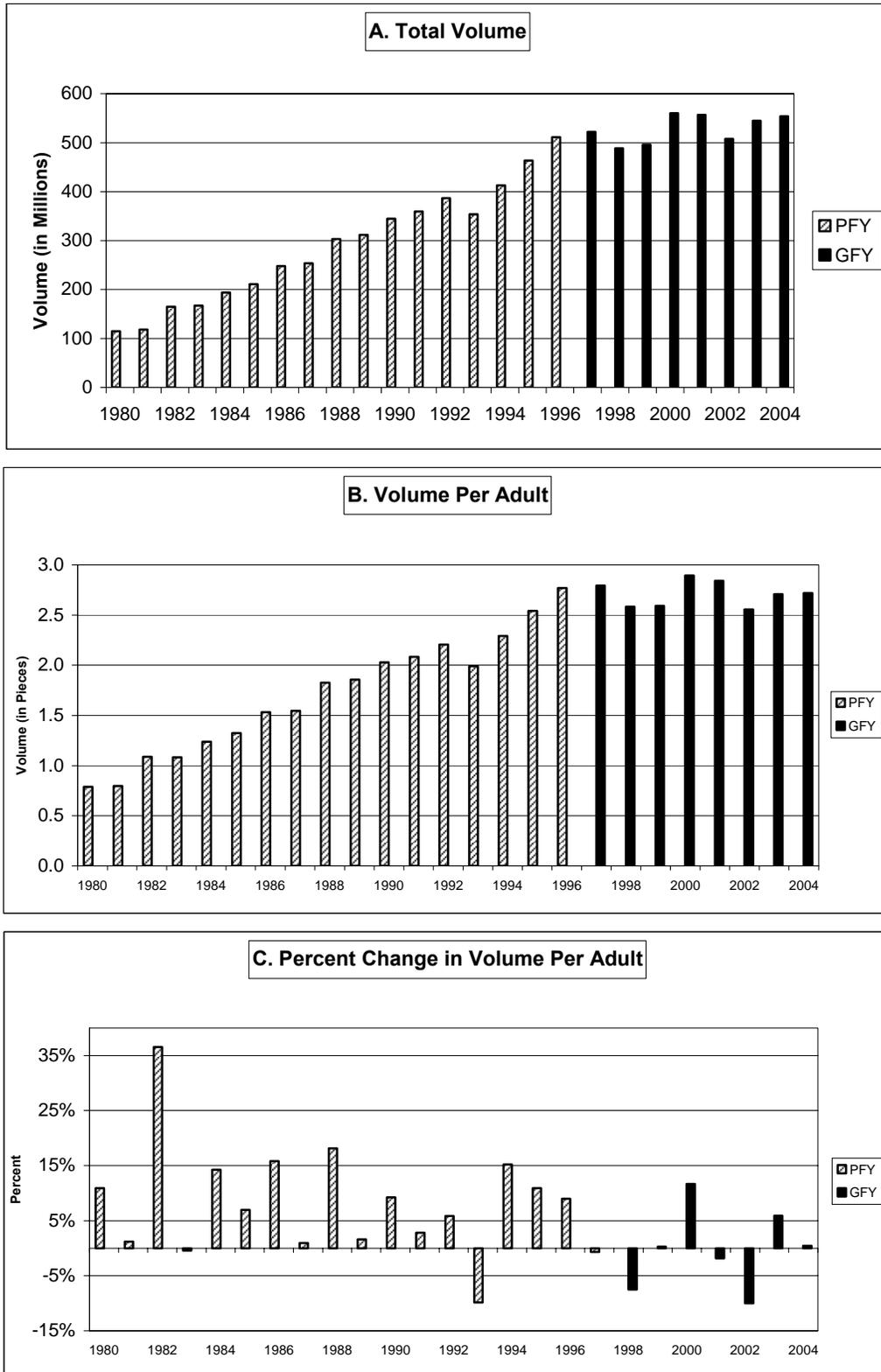
**2. Volume History**

13

Bound Printed Matter is the largest subclass of Package Services Mail. Since 1980, Bound Printed Matter volume has grown steadily, going from 115 million pieces in

14

**Figure 20**  
**Bound Printed Matter Volume History**



1 1980 to nearly 521 million pieces in 1997. Since then, volume has been relatively flat,  
2 and was 554 million pieces in 2004.

3 Volume per adult has followed this pattern, increasing from 0.8 pieces in 1980 to  
4 2.8 pieces in 1997, and then declining to 2.7 pieces in 2004. Annual percent changes in  
5 volume per adult have fluctuated throughout the 1980 to 2004 period, with several years  
6 showing double-digit percentage gains and some years showing double-digit  
7 percentage declines.

### 8 **3. Factors Affecting Volume**

9 Postal rate changes explain some of the variation in Bound Printed Matter  
10 volumes. During the 1980s, when volume was growing, the real price of Bound Printed  
11 Matter was declining. More recently, real prices have increased, though they remain  
12 lower now than they were in 1980. Another important factor has been the rate structure  
13 for Media Mail. Books, which can be sent as Media Mail, are in some cases cheaper to  
14 send as Bound Printed Matter. Bound Printed Matter, which has zoned rates, is  
15 typically more expensive than Media Mail for mailings across several zones, but less  
16 expensive for mailings across only one or two zones. This is especially true for heavier  
17 mailings. Mailers can be expected to choose between these two subclasses based on  
18 the postage costs for their specific mailing. In fact, Upper Access, Inc. produces a web  
19 site for publishers and other users of the mail that shows the weight and distance  
20 combinations for which either Bound Printed Matter or Media Mail is the less expensive  
21 option. [[www.upperaccess.com](http://www.upperaccess.com)]

22 Beyond price considerations, the historical growth in Bound Printed Matter can  
23 be attributed to growth in the mailing of catalogs too heavy to be sent as Standard Mail.  
24 Recently, however, catalogs have tended to become smaller, and as a result there has

1 been a shift toward the use of Standard Mail instead of Bound Printed Matter, consistent  
2 with the stagnation in Bound Printed Matter volumes in recent years.

3 One recent factor contributing to Bound Printed Matter volume has been the  
4 growth of mail-order. This has helped Bound Printed Matter in two ways. First, mail-  
5 order purchases often come from catalogs, some of which are delivered as Bound  
6 Printed Matter. Second, some mail-order purchases are sent as Bound Printed Matter.

7 **4. Recent Contributions to Volume**

8 Table 40 shows that over the four-year period ending in 2005Q1, the volume of  
9 Bound Printed Matter decreased 1.43 percent. Table 40 also presents the contributions  
10 of individual factors to this four-year volume change, based on the econometric analysis  
11 of Thomas Thress.

| <b>Table 40</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Bound Printed Matter Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 17.8%                         | -0.604                  | -9.41%                             |
| Media and Library Price   | 6.1%                          | 0.510                   | 3.07%                              |
| Mail-Order Retail Sales   | 7.4%                          | 0.424                   | 3.08%                              |
| Price of Direct Mail<br>Advertising   | -6.9%                         | -0.716                  | 5.26%                              |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   | -                             | -                       | -7.51%                             |
| Total Change in Volume  | -                             | -                       | -1.43%                             |

1                   **a.     Own-Price**

2                   Table 40 shows that the real price of Bound Printed Matter increased 17.8  
3 percent over the four years ending in 2005Q1. The econometrically estimated long-run  
4 own-price elasticity for Bound Printed Matter is -0.604. Applying this elasticity to the  
5 17.8 percent increase in real price yields a volume decrease of 9.41 percent.  
6 Therefore, higher postage rates have been a major factor behind the recent stagnation  
7 in Bound Printed Matter volumes.

8                   **b.     Media and Library Rate Cross-Price**

9                   As discussed earlier, some mailings can be sent as Bound Printed Matter or as  
10 Media Mail. This effect is measured through a cross-price elasticity with the weighted  
11 average price of Media and Library Rate Mail. A one percent increase in the real price  
12 of Media and Library Mail rate is estimated to increase the volume of Bound Printed  
13 Matter by 0.510 percent. The Library and Media Mail rate increased by 6.1 percent in  
14 the previous four years, which is estimated to have contributed 3.07 percent to the  
15 volume of Bound Printed Matter.

16                   **c.     Mail-Order Retail Sales**

17                   As discussed earlier in this section, growth in mail-order retail sales has had a  
18 positive impact on the volume of Bound Printed Matter. Econometrically, it is estimated  
19 that the elasticity of Bound Printed Matter volume with respect to real mail-order retail  
20 sales per adult is 0.424. Therefore, the 7.4 percent increase in the mail-order retail  
21 sales variable over the past four years is estimated to have increased Bound Printed  
22 Matter volume by 3.08 percent.

23                   **d.     Direct Mail Advertising Price**

24                   Bound Printed Matter volume is also affected by the price of direct mail  
25 advertising. Over the past four years, direct mail advertising price, adjusted for inflation,

1 declined 6.9 percent. Applying the estimated elasticity of -0.716 to this price decline  
2 yields a 5.26 percent increase in volume due to this factor over the past four years.

3 **e. Adult Population**

4 Growth in the adult population is estimated to have contributed 5.21 percent to  
5 the volume of Bound Printed Matter.

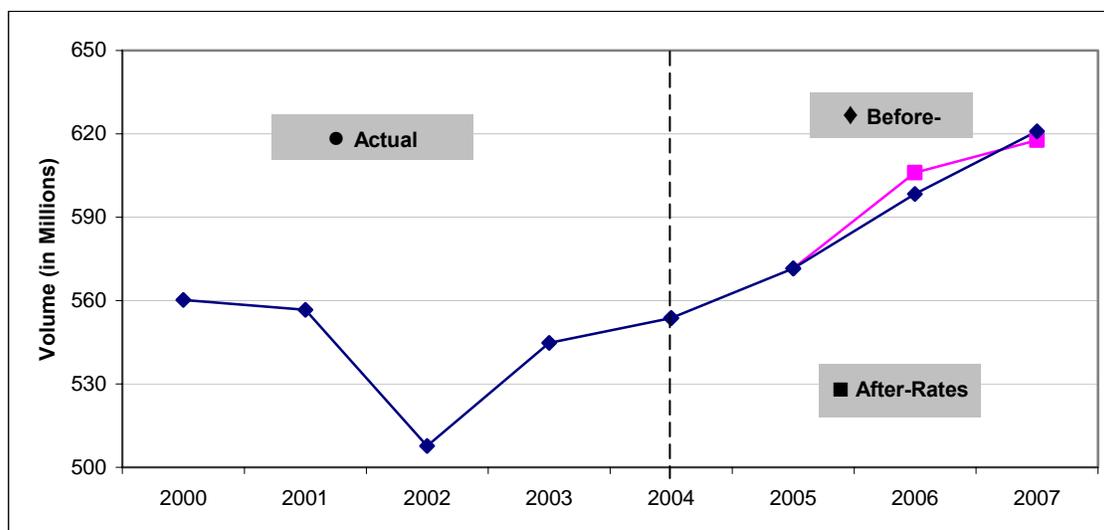
6 **f. Other Factors**

7 Table 40 shows that in addition to the variables described above, other factors  
8 were responsible for a 7.51 percent decrease in Bound Printed Matter volume over the  
9 past four years. Included in these other factors are the effects of seasonality and other  
10 influences captured in the Base Year volume of Bound Printed Matter.

11 **5. Before- and After-Rates Volume Forecasts**

12 The before-rates and after-rates forecasts of Bound Printed Matter are presented  
13 in Figure 20A, along with the recent volume history. The forecasts are obtained from  
14 Attachment A of the testimony of Thomas Thress (USPS-T-7). Bound Printed Matter  
15 volume is projected to grow, buoyed by further increases in mail-order retail sales and,  
16 in the before-rates scenario, no rate increase, and in the after-rates scenario, a  
17 proposed rate increase that is lower than what occurred over the past few years. The  
18 before-rates Test Year (GFY 2006) volume forecast of Bound Printed Matter is 598.339  
19 million pieces. The Test Year after-rates forecast is 605.996 million pieces.

**Figure 20A**  
**Bound Printed Matter Volume Forecasts**



1

2

**D. Media Mail**

3

**1. Definition**

4

Media Mail (formerly Special Rate Mail) includes books, literary manuscripts, compact discs and cassette tapes, small films, and educational materials such as charts and mathematical tables. At one time, book clubs, music clubs, and book publishers accounted for 95 percent of Media Mail volume. Now, with the advent and growth of E-Bay, Amazon.com and other online retailers, senders of Media Mail are a more diverse group. Media Mail is not zoned, but postage varies by weight. Two presort rates are available.

10

11

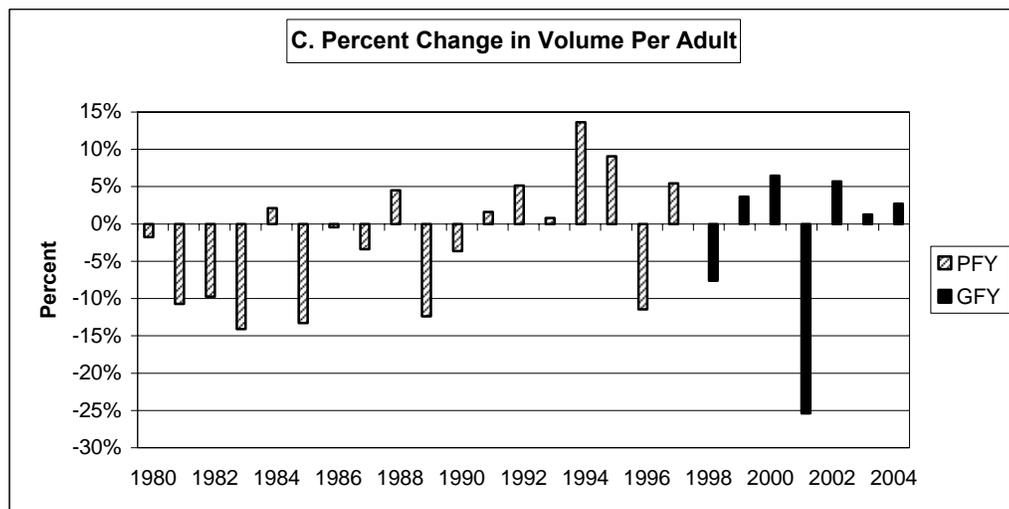
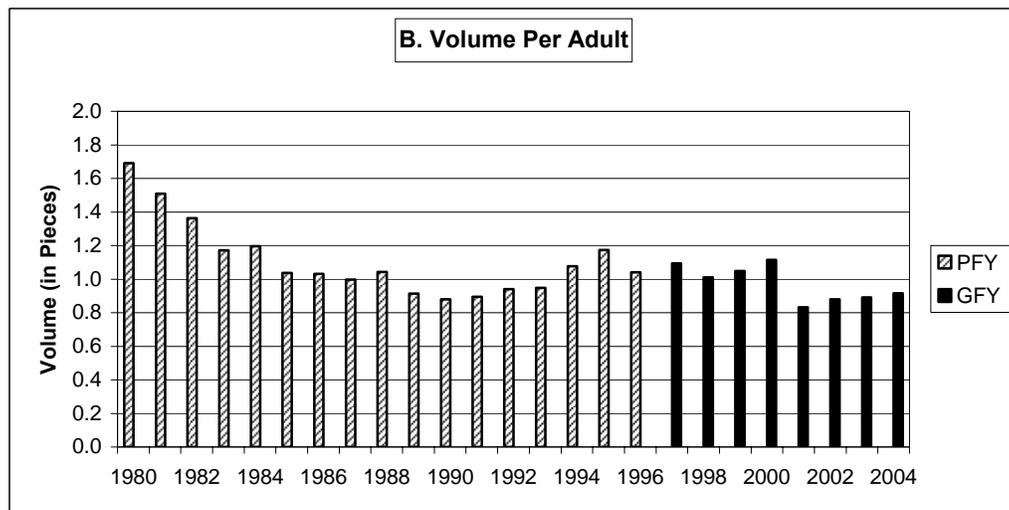
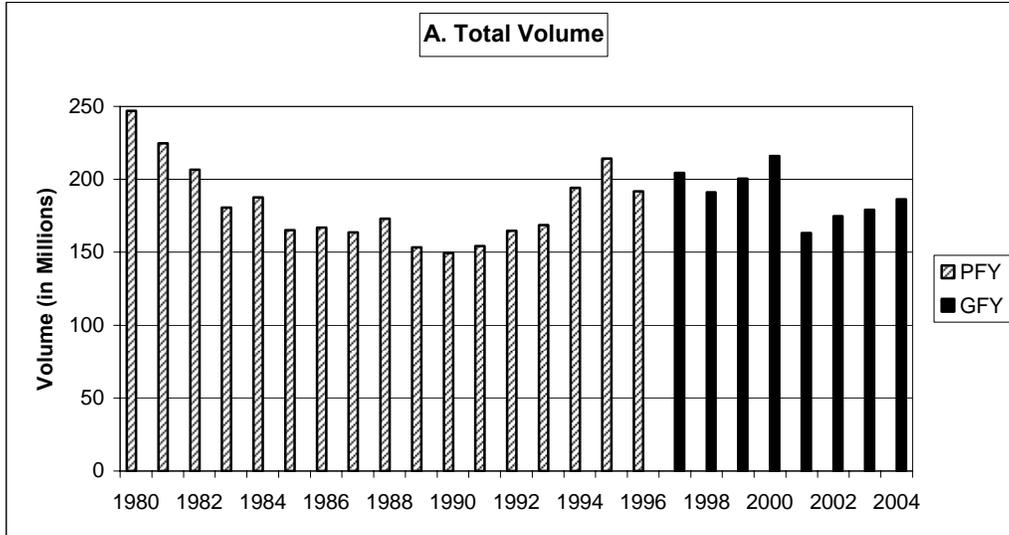
**2. Volume History**

12

As shown in Figure 21, the volume of Media Mail declined in the 1980s, grew moderately in the 1990s, and has grown moderately since 2001. In 1980, volume stood at 247 million pieces, but declined to 149 million pieces in 1990. Growth rebounded in

14

**Figure 21**  
**Media Mail Volume History**



1 the 1990s to a peak of 214 million pieces in 1995 and stayed relatively constant until  
2 2000. Volume dropped to 163 million pieces in 2001, but reached 186 million pieces in  
3 2004. Volume per adult has followed this pattern, going from just under 1.7 pieces per  
4 adult in 1980 to 0.9 pieces per adult in 2004. Annual growth was generally negative  
5 during the 1980s, fluctuated between negative and positive during the 1990s, and after  
6 the drop in 2001, has been positive for the past three years.

### 7 **3. Factors Affecting Volume**

8 During the 1980s, Media Mail volumes declined because of relative declines in  
9 Bound Printed Matter rates. Mailers could qualify for Bound Printed Matter by inserting  
10 a single page of advertising into a mailing that would otherwise be sent as Media Mail.

11 Media Mail volumes have been helped by growth in mail-order and e-commerce,  
12 which has led to an increase in the mailing of books, CDs, DVDs, and other media  
13 items. For example, Amazon.com is a major user of Media Mail. They offer a “super-  
14 saver” rate for orders on books, music, or movies, which are usually sent as Media Mail.

15 Amazon reports that its North American sales of Media categories have  
16 increased from \$1.8 billion in 2001 to \$2.6 billion in 2004, an increase of more than 40  
17 percent over a three-year period. [Amazon.com, Inc., Historical Supplemental Net  
18 Sales Information, 2000 – 2004”]. More generally, mail-order sales have risen as a  
19 share of total retail sales, with much of that growth being due to increases in e-  
20 commerce. According to the Commerce Department, e-commerce sales have doubled  
21 over the past three years, coinciding with a period during which Media Mail volumes  
22 have increased.

### 23 **4. Recent Contributions to Volume**

24 Table 41 shows that over the four-year period ending in 2005Q1, the volume of  
25 Media Mail decreased 6.65 percent. Table 41 also presents the contributions of

1 individual factors to this four-year volume change, based on the econometric analysis of  
 2 Thomas Thress. For purposes of econometric estimation, the volumes of Media Mail  
 3 and Library Rate Mail are combined. Therefore, the Media Mail volume elasticities  
 4 presented in Table 41 are identical to the Library Rate volume elasticities that will be  
 5 presented in Table 42.

| <b>Table 41</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Media Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 6.4%                          | -0.796                  | -4.83%                             |
| Bound Printed Matter<br>Price   | 18.2%                         | 0.509                   | 8.89%                              |
| Mail-Order Retail Sales   | 7.4%                          | 0.249                   | 1.80%                              |
| 2001Q1 Dummy  | -                             | -                       | -18.20%                            |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   | -                             | -                       | 2.82%                              |
| Total Change in Volume  | -                             | -                       | -6.65%                             |

6

7 **a. Own-Price**

8 The real price of Media Mail increased 6.4 percent over the past four years. The  
 9 estimated price elasticity of Media Mail is -0.796. Therefore, the real price increase is  
 10 estimated to have reduced Media Mail volume by 4.83 percent over the past four years.

11 **b. Bound Printed Matter Price**

12 As discussed in the section on Bound Printed Matter, mailers can choose  
 13 between Media Mail and Bound Printed Matter for some kinds of Package Service  
 14 Mailings. This impact is measured by a cross-price elasticity between the two  
 15 subclasses. The estimated cross-price elasticity of Media Mail volume with respect to

1 Bound Printed Matter price is 0.509. Therefore, the 18.2 percent increase in the real  
2 price of Bound Printed Matter over the past four years is estimated to have contributed  
3 8.89 percent to the volume of Media Mail.

4 **c. Mail-Order Retail Sales**

5 Media Mail volumes have also been helped by increases in mail-order retail  
6 sales. The 7.4 percent increase in real mail-order retail sales per adult is estimated to  
7 have contributed 1.80 percent to the volume of Media Mail over the past four years.

8 **d. 2001Q1 Dummy**

9 As shown in Figure 21, there was an unusually large decline in Media Mail  
10 volume in 2001. The impact of this decline is measured by a dummy variable beginning  
11 in 2001Q1. Table 41 shows that this variable explains an 18.20 percent drop in Media  
12 Mail volume.

13 **e. Adult Population**

14 Growth in the adult population over the past four years is estimated to have  
15 contributed 5.21 percent to the volume of Media Mail.

16 **f. Other Factors**

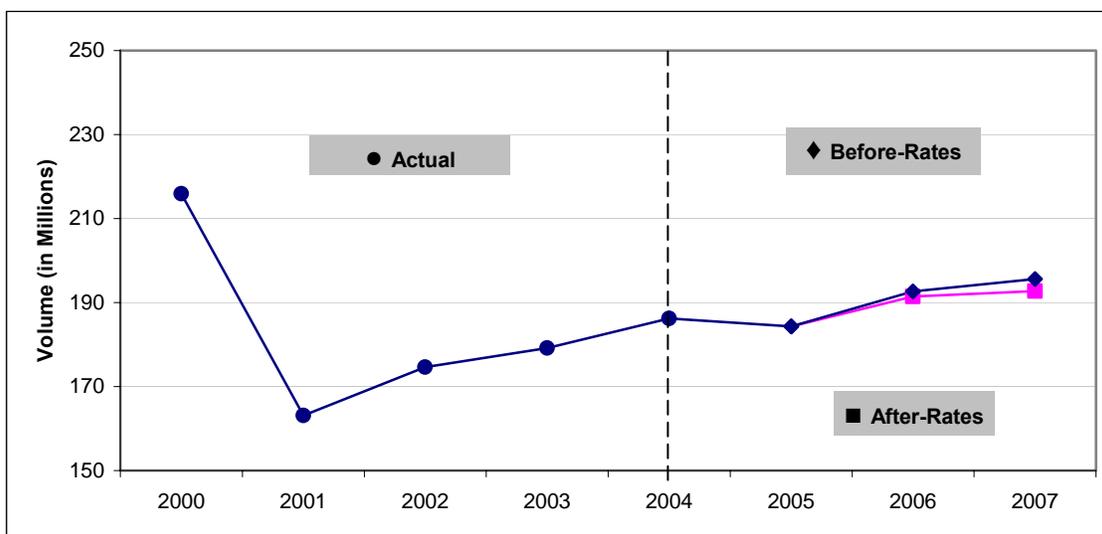
17 Table 41 shows that in addition to the variables described above, other factors  
18 were responsible for a 2.82 percent increase in Media Mail volume over the past four  
19 years. Included in these other factors are the effects of seasonality and other influences  
20 captured in the Base Year volume of Media Mail.

21 **5. Before- and After-Rates Volume Forecasts**

22 The before-rates and after-rates forecasts of Media Mail are presented in Figure  
23 21A, along with the recent volume history. The forecasts are obtained from Attachment  
24 A of the testimony of Thomas Thress (USPS-T-7). Media Mail volume is projected to  
25 continue its recent pattern of growth. The before-rates Test Year (GFY 2006) forecast

1 of Media Mail is 192.642 million pieces. The Test Year after-rates forecast is 191.440  
2 million pieces.

**Figure 21A  
Media Mail Volume Forecasts**



3  
4 **E. Library Rate Mail**  
5 **1. Definition**  
6 Schools, colleges, universities, public libraries, museums, herbariums, and  
7 nonprofit organizations are eligible to send Package Services mail at a preferred rate  
8 known as Package Services Library Rate. No permit is required as would be the case  
9 for other preferred rate categories such as Periodicals and Standard Nonprofit Mail. It is  
10 required only that the address or return address be that of an eligible institution and that  
11 the label "Library Rate" appear conspicuously on both sides of the package.

12 One of the uses of Library Rate is for publishers and distributors to send books to  
13 schools, colleges, universities, and public libraries. Another use is for inter-library loan  
14 materials. As in the case of Media Mail, rates are based on weight but not distance.

15  
16

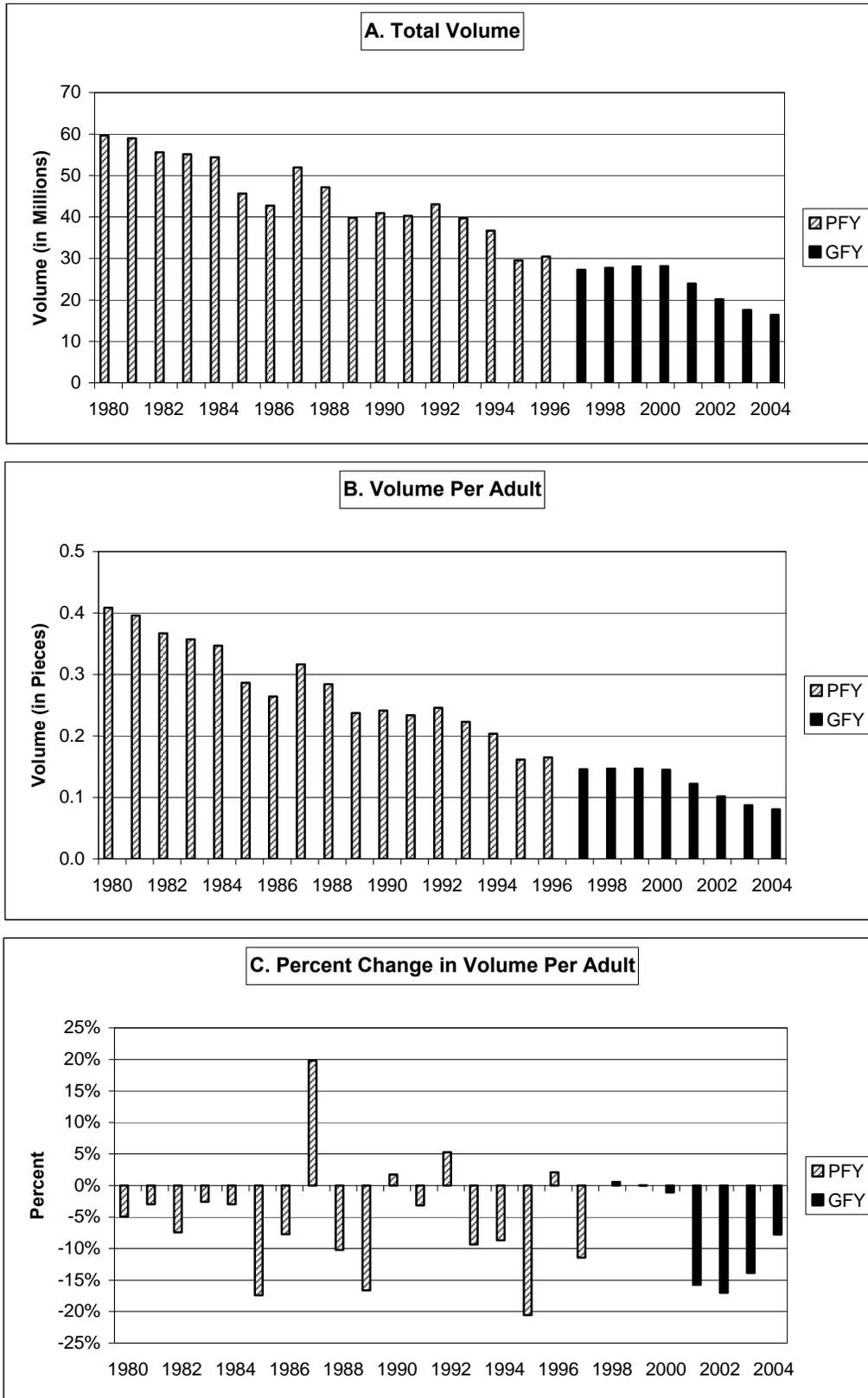
## 2. Volume History

The top panel of Figure 22 shows annual total volume of Library Rate Mail between 1980 and 2004. Between 1980 and 2004, volume has dropped from 59.7 million pieces to 16.4 million pieces. Volume per adult has displayed a similar pattern, falling from 0.4 pieces per adult to 0.08 pieces per adult between 1980 and 2004. With few exceptions (1987, 1990, and 1992 most notably), the annual percentage change in volume per adult has been negative.

## 3. Factors Affecting Volume

Ever since the Postal Reorganization Act, Library Mail has experienced a considerable increase in postage. Since 1980, for example, the real postage cost for Library Rate Mail has more than tripled. Consistent increases in real rates have, therefore, been an important factor explaining the decline in Library Rate volumes. In addition, the rules concerning eligibility for Library Rate Mailings have been tightened over the years, also contributing to the long-run decline in volume.

**Figure 22**  
**Library Rate Mail Volume History**



**4. Recent Contributions to Volume**

Table 42 shows that over the four-year period ending in 2005Q1, the volume of Library Rate decreased 42.37 percent. Table 42 also presents the contributions of individual factors to this four-year volume change, based on the econometric analysis of Thomas Thress. As noted earlier, the estimated elasticities for Library Rate Mail are the same as for Media Mail.

| <b>Table 42</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Library Rate Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 2.2%                          | -0.796                  | -1.71%                             |
| Bound Printed Matter Price  | 18.2%                         | 0.509                   | 8.89%                              |
| Mail-Order Retail Sales   | 7.4%                          | 0.249                   | 1.80%                              |
| 2001Q1 Dummy  |                               |                         | -18.20%                            |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   |                               |                         | -38.54%                            |
| Total Change in Volume  |                               |                         | -42.37%                            |

**a. Own-Price**

The 2.2 percent increase in the real price of Library Rate Mail is estimated to have reduced volume by 1.71 percent over the past four years.

**b. Bound Printed Matter Price**

The 18.2 percent increase in the real price of Bound Printed Matter over the past four years is estimated to have increased the volume of Library Rate Mail by 8.89 percent.

1                                   **c.     Mail-Order Retail Sales**

2                   The 7.4 percent increase in real mail-order retail sales per adult is estimated to  
3                   have increased the volume of Library Rate Mail by 1.80 percent over the past four  
4                   years.

5                                   **d.     2001Q1 Dummy**

6                   An 18.20 percent decline in Library Rate Mail volume is explained by a dummy  
7                   variable beginning 2001Q1.

8                                   **e.     Adult Population**

9                   Growth in the adult population over the past four years is estimated to have  
10                  contributed 5.21 percent to the volume of Library Rate Mail.

11                                  **f.     Other Factors**

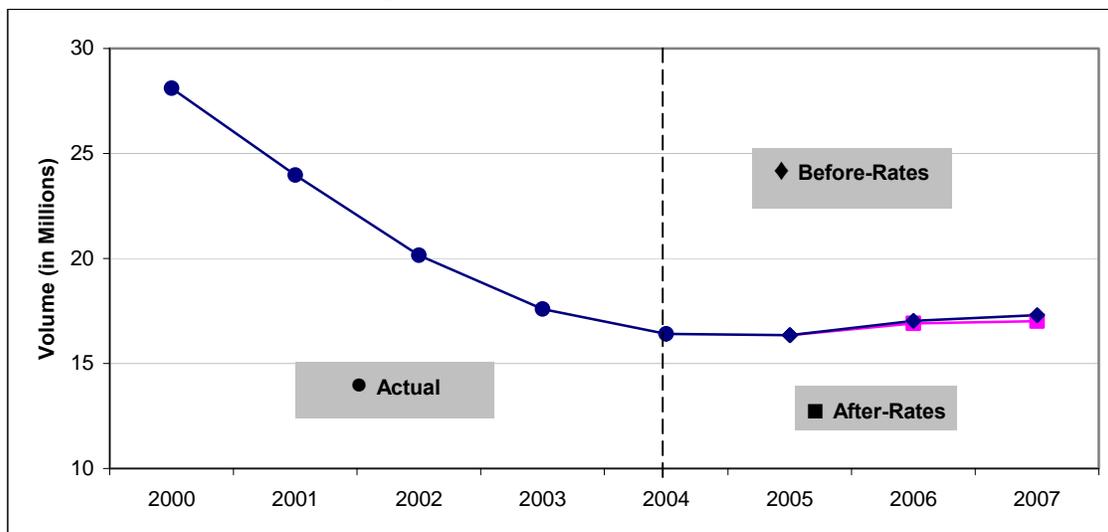
12                  Table 42 shows that in addition to the variables described above, other factors  
13                  were responsible for a 38.54 percent decrease in the volume of Library Rate Mail. This  
14                  large impact of other factors occurs because over the past four years, Library Rate Mail  
15                  volumes declined considerably compared to Media Mail volumes. Nonetheless, the  
16                  impact of these other factors is captured in the Base Year volume of Library Rate Mail.

17                                  **5.     Before- and After-Rates Volume Forecasts**

18                  The before-rates and after-rates forecasts of Library Rate Mail are presented in  
19                  Figure 22A, along with the recent volume history. The forecasts are obtained from  
20                  Attachment A of the testimony of Thomas Thress (USPS-T-7). Library Rate Mail  
21                  volume is projected to be essentially flat over the next few years. The before-rates Test  
22                  Year (GFY 2006) forecast of Library Rate Mail is 17.037 million pieces. The Test Year  
23                  after-rates forecast is 16.908 million pieces.

24  
25

**Figure 22A**  
**Library Rate Mail Volume Forecasts**



1 **VII. OTHER MAIL PRODUCTS**

2 This chapter addresses Postal Penalty Mail, Free for the Blind and Physically  
3 Handicapped Mail, and Mailgrams. For each product, the volume history is reviewed  
4 and factors affecting volume are discussed. The contributions of individual factors to  
5 the change in volume over the past four years are examined, based on the econometric  
6 work of Thomas Thress. Finally, before- and after-rates volume forecasts are  
7 presented, taken from Attachment A of his testimony.

8 **A. Postal Penalty Mail**

9 **1. Definition**

10 Postal Penalty Mail consists of mail sent by the Postal Service. Prior to 1988,  
11 Penalty Mail also included mail sent by other government agencies. Since 1988, this  
12 mail has been counted as part of the mail category by which it was sent. Therefore, the  
13 discussion that follows considers only Postal Penalty Mail.

14 **2. Volume History**

15 Figure 23 presents the volume history of Postal Penalty Mail beginning in 1988.  
16 As shown in the figure, Postal Penalty Mail volume declined during the early 1990s,  
17 falling from over 600 million pieces in 1991 to under 400 million pieces in 1996. Volume  
18 remained close to 400 million pieces until 2004, when there was a large increase in  
19 volume.

20

21

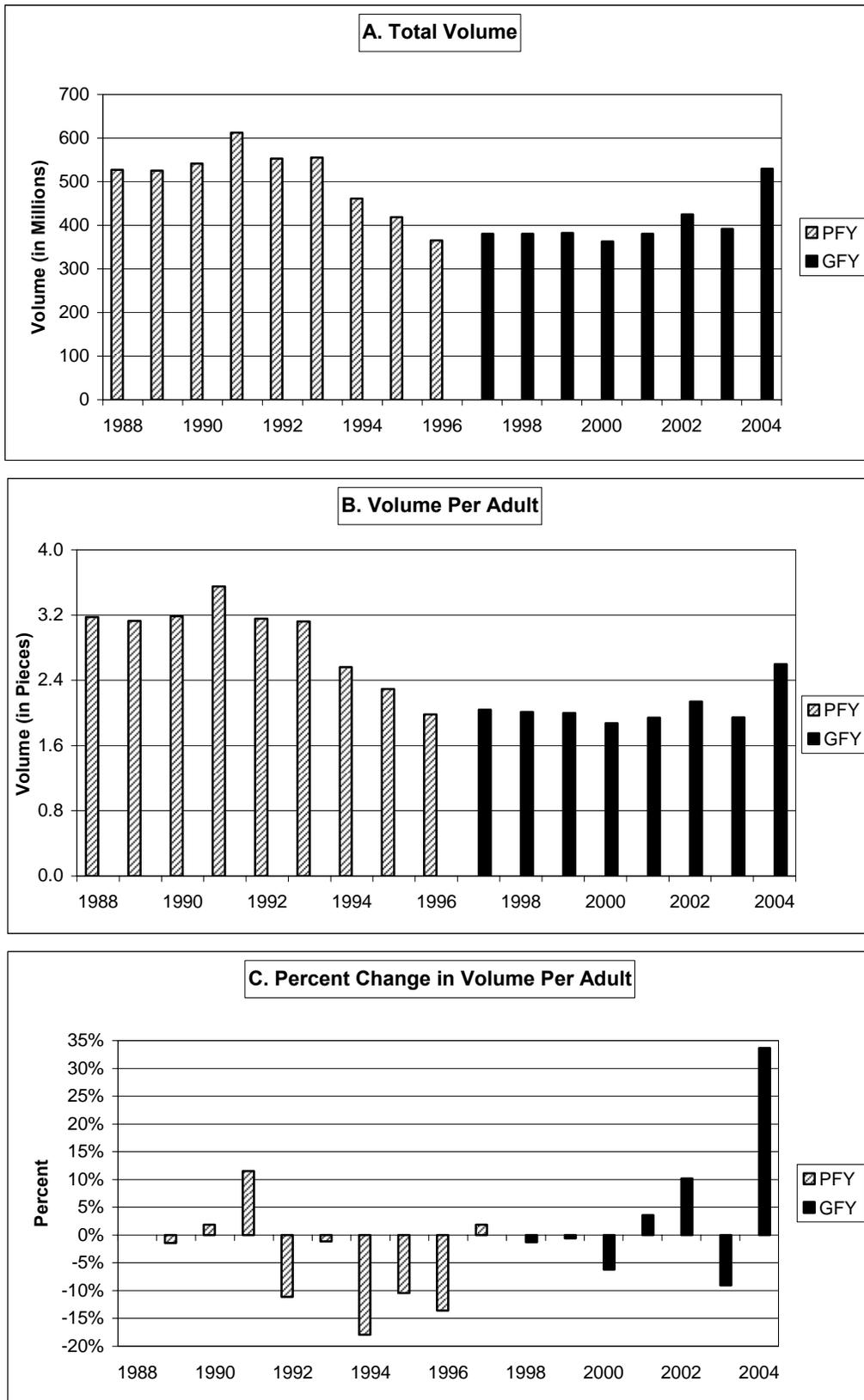
22

23

24

25

**Figure 23**  
**Postal Penalty Mail Volume History**



**3. Factors Affecting Volume**

The declines in Postal Penalty Mail in the mid-1990s were the result of efforts by the Postal Service to discourage its use. The large increase in 2004 was a result of increased communication by the Postal Service with its employees resulting from new benefit programs and automated approaches to benefit administration. There was also a large mailing campaign directed to postal customers prior to the 2004 Christmas season.

**4. Recent Contributions to Volume**

Table 43 shows that over the past four years, the volume of Postal Penalty Mail has increased 63.66 percent. The table also presents the contribution of individual factors to this four-year volume change.

| <b>Table 43</b>  |                                       |                                 |   |
|--|---------------------------------------|---------------------------------|---|
| <b>Contributions to Change in Postal Penalty Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                                       |                                 |   |
| <b>Variable</b>  | <b>Percent Change<br/>in Variable</b> | <b>Estimated<br/>Elasticity</b> | <b>Effect of<br/>Variable on<br/>Volume</b> |
| Econometric Trend  | -                                     | -                               | 22.53%                                      |
| Adult Population   | 5.2%                                  | 1.000                           | 5.21%                                       |
| Other Factors  | -                                     | -                               | 26.96%                                      |
| <b>Total Change in Volume</b>  | <b>-</b>                              | <b>-</b>                        | <b>63.66%</b>                               |

**a. Econometric Trend**

As there is no charge for Postal Penalty Mail, its volume is not affected by the usual economic factors that normally influence mail volumes. Instead, Postal Penalty Mail volumes are modeled through the use of econometric trends. Two trend terms are included in the Postal Penalty Mail equation. The first is a full-sample negative trend

1 reflecting the fact that Postal Penalty Mail volumes were lower in recent years than they  
2 were in 1988. The second econometric trend is a positive trend beginning in 1997,  
3 reflecting the recent increase in its volume. Over the past four years, this more recent  
4 trend effect dominates. Combined, the two trends explain a 22.53 percent increase in  
5 Postal Penalty Mail volume over the past four years.

6 **b. Adult Population**

7 Increases in adult population explain a 5.21 percent increase in Postal Penalty  
8 Mail volume over the past four years.

9 **c. Other Factors**

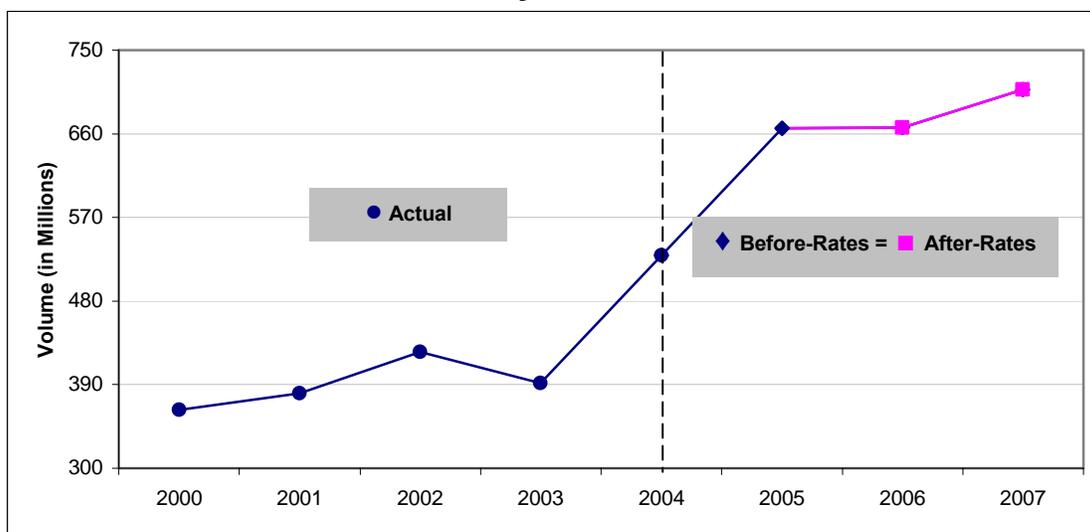
10 Table 43 shows that other factors explain a 26.96 percent increase in Postal  
11 Penalty volume over the past four years. Most of this impact is due to the large  
12 increase in volume in 2004, and is included in the Base Volume for Postal Penalty Mail.

13 **5. Before- and After-Rates Volume Forecasts**

14 The before-rates and after-rates forecasts of Postal Penalty Mail are presented in  
15 Figure 23A, along with the recent volume history. The forecasts are obtained from  
16 Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to  
17 increase, though not as rapidly as in the very recent past. Because there is no postage  
18 charged for this mail, the before- and after-rates forecasts are the same. The Test Year  
19 (GFY 2006) forecast of Postal Penalty Mail is 666.538 million pieces

1  
2

**Figure 23A**  
**Postal Penalty Mail Volume Forecasts**



3  
4

**B. Free for the Blind and Physically Handicapped Mail**

**1. Definition**

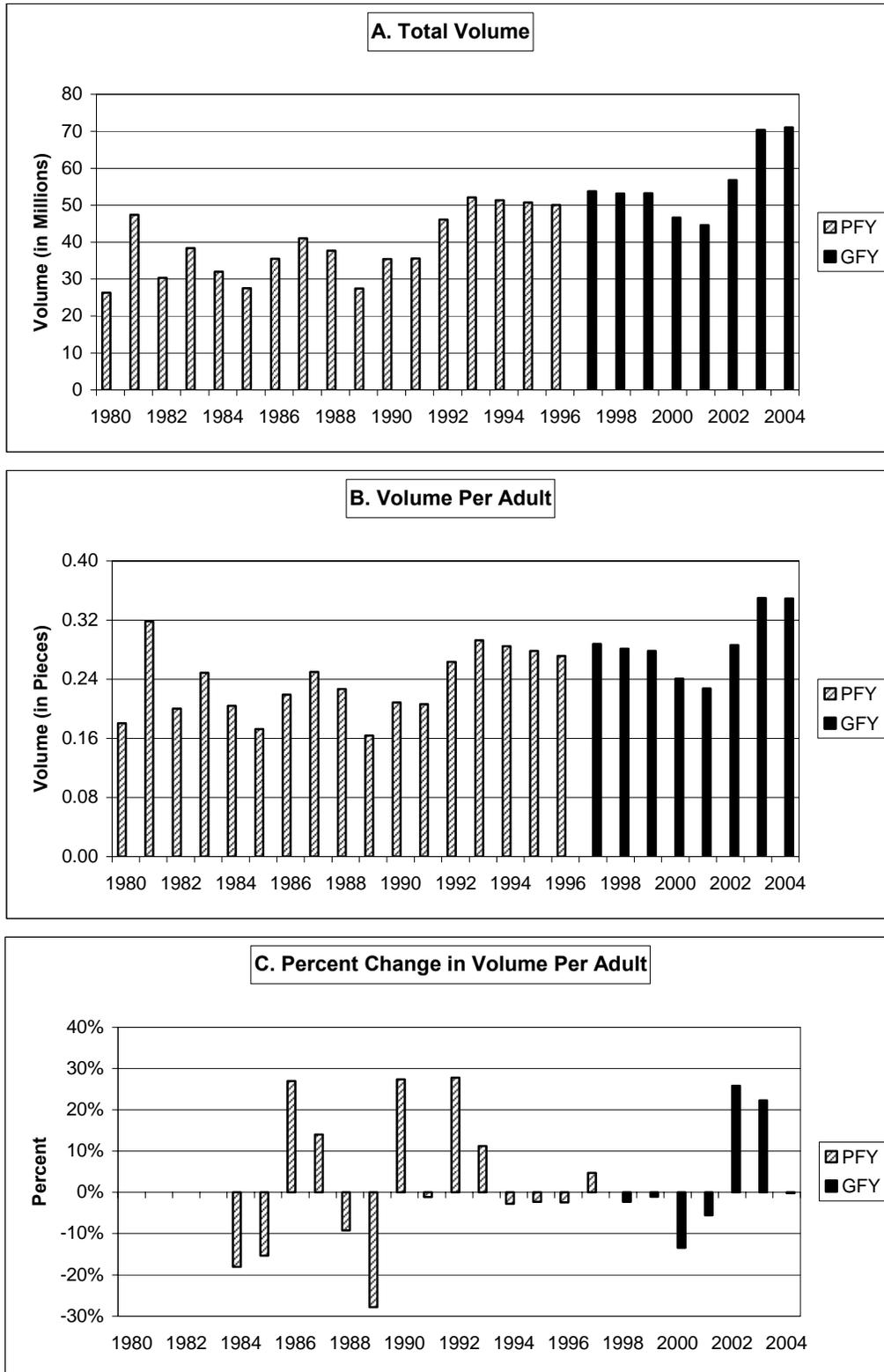
Free for the Blind and Physically Handicapped Mail, hereafter “Free for the Blind Mail,” includes materials and devices mailed for or by those unable to read conventionally. No postage is charged for authorized mailings of these items. Customers who are eligible to mail this category must be on record at their local post office.

**2. Volume History**

As shown in Figure 20, Free for the Blind Mail volume is somewhat erratic, but has generally grown over time. Volume fluctuated during the 1980s and leveled off during the 1990s. The last three years have witnessed strong growth, going from 44.6 million pieces in 2001 to 71.1 million pieces in 2004. On a per-adult basis, volume stood at 0.35 pieces in 2004.

18

**Figure 24**  
**Free for the Blind Mail Volume History**



**3. Factors Affecting Volume**

The long-term increase in volume is probably due to the aging of the U.S. population and an increase in the number of people who have limited eyesight.

**4. Recent Contributions to Volume**

Table 44 shows that the volume of Free for the Blind Mail increased 63.48 percent over the past four years. The table also presents the contribution of individual factors to this four-year volume change, based on the econometric work of Thomas Thress.

| <b>Table 44</b>  |                                       |                                 |   |
|--|---------------------------------------|---------------------------------|---|
| <b>Contributions to Change in Free for the Blind Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                                       |                                 |   |
| <b>Variable</b>  | <b>Percent Change<br/>in Variable</b> | <b>Estimated<br/>Elasticity</b> | <b>Effect of<br/>Variable on<br/>Volume</b> |
| Econometric Trend  | -                                     | -                               | 13.99%                                      |
| Internet Experience  | 41.4%                                 | -0.163                          | -5.48%                                      |
| 2000- 2001 Dummy   | -                                     | -                               | 26.74%                                      |
| Adult Population   | 5.2%                                  | 1.000                           | 5.21%                                       |
| Other Factors  | -                                     | -                               | 13.79%                                      |
| Total Change in Volume   | -                                     | -                               | 63.48%                                      |

**a. Econometric Trend**

As there is no charge for Free for the Blind Mail, its volume is not affected by the usual economic factors that normally influence mail volumes. Instead, the long-term growth in volume is explained by an econometric trend term. Over the past four years, this trend explains a 13.99 percent increase in volume.

1                           **b.     Internet Experience**

2                   Increases in Internet experience explain a 5.48 percent decline in volume over  
3 the past four years. Among the Internet-related products that can be helpful to those  
4 who are blind or have limited sight are browsers that produce voice output for text  
5 displayed on a computer screen and audio books that can be downloaded.

6                           **c.     2000 - 2001 Dummy Variable**

7                   A dummy variable is included in the Free for the Blind Mail demand equation to  
8 account for an unusual decrease in volume in 2000 and 2001. As this variable is part of  
9 the volume occurring four years ago, but not part of the volume in the most recent four  
10 quarters, the variable makes a positive contribution to volume over the four-year period.  
11 Table 44 shows that this variable contributes a 26.74 percent increase in volume.

12                           **d.     Adult Population**

13                   Increases in adult population explain a 5.21 percent increase in Free for the Blind  
14 Mail volume over the past four years.

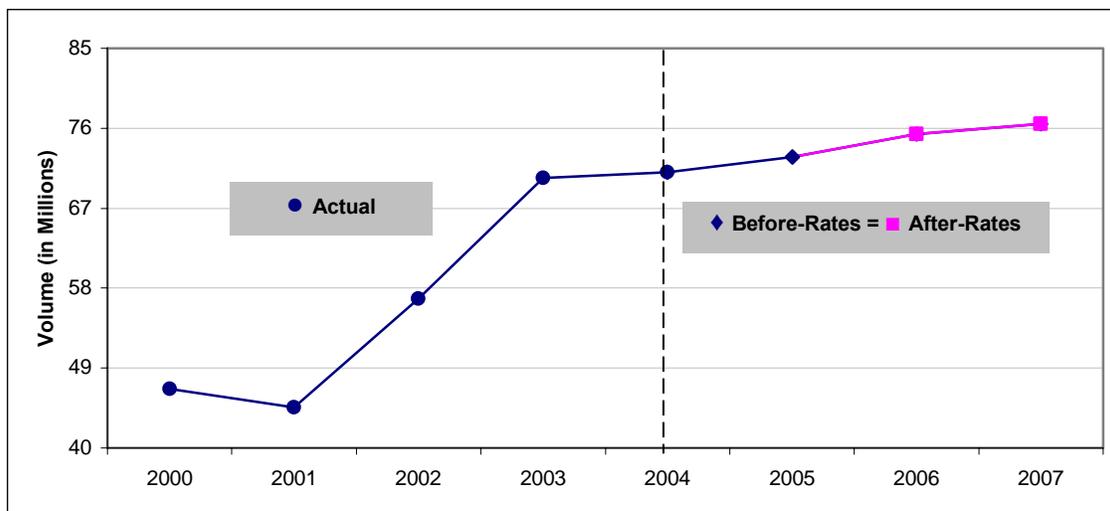
15                           **e.     Other Factors**

16                   Table 44 shows that other factors explain a 13.79 percent increase in volume  
17 over the past four years. Included in these other factors are seasonal differences and  
18 influences captured in the Base Volume of Free for the Blind Mail.

19                           **5.     Before- and After-Rates Volume Forecasts**

20                   The before-rates and after-rates forecasts of Free for the Blind Mail are  
21 presented in Figure 24A, along with the recent volume history. The forecasts are  
22 obtained from Attachment A of the testimony of Thomas Thress. Volume is projected to  
23 increase over the next few years. Because there is no postage charged for this mail,  
24 the before- and after-rates forecasts are the same. In both scenarios, the Test Year  
25 (GFY 2006) forecast of Free for the Blind Mail is 75.317 million pieces.

**Figure 24A**  
**Free for the Blind Mail Volume Forecasts**



1 **C. Mailgrams**

2 **1. Definition**

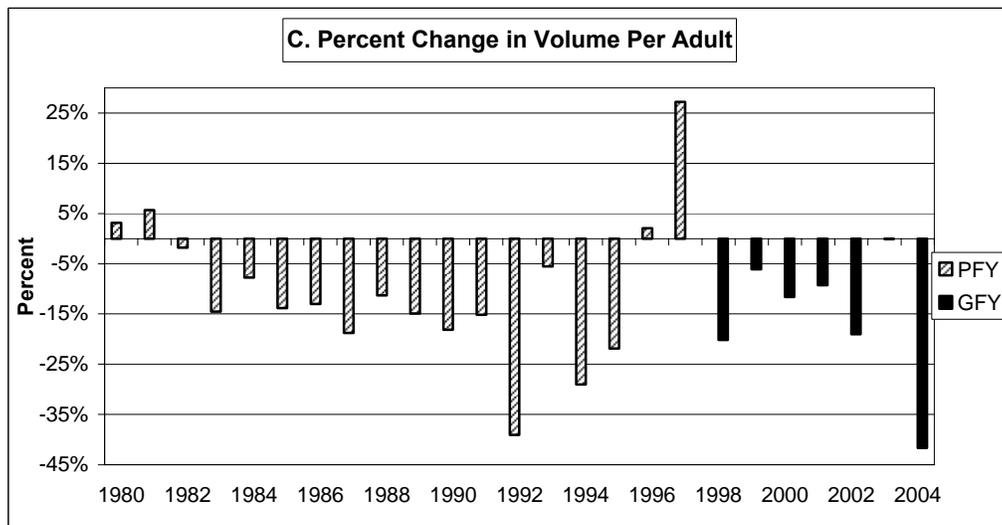
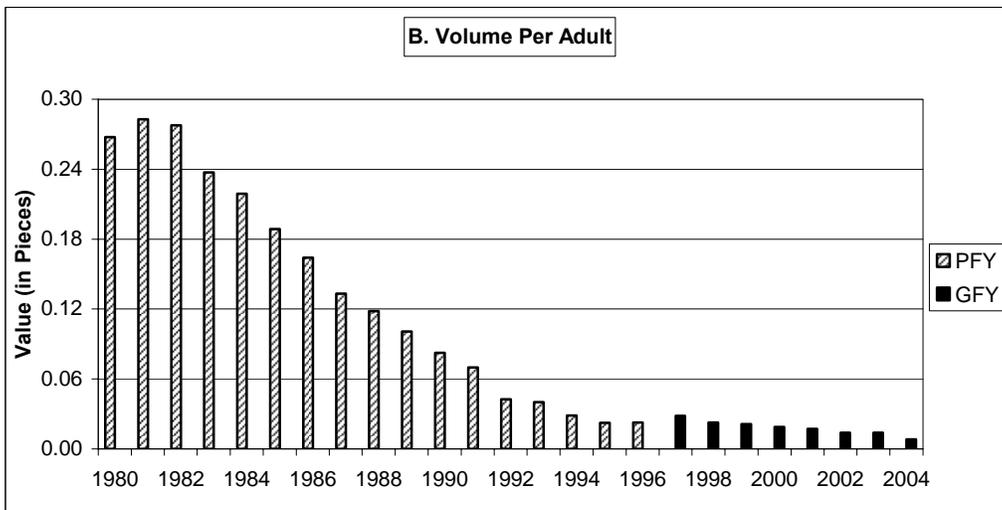
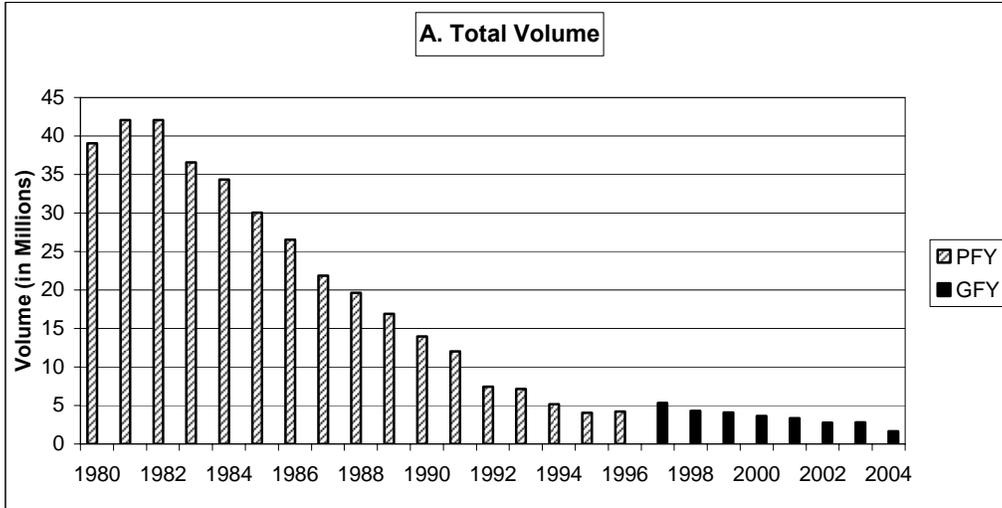
3 Mailgrams are offered pursuant to an agreement between Western Union and  
4 the Postal Service and provide for delivery by the Postal Service of messages  
5 generated and printed by Western Union. Western Union reimburses the Postal  
6 Service for each message.

7 **2. Volume History**

8 As shown in Figure 25, Mailgrams volume is characterized by steady declines.  
9 Between 1980 and 2004, volume fell from 39 million to 1.6 million. Volume per adult  
10 followed suit; after peaking at 0.28 pieces in 1981, volume per adult fell to 0.008 pieces  
11 per adult by 2004.

12  
13  
14

**Figure 25**  
**Mailgrams Volume History**



**3. Factors Affecting Volume**

Use of Mailgrams has been falling out of favor for many years, as is clear in the volume history.

**4. Recent Contributions to Volume**

Table 45 shows that the volume of Mailgrams declined 53.74 percent over the past four years. The table also shows the contribution of individual factors to this four-year volume change, based on the econometric analysis of Thomas Thress.

**a. Econometric Trend**

The long-term decline in Mailgrams volume is explained by an econometric trend term. Over the past four years, this trend explains a 46.06 percent decline in volume.

**b. Adult Population**

Increases in adult population explain a 5.21 percent increase in the volume of Mailgrams over the past four years.

| <b>Table 45</b>  |                                       |                                 |   |
|--|---------------------------------------|---------------------------------|---|
| <b>Contributions to Change in Mailgrams Volume<br/>For the Four Years Ending in 2005Q1</b> |                                       |                                 |   |
| <b>Variable</b>  | <b>Percent Change<br/>in Variable</b> | <b>Estimated<br/>Elasticity</b> | <b>Effect of<br/>Variable on<br/>Volume</b> |
| Econometric Trend  | -                                     | -                               | -46.06%                                     |
| Adult Population   | 5.2%                                  | 1.000                           | 5.21%                                       |
| Other Factors  | -                                     | -                               | -18.48%                                     |
| Total Change in Volume   | -                                     | -                               | -53.74%                                     |

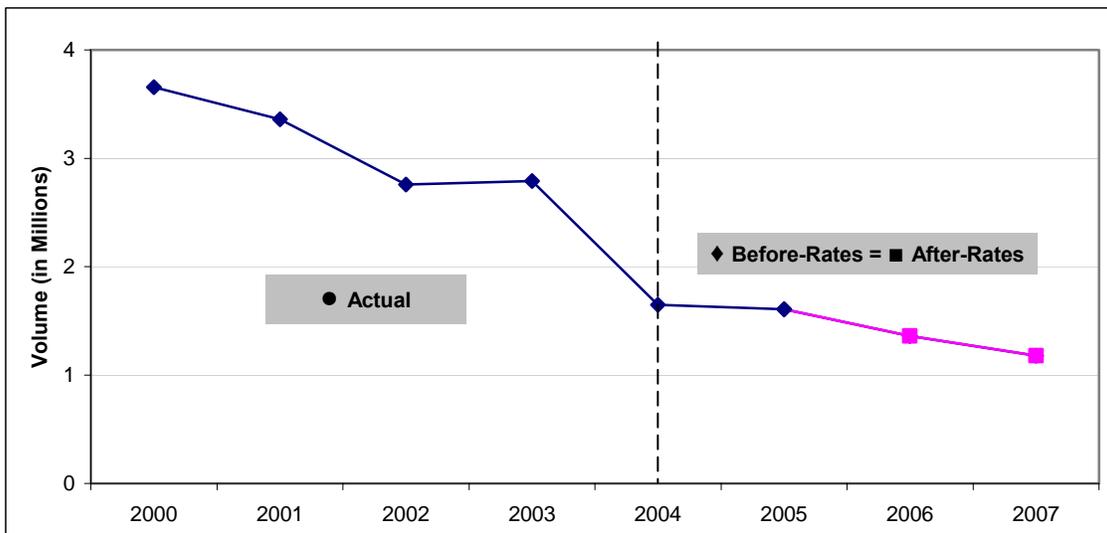
**c. Other Factors**

Table 45 shows that other factors explain an 18.48 percent decline in the volume of Mailgrams over the past four years. Included in these other factors are seasonal variations and other influences included in the Base Year volume.

1                   **5.     Before- and After-Rates Volume Forecasts**

2                   The before-rates and after-rates forecasts of Mailgrams are presented in Figure  
3                   25A, along with the recent volume history. The forecasts are obtained from Attachment  
4                   A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to continue its  
5                   long-term historical decline. In both the before- and after-rates scenarios, the  
6                   forecasted Test Year (GFY 2006) volume of Mailgrams is 1.359 million pieces.

**Figure 25A  
Mailgrams Volume  
Forecasts**



1 **VIII. SPECIAL SERVICES**

2 **A. General Characteristics**

3 Seven Special Services are included in this section. They are Registered Mail,  
4 Insured Mail, Certified Mail, Collect-on-Delivery service, Return Receipts, Postal Money  
5 Orders, and Delivery and Signature Confirmation. In addition, this chapter presents a  
6 discussion of Post Office Boxes and Stamped cards.

7 Registered Mail, Insured Mail, Certified Mail and Return Receipts are used to  
8 provide added security, to protect the value of the mail, and to verify that the mail piece  
9 is sent through the Postal Service. Collect-on-Delivery service is used as a method of  
10 payment for mail pieces delivered by the Postal Service. Money Orders are considered  
11 a non-mail service, as Money Orders can be purchased from any post office to be used  
12 for payment of sums of money, travelers' checks or bank checks, and need not be used  
13 in conjunction with mail. Delivery Confirmation was introduced in 1999 as a service for  
14 Priority Mail and Package Services Mail, and was expanded to First Class Parcels,  
15 Standard Parcels, and Parcel Select Mail in 2002. Signature Confirmation was  
16 introduced in 2001 for Priority and Package Services and expanded to First Class  
17 Parcels and Parcel Select in 2002. Post Office Boxes are offered to any customer  
18 requiring more than free carrier delivery or general delivery. Stamped cards are  
19 postcards sold by the Postal Service with the postage imprinted.

20 In GFY 2004, there were 5.0 million Registered Mail pieces, 51.5 million Insured  
21 Mail pieces, 273.7 million pieces of Certified Mail, 1.9 million Collect-on-Delivery pieces,  
22 238.5 million Return Receipts, 187.2 million Money Orders, 590.6 million Delivery  
23 Confirmations, and 8.7 million Signature Confirmations. The total volume of these  
24 Special Services was 1,357.1 million transactions in 2004. There were also 15.3 million  
25 Post Office Boxes and 96.8 million Stamped cards in 2004.

1           **B.     Registered Mail**

2                   **1.     Definition**

3           Registered Mail is a special service for First-Class mailers, providing added  
4 protection for valuable mail and payment for damaged or lost mail. According to the  
5 Domestic Mail Manual, “it is the most secure service that the USPS offers. [Domestic  
6 Mail Manual, S911.1.1, p. S-17 (DMM Issue 58 Updated 9-16-04)] Registered Mail  
7 involves a series of receipts as the piece of mail travels from sender to recipient.  
8 Registered Mail must be prepaid at First-Class Mail rates, and cannot include Business  
9 Reply Mail.

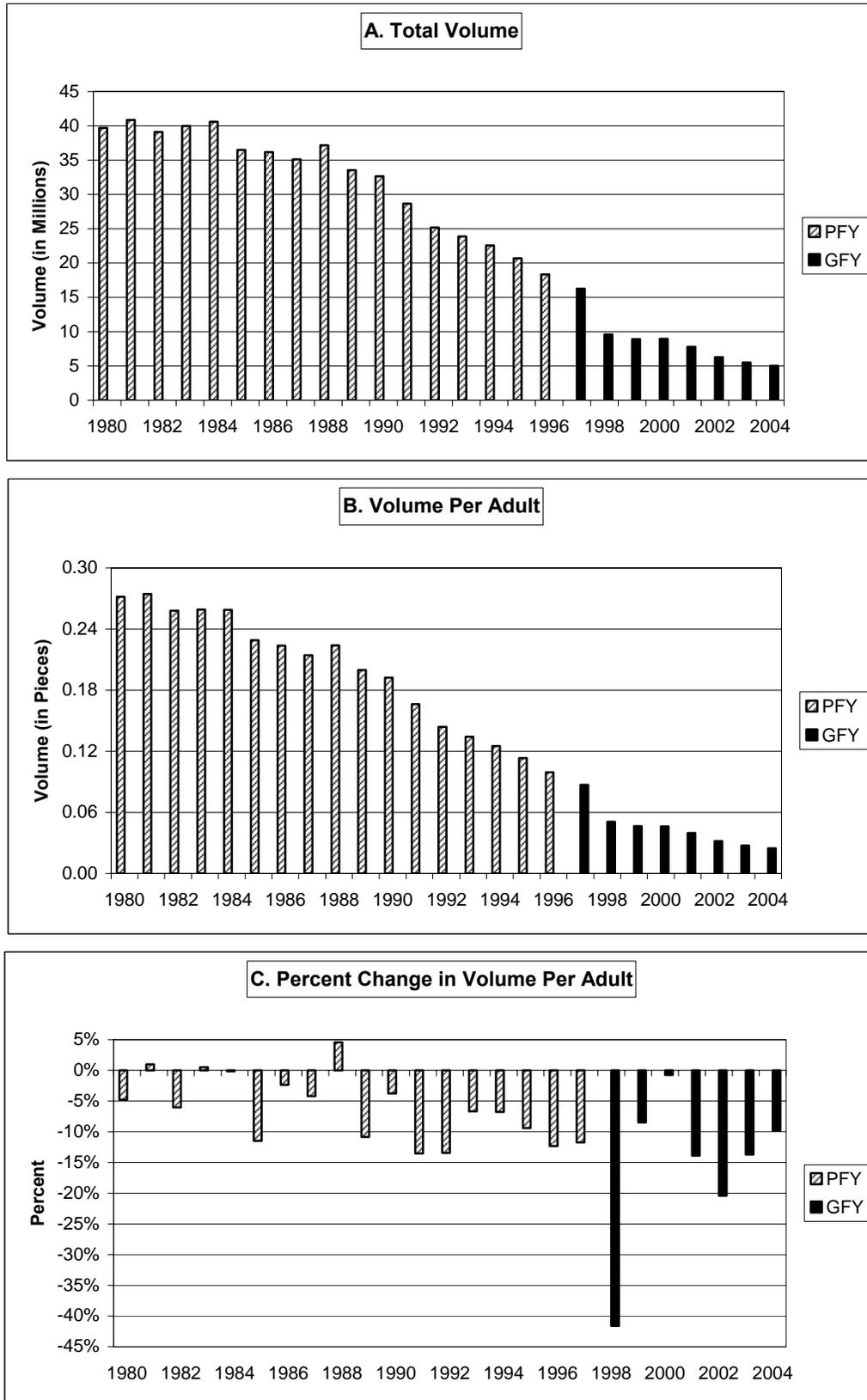
10                   **2.     Volume History**

11           Figure 26 shows that the volume of Registered Mail has declined from 39.7  
12 million pieces in 1980 to just over 5 million pieces in 2004. Volume per adult has  
13 followed suit, dropping from 0.27 pieces per adult in 1980 to 0.025 pieces per adult in  
14 2004. Over this period, annual changes in volume have been mostly negative, with a  
15 few years experiencing small positive growth. Registered Mail volume per adult has  
16 declined in each of the last 16 years.

17                   **3.     Factors Affecting Volume**

18           Because Registered Mail has some features in common with Certified Mail and  
19 Insurance, it is a somewhat redundant postal offering. Some mailers may be opting for  
20 lower-cost Certified Mail and foregoing postal insurance, perhaps because the  
21 merchandise is insured by other means. Moreover, many private delivery companies  
22 provide insurance as part of their basic rates. Moreover, with the introduction of end-to-  
23 end tracking and tracing services, alternative delivery services have come to be  
24 perceived as more secure carriers.

**Figure 26**  
**Registered Mail Volume History**



#### 4. Recent Contributions to Volume

Table 46 shows that over the four-year period ending in 2005Q1, the volume of Registered Mail decreased 43.92 percent. Table 46 also presents the contributions of individual factors to this four-year volume change, based on the econometric analysis of Thomas Thress.

| Table 46   |                               |                         |                                    |
|--|-------------------------------|-------------------------|------------------------------------|
| Contributions to Change in Registered Mail Volume<br>For the Four Years Ending in 2005Q1 |                               |                         |                                    |
| Variable   | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price  | 24.2%                         | -0.099                  | -2.12%                             |
| First-Class Letters<br>Volume  | -10.0%                        | 1.173                   | -11.59%                            |
| Econometric Trend  |                               |                         | -34.88%                            |
| Adult Population   | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors  |                               |                         | -5.41%                             |
| Total Change in Volume   |                               |                         | -43.92%                            |

##### a. Price

The real price of Registered Mail increased 24.2 percent. It is estimated that the own-price elasticity of Registered Mail is -0.099. Applying this elasticity to the percent increase in real price produces a decrease in volume of 2.12 percent.

##### b. First-Class Letters Volume

Because Registered is a special service for senders of First-Class letters, there is a direct relationship between First-Class letter volume and the use of Registered Mail. Table 46 shows that over the past four years, First-Class letter volume per adult decreased by 10.0 percent. With an elasticity of 1.173, the estimated effect of the

1 change in First-Class letter volume on the volume of Registered Mail is an 11.59  
2 percent decrease. Note that although there is no measured, direct impact of income on  
3 the volume of Registered Mail, income changes affect the volume of First-Class letters  
4 which, in turn, affects the volume of Registered Mail.

5 **c. Econometric Trend**

6 As seen in Figure 26, Registered Mail volume has been declining for many years.  
7 This long-term volume decline is measured econometrically by a negative time trend.  
8 Table 46 shows that over the past four years, this time trend explains a 34.88 percent  
9 decline in the volume of Registered Mail.

10 **d. Adult Population**

11 Growth in adult population is estimated to have contributed 5.21 percent to the  
12 volume of Registered Mail over the past four years.

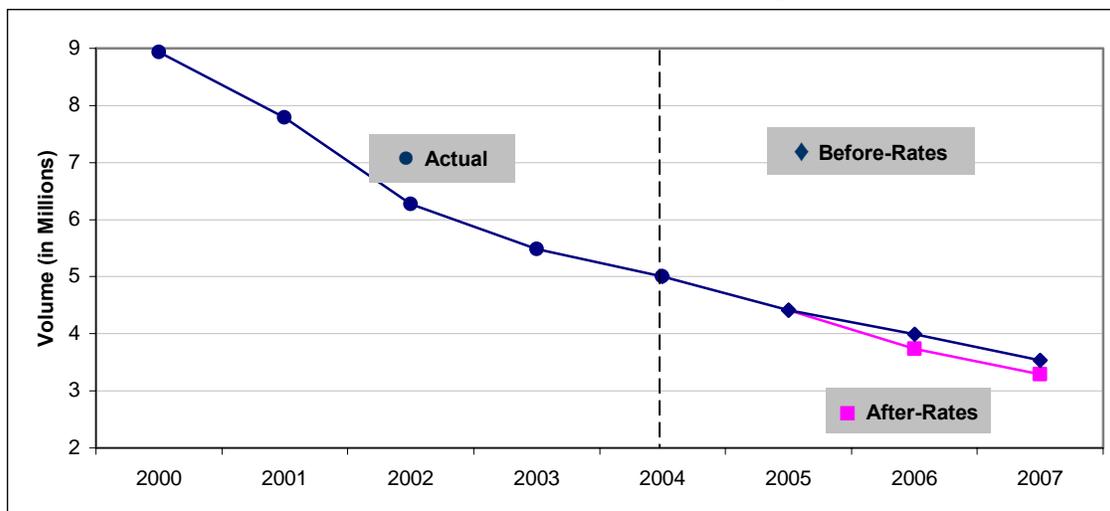
13 **e. Other Factors**

14 Other factors beyond those measured by the variables discussed above were  
15 responsible for a 5.41 percent decline in Registered Mail volume over the past four  
16 years. These other factors include seasonal differences and impacts included in the  
17 Base Volume of Registered Mail.

18 **5. Before- and After-Rates Volume Forecasts**

19 The before-rates and after-rates forecasts of Registered Mail are presented in  
20 Figure 26A, along with the recent volume history. The forecasts are obtained from  
21 Attachment A of the testimony of Thomas Thress (USPS-T-7). The long-term historical  
22 decline in volume is projected to continue. The before-rates Test Year (GFY 2006)  
23 forecast of Registered Mail is 3.990 million pieces. The Test Year after-rates forecast is  
24 3.738 million pieces.

**Figure 26A**  
**Before- and After-Rates Forecasts of Registered Mail**



**C. Insured Mail**

**1. Definition**

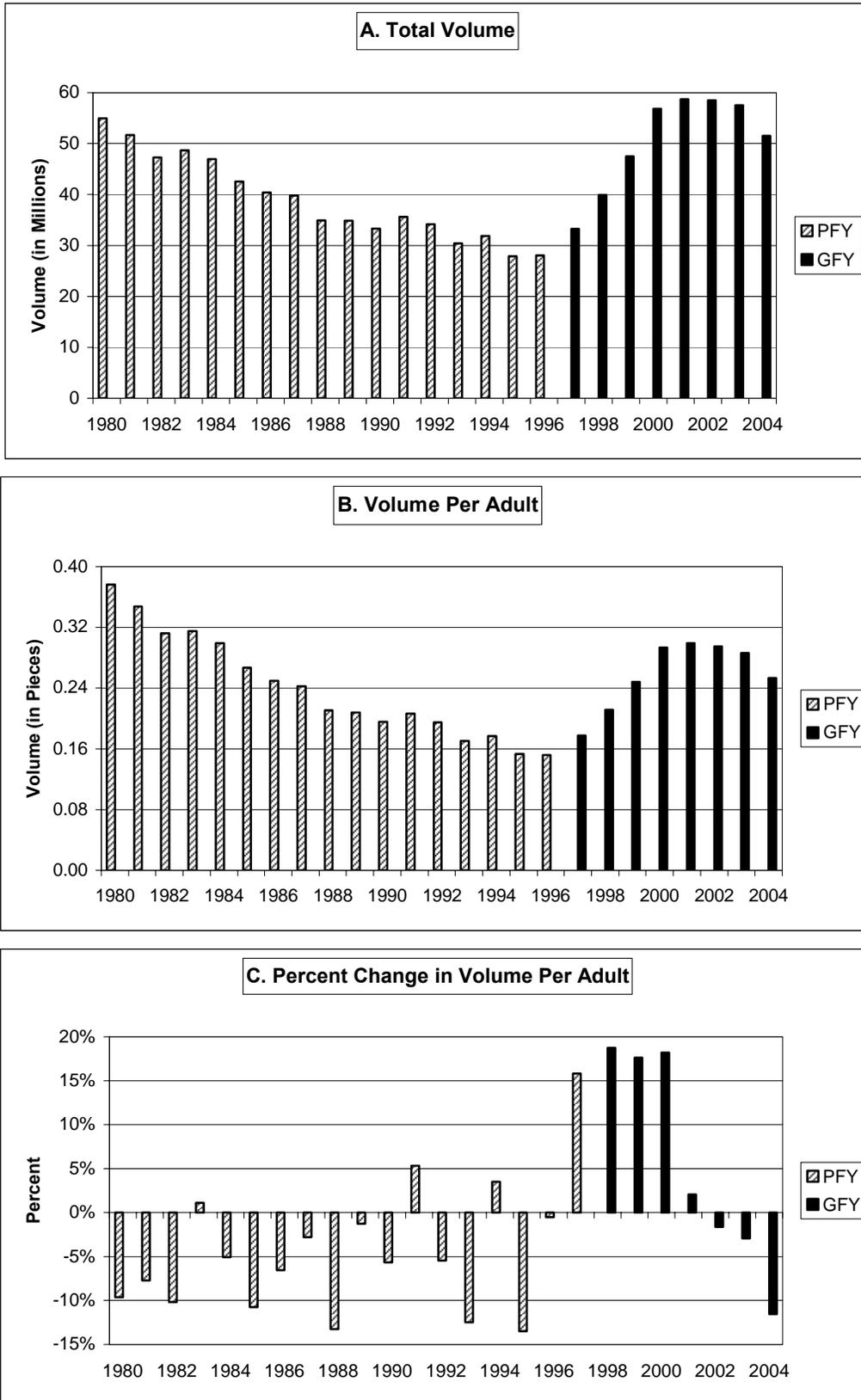
Insured Mail provides reimbursement for loss or damages. Insurance may not be purchased for unusually fragile or ill-prepared articles. Even though no record of Insured Mail is kept at the post office of mailing, the sender is provided a mailing receipt. For mail insured for more than \$50, a delivery record is kept at the addressee post office. Insured Mail is handled in transit as ordinary mail. As a result of the MC96-3 case, the maximum level of insurance was increased from \$600 to \$5,000.

**2. Volume History**

Figure 27 shows that from 1980 to 1995, the volume of Insured Mail fell by half, from about 55 million pieces to about 28 million pieces. Insured Mail volume began a recovery in 1996 and reached 58.7 million pieces in 2001. After small declines in 2002 and 2003, volume fell sharply in 2004, to 51.5 million pieces.

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**Figure 27**  
**Insured Mail Volume History**



1           Volume per adult shows a similar pattern to total volume. The larger percentage  
2 increases in volume per adult in the four years from 1997 through 2000 are clearly  
3 different from the long-term history of this mail product, which has almost always seen  
4 declines in volume per adult.

### 5                           **3. Factors Affecting Volume**

6           The long-term decline in Insured Mail volume is due to several factors. First, until  
7 1996, insurance coverage was limited to \$600 which, due to inflation, gradually declined  
8 in real value over time. Therefore, postal insurance became a less and less valuable  
9 product. A second reason for the decline in Insurance volume is the increased use of  
10 credit cards to make purchases of products that were shipped through the mail. Credit  
11 card companies often provide insurance, making postal insurance unnecessary. A third  
12 reason for the decline was the decline in the use of Parcel Post during the 1980s.  
13 Insurance is often used with Parcel Post, and as the use of Parcel Post declined, so did  
14 the use of postal insurance. Reinforcing this impact was the fact that UPS began  
15 including insurance in its basic rates, which made it a more attractive alternative for  
16 customers seeking insurance protection.

17           The large increase in Insured Mail volume beginning in 1996 is due to the  
18 increase in the value of insurance from \$600 to \$5,000 following the Special Services  
19 reclassification case. This increase more than offset the gradual decline in the real  
20 value of insurance coverage that had occurred over the previous years.

### 21                           **4. Recent Contributions to Volume**

22           Table 47 shows that during the four-year period ending in 2005Q1, the volume of  
23 Insured Mail decreased by 17.72 percent. Table 47 also presents the contributions of  
24 individual factors to this four-year volume change, based on the econometric analysis of  
25 Thomas Thress.

| <b>Table 47</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Insured Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 15.4%                         | -0.230                  | -3.23%                             |
| Parcel Post Volume  | 9.1%                          | 0.296                   | 2.62%                              |
| Econometric Trends  | -                             | -                       | -16.02%                            |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   | -                             | -                       | -6.21%                             |
| Total Change in Volume  | -                             | -                       | -17.72%                            |

1

2

**a. Price**

3

Table 47 shows that the real own-price of Insured Mail increased 15.4 percent.

4

Applying an estimated price elasticity of -0.230 to this decline in price yields a 3.23

5

percent decrease in volume due to this factor.

6

**b. Parcel Post Volume**

7

Insurance is often purchased on Parcel Post mailings. Therefore, changes in

8

Parcel Post volume can be expected to affect Insured Mail volume. It is estimated that

9

the 9.1 percent increase in Parcel Post volume contributed 2.62 percent to the volume

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Insured Mail, as shown in Table 47.

11

**c. Econometric Trends**

12

Three distinct econometric trends are estimated in the demand equation for

13

Insured Mail. A negative linear time trend is estimated over the full sample period,

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reflecting the long-term decline in Insured Mail volume. Beginning in 1997Q4, there is a

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positive logistic time trend reflecting the effect of the increase in the maximum value of

16

insurance from \$600 to \$5,000. A negative linear time trend is introduced beginning in

1 2003Q4, reflecting recent declines in the volume of parcels sent through the Postal  
2 Service. Over the past four years, the combined impact of these three time trends is to  
3 reduce the volume of Insured Mail by 16.02 percent.

4 **d. Adult Population**

5 Adult population growth is estimated to have added 5.21 percent to the Insured  
6 Mail volume.

7 **e. Other Factors**

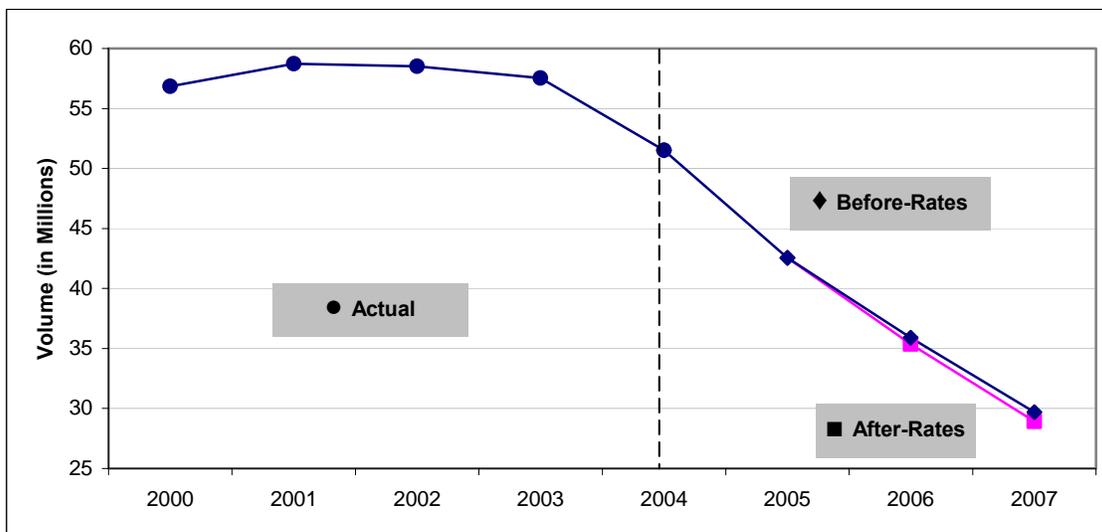
8 Other factors were responsible for a 6.21 percent decrease in Insured Mail  
9 volume over the past four years. These other factors include seasonal differences as  
10 well as other influences captured in the Base Year volume.

11 **5. Before- and After-Rates Volume Forecasts**

12 The before-rates and after-rates forecasts of Insured Mail are presented in Figure  
13 27A, along with the recent volume history. The forecasts are obtained from Attachment  
14 A of the testimony of Thomas Thress (USPS-T-7). As the positive impact of the 1996  
15 increase in Insurance coverage dissipates, volumes are projected to resume their long-  
16 term historical decline. The before-rates Test Year (GFY 2006) forecast of Insured Mail  
17 is 35.903 million pieces. The Test Year after-rates forecast is 35.366 million pieces.

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**Figure 27A  
Insured Mail Volume Forecasts**



1        **D.     Certified Mail**

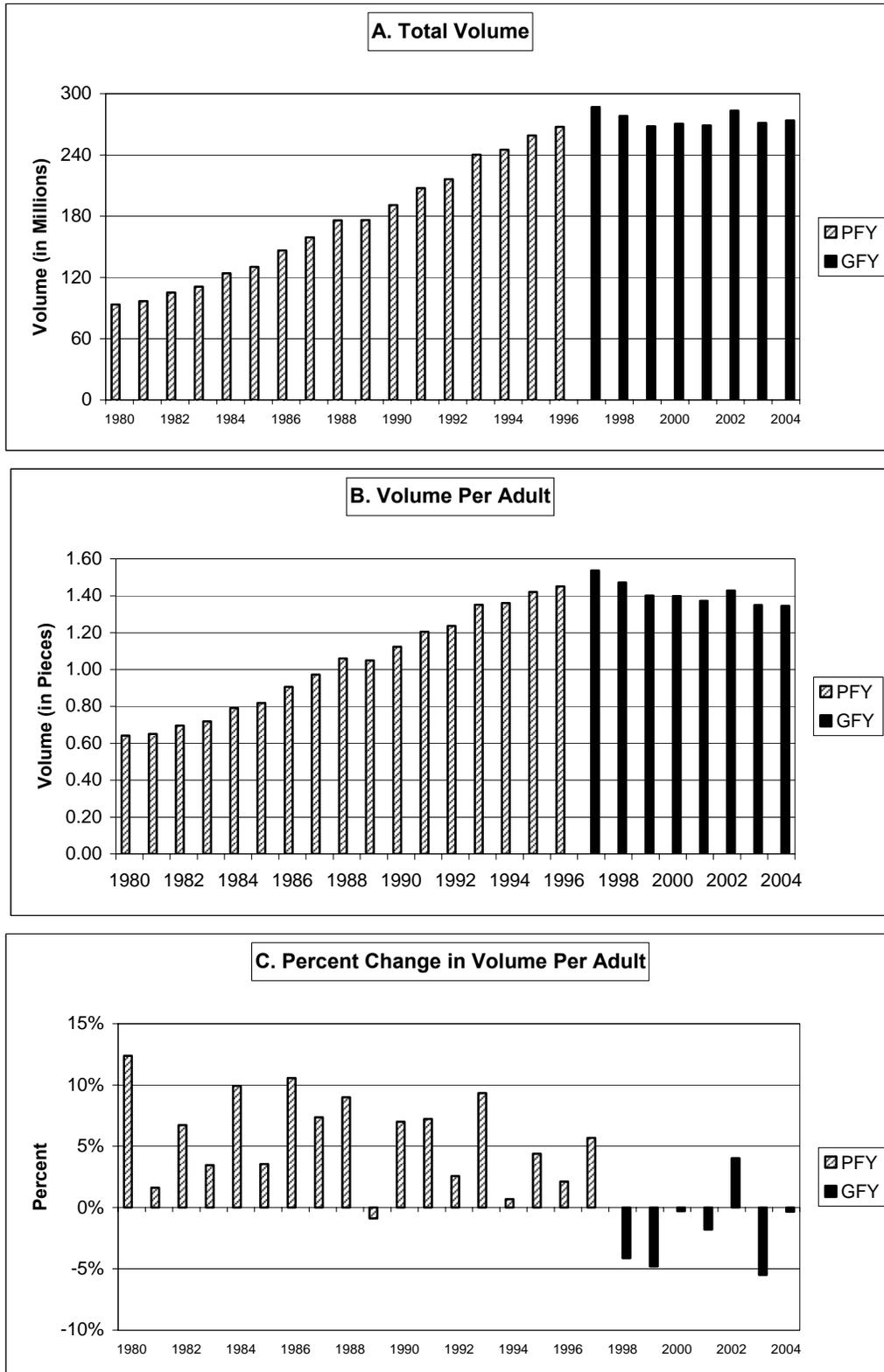
2                **1.     Definition**

3                Certified Mail is a less expensive substitute for "no value" Registered First-Class  
4 Mail. No insurance coverage is offered with this service, and certification is available  
5 only for First-Class Mail. Certified Mail provides the mailer with a mailing receipt, and a  
6 record of delivery is maintained at the delivery office. The service may also be used in  
7 conjunction with restricted delivery and return receipt services to provide both enhanced  
8 control of delivery and proof of delivery.

9                **2.     Volume History**

10              Certified Mail volume has increased since 1980, rising from 93.6 million pieces to  
11 273.7 million pieces in 2004. Volume per adult has followed suit, increasing from 0.64  
12 pieces per adult in 1980 to 1.34 pieces per adult in 2004. Annual growth has been  
13 positive in most years over the 1980 to 2004 period, but the last seven years have  
14 experienced growth in only 2002.

**Figure 28**  
**Certified Mail Volume History**



### 3. Factors Affecting Volume

For many mailers, Certified Mail has become a lower-cost alternative to Registered Mail. Although there are no insurance features included in Certified Mail, for reasons discussed in the section on Insured Mail, insurance is often provided for merchandise purchased with credit cards. Therefore, mailers who want a record of their mail delivery, but do not want insurance, find Certified Mail to be an attractive product.

Certified Mail is also a valuable service to verify the mailing of important documents such as legal papers or tax information. Increased use of Certified Mail is therefore linked to increased mailing of these kinds of documents.

### 4. Recent Contributions to Volume

Table 48 shows that during the four-year period ending in 2005Q1, the volume of Certified Mail decreased by 0.02 percent. Table 48 also presents the contributions of individual factors to this four-year volume change, based on the econometric analysis of Thomas Thress.

#### a. Price

Table 48 shows that the real price of Certified Mail increased 51.8 percent. This price increase is responsible for an estimated 7.35 percent decline in volume, obtained after applying the estimated own-price elasticity of -0.183.

#### b. First-Class Letters Volume

Because Certified Mail service is used with First-Class letters, the volume of Certified Mail is related to the volume of First-Class letters. Over the past four years, First-Class letter volume per adult declined 10.0 percent. With an elasticity of the volume of Certified Mail with respect to the volume of First-Class letters equal to 0.767,

1 the decline in First-Class letter volume is estimated to have reduced Certified Mail  
2 volume by 7.74 percent.

3

| <b>Table 48</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Certified Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 51.8%                         | -0.183                  | -7.35%                             |
| First-Class Letters<br>Volume   | -10.0%                        | 0.767                   | -7.74%                             |
| Econometric Trend   | -                             | -                       | 13.04%                             |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   | -                             | -                       | -1.65%                             |
| Total Change in Volume  | -                             | -                       | -0.02%                             |

4

5 **c. Econometric Trend**

6 The growth in Certified Mail, partly at the expense of other Special Services and  
7 partly because of the increase in the mailing of important documents, is accounted for  
8 by an econometric trend term. Table 48 shows that this trend term explains a 13.04  
9 percent increase in the volume of Certified Mail over the past four years.

10 **d. Adult Population**

11 The increase in adult population over the past four years is estimated to have  
12 added 5.21 percent to the use of Certified Mail.

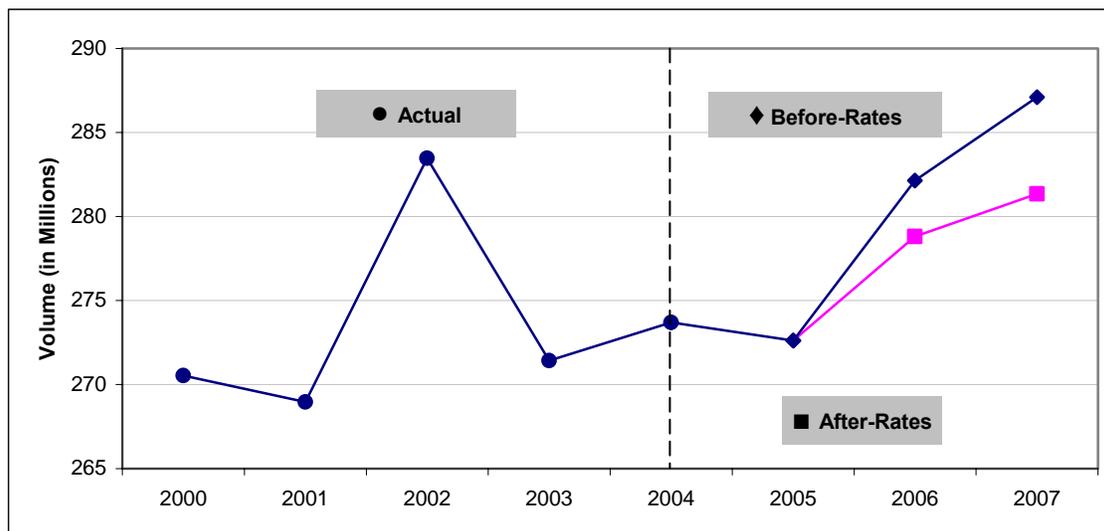
13 **e. Other Factors**

14 Other factors contributed to a decrease in the use of Certified Mail by 1.65  
15 percent. These other factors include seasonal variations and other influences included  
16 in the Base Year volume of Certified Mail.

**5. Before- and After-Rates Volume Forecasts**

The before-rates and after-rates forecasts of Certified Mail are presented in Figure 28A, along with the recent volume history. The forecasts are obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to increase, though the rise will be smaller in the after-rates situation. The before-rates Test Year (GFY 2006) forecast of Certified Mail is 282.145 million pieces. The Test Year after-rates forecast is 278.811 million pieces.

**Figure 28A  
Certified Mail Volume Forecasts**



**E. Collect-on-Delivery**

**1. Definition**

Collect-on-Delivery (COD) is used primarily by businesses mailing to individuals. The remainder of any payment due for an article and the cost of postage are paid at the time of delivery, and the amount collected is returned to the mailer by a postal money order or personal check. This service provides the mailer with a mailing receipt, and the destination post office keeps a delivery record. The current maximum COD payment is

1 \$600. This service may be used with Express Mail, First-Class Mail, Priority Mail and  
2 Standard Mail.

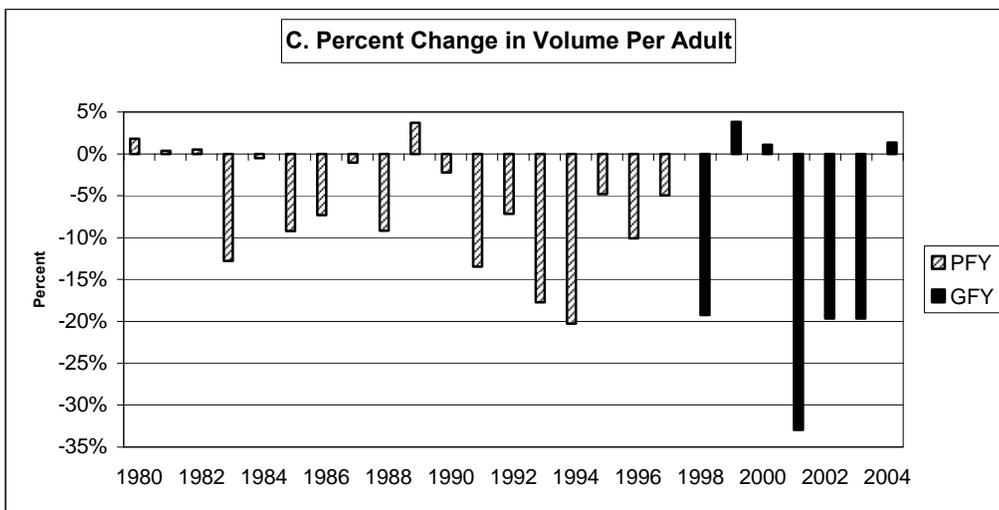
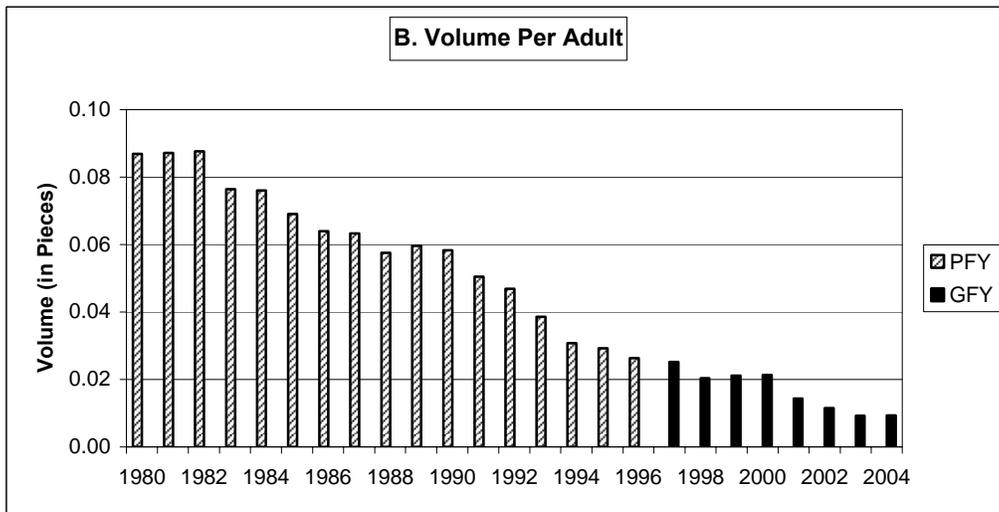
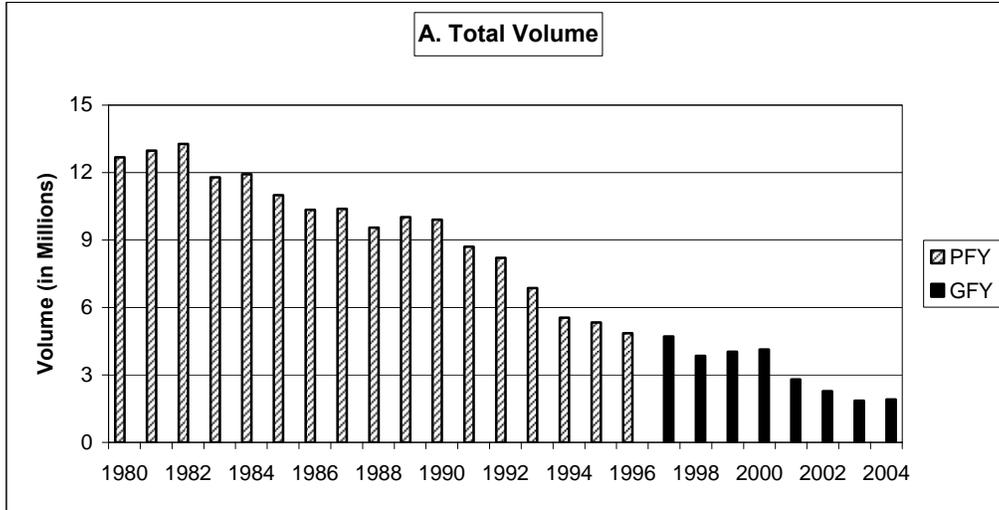
3 **2. Volume History**

4 As Figure 24 shows, COD volume has experienced a long-term decline, falling  
5 from 12.7 million transactions in 1980 to 1.9 million transactions in 2004. On a per-adult  
6 basis, volume in 2004 was only 0.009 pieces, representing a nearly 90 percent decline  
7 over this period.

8 **3. Factors Affecting Volume**

9 The use of COD has declined for many years. One factor explaining much of this  
10 decline has been the increased use of credit cards to make purchases that in the past,  
11 might have been made using COD service. More recently, online payment services,  
12 such as PayPal, are replacing COD services.

**Figure 29**  
**COD Mail Volume History**



**4. Recent Contributions to Volume**

Table 49 shows that during the four-year period ending in 2005Q1, the volume of COD mail decreased by 54.63 percent. Table 49 also presents the contributions of individual factors to this four-year volume change, based on the econometric analysis of Thomas Thress.

| <b>Table 49</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in COD Mail Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 1.5%                          | -0.592                  | -0.89%                             |
| Econometric Trend   | -                             | -                       | -24.67%                            |
| 2002Q2 Dummy  | -                             | -                       | -32.07%                            |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   | -                             | -                       | -14.97%                            |
| Total Change in Volume  | -                             | -                       | -54.63%                            |

**a. Price**

The real price of COD increased 1.5 percent over the past four years. It is estimated that the long-run own-price elasticity of COD volume is -0.592. Applying this elasticity to the price increase yields a 0.89 percent decline in volume due to this factor.

**b. Econometric Trend**

The long-term decline in COD volume, quite evident from its volume history, is accounted for econometrically by a negative trend term. Table 49 shows that over the past four years, this trend term explains a 24.67 percent decline in volume.

1                                   **c.     2002Q2 Dummy**

2                   Post 9/11 security concerns along with the anthrax scare created an increased  
3 reluctance to send and receive pieces COD. This impact is accounted for by a dummy  
4 variable beginning in 2002Q2. Table 49 shows that over the past four years, this  
5 dummy variable accounts for a 32.07 percent reduction in the volume of COD Mail.

6                                   **d.     Adult Population**

7                   Increases in adult population added 5.21 percent to the volume of COD  
8 transactions over the past five years.

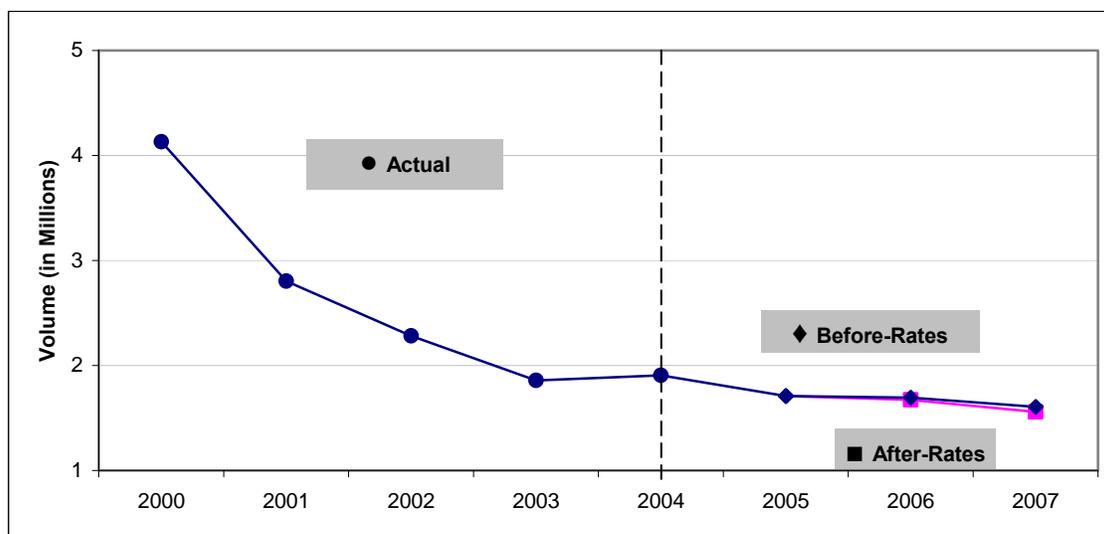
9                                   **e.     Other Factors**

10                  Table 49 shows that other factors were responsible for a 14.97 percent decrease  
11 in COD volume. Included in these other factors are changes in seasonal variation and  
12 other influences captured in the Base Volume of COD Mail.

13                               **5.     Before- and After-Rates Volume Forecasts**

14                  The before-rates and after-rates forecasts of COD Mail are presented in Figure  
15 29A, along with the recent volume history. The forecasts are obtained from Attachment  
16 A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to decline but at  
17 a relatively modest pace, following the experience of the most recent year. The before-  
18 rates Test Year (GFY 2006) forecast of COD Mail is 1.693 million pieces. The Test  
19 Year after-rates forecast is 1.673 million pieces.

**Figure 29A  
COD Mail Volume Forecasts**



1 **F. Return Receipts**

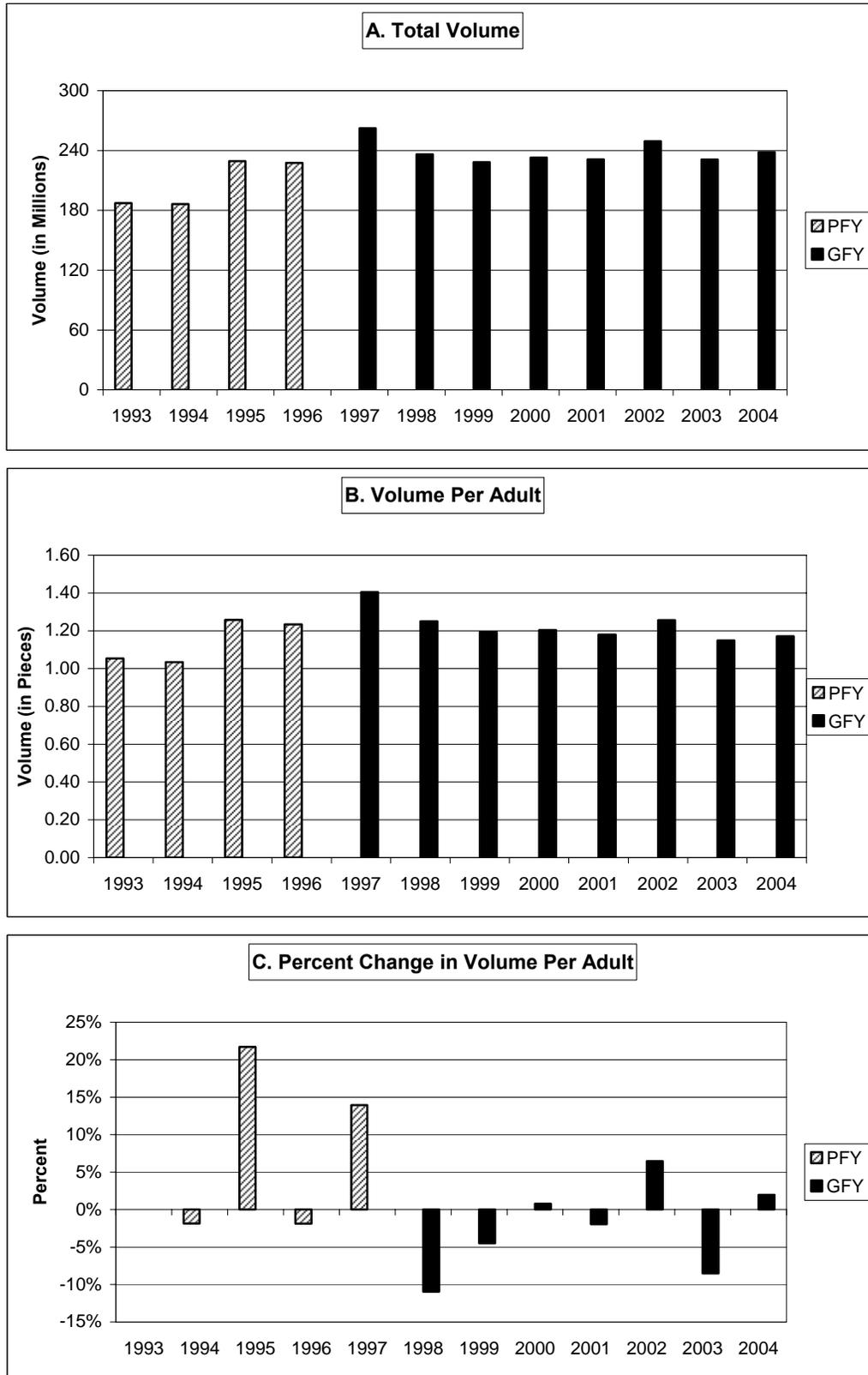
2 **1. Definition**

3 This service provides the mailer with the date of actual delivery and the  
 4 addressee's actual mailing address. This service is available only for Express Mail and  
 5 mail sent as Registered Mail, Certified Mail, COD, or mail insured for more than \$50.  
 6 Upon delivery, a Return Receipt is mailed to the sender.

7 **2. Volume History**

8 Figure 30 presents the volume of Return Receipts from 1993 to 2004. Since  
 9 1993, volume has increased, rising from 187.3 million to 238.5 million in 2004. Volume  
 10 has declined since 1997, however. Volume per adult has gone from 1.05 in 1993 to  
 11 1.17 in 2004. Annual growth has fluctuated over the 1993 to 2004 period.

**Figure 30**  
**Return Receipts Volume History**



1                   **3.     Factors Affecting Volume**

2                   While the introduction of Delivery Confirmation appears to have created a lower  
3 cost alternative to Return Receipts, there has been little effect on its volume. This  
4 insensitivity of Return Receipts volume to Delivery Confirmation is likely to be because  
5 the volume of Return Receipts is closely related to the volume of Certified Mail, which is  
6 not eligible for use with Delivery Confirmation. Moreover, Delivery Confirmation does  
7 not provide physical documentation of delivery. Signature Confirmation is unlikely to  
8 affect volumes of Return Receipt because its cost is higher and it is not available to  
9 users of Certified Mail. The recent introduction of electronic receipts in 2005Q1  
10 provides a lower cost option (\$1.30 as opposed to \$1.75) for bulk mailers using privately  
11 printed Certified Mail, Registered Mail, and COD.

12                   **4.     Recent Contributions to Volume**

13                   Table 50 shows that during the four-year period ending in 2005Q1, the volume of  
14 Return Receipts increased by 4.19 percent. Table 50 also presents the contributions of  
15 individual factors to this four-year volume change, based on the econometric analysis of  
16 Thomas Thress.

| <b>Table 50</b>  |                               |                         |                                    |
|--|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Return Receipts Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable   | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price  | 2.0%                          | -0.180                  | -0.35%                             |
| Certified Mail Volume  | -5.3%                         | 0.845                   | -4.46%                             |
| Dummy beginning<br>2002Q2  | -                             | -                       | 2.03%                              |
| Adult Population   | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors  | -                             | -                       | 1.95%                              |
| Total Change in Volume   | -                             | -                       | 4.19%                              |

1                                    **a.     Own-Price**

2                                    Over the past four years, the real own-price of Return Receipts increased 2.0  
3 percent. Applying an estimated own-price elasticity of -0.180 to this increase in price  
4 yields a 0.35 percent decline in volume as shown in Table 50.

5                                    **b.     Certified Mail Volume**

6                                    Because Return Receipts are often purchased in conjunction with Certified Mail,  
7 the change in the volume of Certified Mail has a direct impact on the volume of Return  
8 Receipts. Over the past four years, Certified Mail volume per adult has decreased by  
9 5.3 percent. The estimated elasticity of the volume of Return Receipts with respect to  
10 the volume of Certified Mail is 0.845. Therefore, the calculated impact of Certified Mail  
11 on Return Receipts is a 4.46 percent fall in volume.

12                                   **c.     Dummy beginning 2002Q2**

13                                   A dummy variable beginning in 2002Q2 explains a 2.03 percent increase in the  
14 volume of Return Receipts over the four-year period ending in 2005Q1. The positive  
15 contribution of this post-9/11 and anthrax dummy suggests that some mailers have

1 become more concerned about ensuring that their mail is delivered, thus increasing the  
2 volume of Return Receipts modestly.

3 **d. Adult Population**

4 The increase in adult population is estimated to have contributed to a 5.21  
5 percent increase in Return Receipts volume.

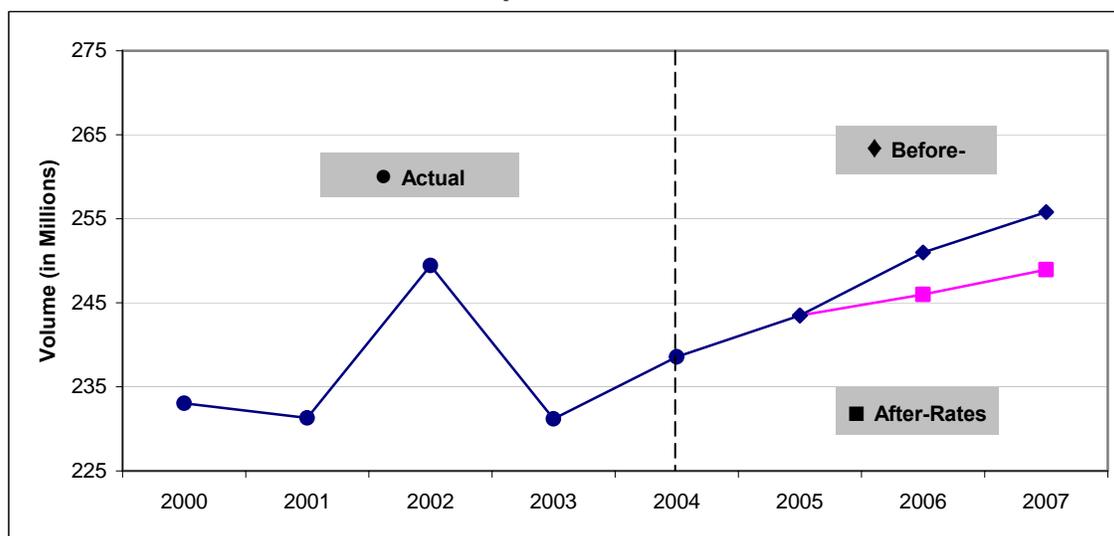
6 **e. Other Factors**

7 Table 50 shows that other factors contributed a 1.95 percent increase in Return  
8 Receipts volume over the past four years. These other factors include seasonal  
9 differences and other influences captured in the Base Year volume.

10 **5. Before- and After-Rates Volume Forecasts**

11 The before-rates and after-rates forecasts of Return Receipts are presented in  
12 Figure 30A, along with the recent volume history. The forecasts are obtained from  
13 Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to  
14 rise. The before-rates Test Year (GFY 2006) forecast of Return Receipts is 250.973  
15 million pieces. The Test Year after-rates forecast is 245.970 million pieces.

**Figure 30A  
Return Receipts Volume Forecasts**



## **G. Money Orders**

### **1. Definition**

Money Orders are used as a substitute for cash or checks in making financial transactions. The current maximum amount is \$700 for a single Money Order. There is a limit of \$10,000 total per individual per day. Money Orders are also used to transfer funds received during COD transactions to the firm sending the merchandise. Money Orders must be paid for with cash, traveler's checks payable in U.S. dollars (if the purchase is for at least 50 percent of the value of the traveler's checks), or with ATM/Debit cards approved by the Postal Service.

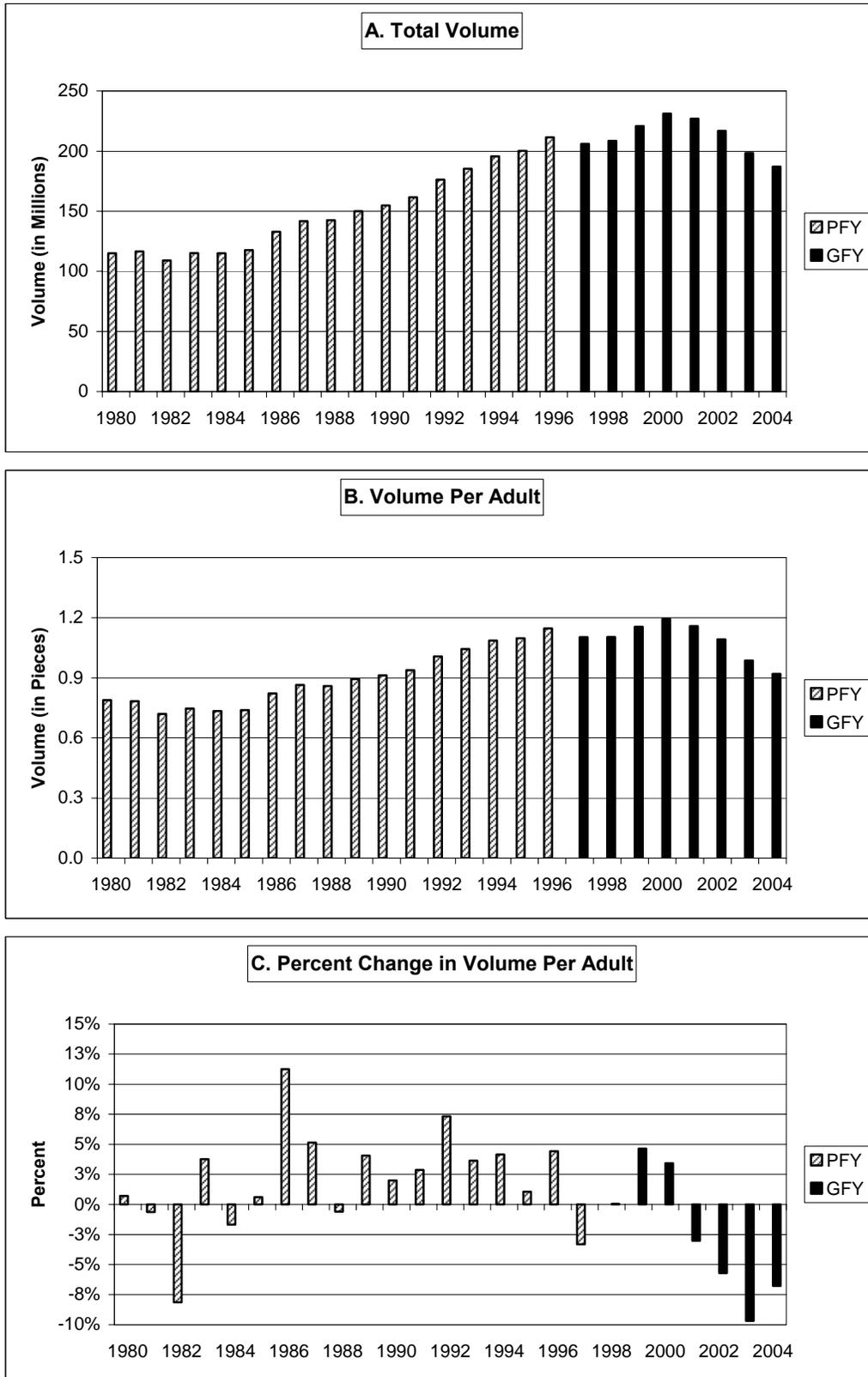
### **2. Volume History**

Figure 31 shows the recent volume history for Money Order transactions. Since 1980, volume has increased from 115.2 million pieces in 1980 to 187.2 million pieces in 2004. Since 2000, the volume of Money Orders has fallen from 231.2 million pieces to its current 2004 level. Volume per adult has followed this pattern, increasing from 0.79 pieces in 1980 to its peak of 1.19 pieces in 2000. Since then, volume per adult has fallen to its current level of 0.92 pieces. Since 2001, annual percent changes in Money Order volume per adult have been negative.

### **3. Factors Affecting Volume**

Money Orders are a popular method for transferring money and making payments for people who do not have bank accounts. Over time, there has been an increase in the "unbanked." One reason for this increase in the number of people without bank accounts has been that many banks have increased their account fees, making banks a less attractive option for people who would have small monthly balances. It is also the case that immigrants are less likely to have bank accounts, and

**Figure 31**  
**Money Orders Volume History**



1 recent increases in immigration have therefore acted to increase the number of people  
 2 without bank accounts and created an increased demand for Money Orders.  
 3 More recently, Wal-Mart began selling money orders, and several other chain stores  
 4 followed suit thereafter. In addition, growth in the use of pre-paid debit cards has also  
 5 probably caused the volume of Postal Service Money Orders to decline.

6 **4. Recent Contributions to Volume**

7 Table 51 shows that during the four-year period ending in 2005Q1, the volume of  
 8 Money Orders decreased by 20.47 percent. Table 51 also presents the contributions of  
 9 individual factors to this four-year volume change, based on the econometric analysis of  
 10 Thomas Thress.

| <b>Table 51</b>   |                               |                         |                                    |
|---|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Money Orders Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable  | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| Own-Price   | 8.2%                          | -0.604                  | -4.65%                             |
| Employment  | -6.1%                         | 0.867                   | -5.29%                             |
| Econometric Trend from<br>2000Q4  | -                             | -                       | -15.05%                            |
| Adult Population  | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors   | -                             | -                       | -1.46%                             |
| Total Change in Volume  | -                             | -                       | -20.47%                            |

11 **a. Price**

12 It is estimated that the own-price elasticity of Money Orders is -0.604. The real  
 13 own-price of Money Orders increased 8.2 percent over the past four years. Applying  
 14 the estimated own-price elasticity of -0.604 to this price increase yields a reduction in  
 15 Money Order volume of 4.65 percent.

1                           **b.     Employment**

2                   The elasticity of Money Order volume with respect to employment per adult is  
3 estimated to be 0.867. Employment per adult fell 6.1 percent. This decrease in  
4 employment per adult contributed a 5.29 percent reduction to the volume of Money  
5 Orders.

6                           **c.     Econometric Trend**

7                   The decline in Money Order volume due to Wal-Mart's entry into this market is  
8 accounted for by a negative econometric trend. Other chain stores followed suit  
9 thereafter. Additionally, this period experienced the growth in popularity of debit cards  
10 and the introduction of pre-paid debit cards, both of which could substitute for Money  
11 Orders. Table 51 shows that over the past four years, this trend explains a 15.05  
12 percent decline in the volume of Money Orders.

13                           **d.     Adult Population**

14                   Growth in adult population is estimated to have contributed 5.21 percent to the  
15 volume of Money Orders.

16                           **e.     Other Factors**

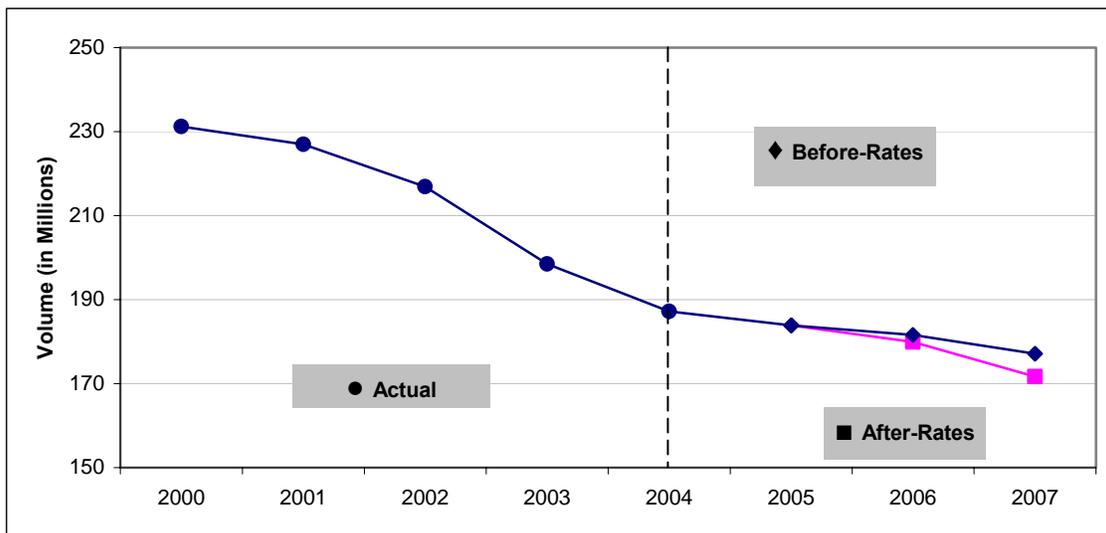
17                   Table 51 shows that other factors are estimated to have contributed a 1.46  
18 percent decline in the volume of Money Orders over the past four years. Included in  
19 these other factors are seasonal variations and other influences included in the Base  
20 Year volume of Money Orders.

21                           **5.     Before- and After-Rates Volume Forecasts**

22                   The before-rates and after-rates forecasts of Money Order transactions are  
23 presented in Figure 31A, along with the recent volume history. The forecasts are  
24 obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). Money  
25 Order transactions are projected to continue their recent decline, though improvements

1 in the economy will slow the pace of this decline from what has been seen in the past  
 2 few years. The before-rates Test Year (GFY 2006) forecast of Money Orders is  
 3 181.567 million transactions. The Test Year after-rates forecast is 179.939 million  
 4 transactions.

**Figure 31A**  
**Money Order Transactions Volume Forecasts**



## 5 H. Delivery and Signature Confirmation

### 6 1. Definition

7 Delivery Confirmation is a service that provides the mailer with information about  
 8 the date and time an article was delivered. Signature Confirmation also provides  
 9 information about the date and time of delivery but further includes a record of delivery  
 10 with a signature that is maintained by the Postal Service and can be requested by the  
 11 mailer. This service is available only for First-Class parcels, Priority Mail, Standard  
 12 parcels, and Package Services Mail. The discussion that follows combines the  
 13 volumes of Delivery Confirmation and Signature Confirmation.

14

## 2. Volume History

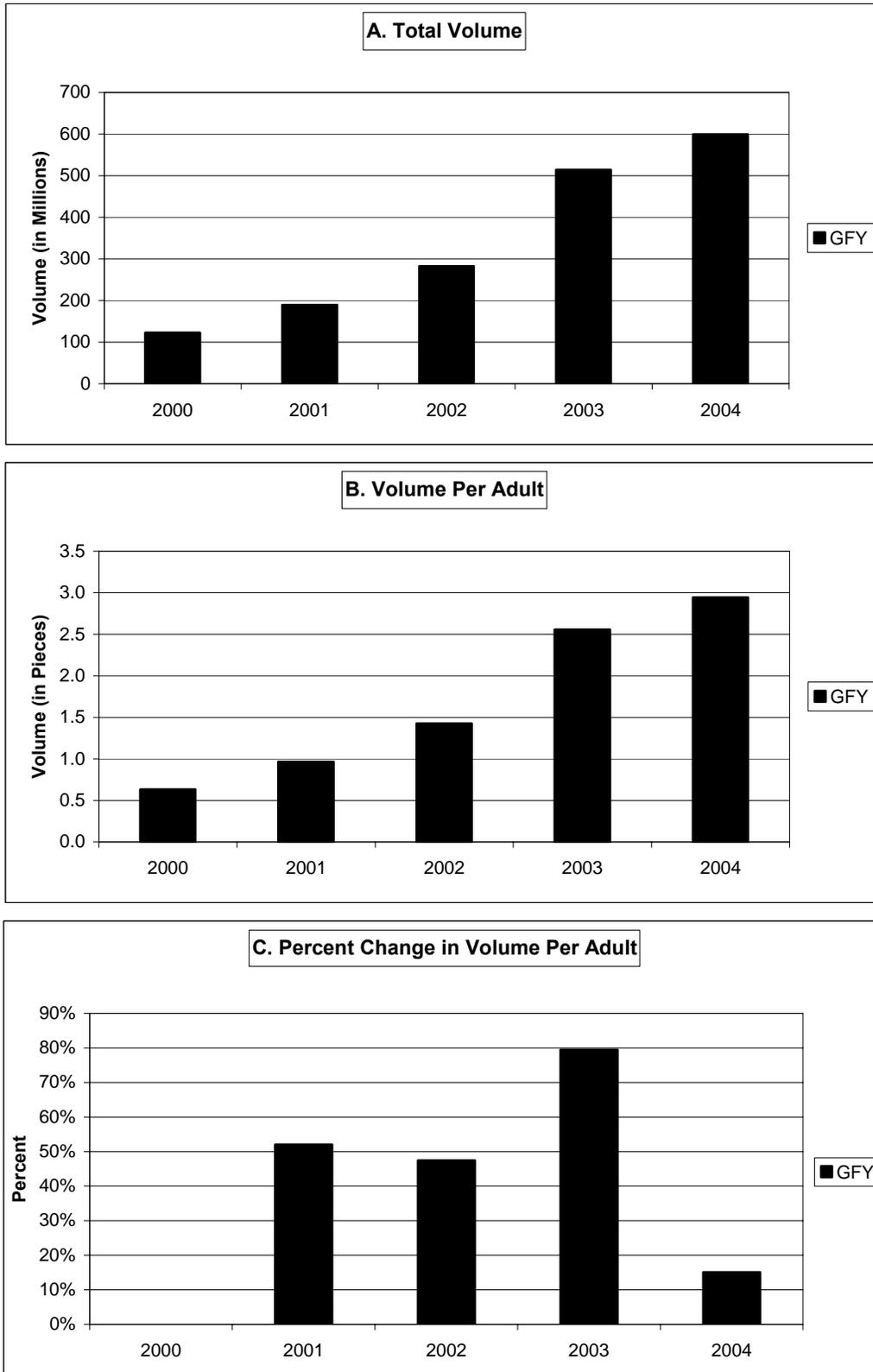
Figure 32 shows the volume of Delivery and Signature Confirmation since 2000, its first full year of existence. Volume has grown considerably, rising from 123 million pieces in 2000 to 599 million pieces in 2004. Volume per adult has risen similarly, from about 0.6 pieces in 2000 to 2.9 pieces in 2004. Annual growth in volume per adult has been quite large, but in 2004 slowed to about 15 percent.

## 3. Factors Affecting Volume

When the Postal Service introduced Delivery Confirmation in 1999Q2, UPS and Federal Express already offered real-time tracking services for their parcels at no additional charge above the basic rate. The Delivery Confirmation service the Postal Service introduced in 1999Q2 provided an electronic service for high-volume mailers (such as Amazon.com), and a retail service, which is also essentially electronic but involves a paper receipt, for small-volume mailers, to confirm delivery of package mail at substantially lower prices than that charged for a Return Receipt. For the price comparisons, at their introduction in 1999Q2, electronic and retail Delivery Confirmation cost \$0.25 and \$0.60, versus \$1.25 for Return Receipts; Delivery Confirmation prices were reduced by R2001-1 to \$0.12 for electronic and \$0.50 for retail, while the Return Receipt price rose to \$1.50; currently the prices stand at \$0.13 and \$0.55 for Delivery Confirmation and \$1.75 for a Return Receipt.

The electronic option is available, upon application, to high-volume mailers who establish a specific electronic link with the Postal Service for transferring delivery data. It is not available to retail customers. The retail option, which requires no advance application, provides lower-volume mailers with a paper mailing receipt which allows them to confirm delivery online or by phone. Initially, the service was available only to

**Figure 32**  
**Delivery and Signature Confirmation Volume History**



1 users of Priority Mail and Package Services Mail. In 2002Q4, the service was extended  
2 to First Class Parcels, Standard Parcels, and Parcel Select mail.

3 In 2001Q2, Signature Confirmation was introduced as a more robust confirmation  
4 service. While similar to Delivery Confirmation, it additionally provides the mailer with a  
5 record of the recipient's signature, but is significantly more expensive (in 2001Q2, \$0.12  
6 and \$0.50 for electronic and retail Delivery Confirmation versus \$1.25 and \$1.75 for  
7 electronic and retail Signature Confirmation).

8 **4. Recent Contributions to Volume**

9 Table 52 shows that over the past four years, the volume of Delivery and  
10 Signature Confirmation increased 344.35 percent. Table 52 also presents the  
11 contributions of individual factors to this four-year volume change, based on the  
12 econometric analysis of Thomas Thress.

13

| Variable                 | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
|--------------------------|-------------------------------|-------------------------|------------------------------------|
| Own-Price                | -48.8%                        | -0.466                  | 36.60%                             |
| Market Penetration Trend | -                             | -                       | 97.30%                             |
| R2000-1 Rule Change      | -                             | -                       | 46.19%                             |
| Adult Population         | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors            | -                             | -                       | 7.20%                              |
| Total Change in Volume   | -                             | -                       | 344.35%                            |

14 **a. Own-Price**

15 It is estimated that the long-run own-price elasticity of Delivery and Signature  
16 Confirmation is -0.466. The real own-price of Delivery and Signature Confirmation

1 decreased 48.8 percent. Applying the estimated own-price elasticity of -0.466 to this  
2 price decrease yields an increase in Delivery and Signature Confirmation volume of  
3 36.60 percent.

4 **b. Market Penetration Trend**

5 The rapid growth in Delivery and Signature Confirmation volumes following their  
6 introduction is modeled econometrically as a logistic market penetration trend. Over the  
7 past four years, this trend term explains a 97.30 percent increase in volume.

8 **c. R2000-1 Rule Change**

9 This variable is a dummy for all quarters following the R2000-1 rate case. The  
10 mail categories for which Delivery and Signature Confirmations are available were  
11 expanded significantly in that rate case. R2000-1 expanded the availability of Delivery  
12 Confirmation to include Package Services Mail in 2001Q2. The R2000-1 case  
13 introduced Signature Confirmation with applicability to Priority and Package Services,  
14 also beginning in 2001Q2. This effect is estimated to have added 46.19 percent to the  
15 volume of Delivery and Signature Confirmation.

16 **d. Adult Population**

17 Growth in adult population is estimated to have contributed 5.21 percent to the  
18 volume of Delivery and Signature Confirmation.

19 **e. Other Factors**

20 Table 52 shows that other factors are estimated to have contributed a 7.20  
21 percent increase in the volume of Delivery and Signature Confirmation over the past  
22 four years. Included in these other factors are seasonal differences and influences  
23 captured in the Base Year volume of Delivery and Signature Confirmation.

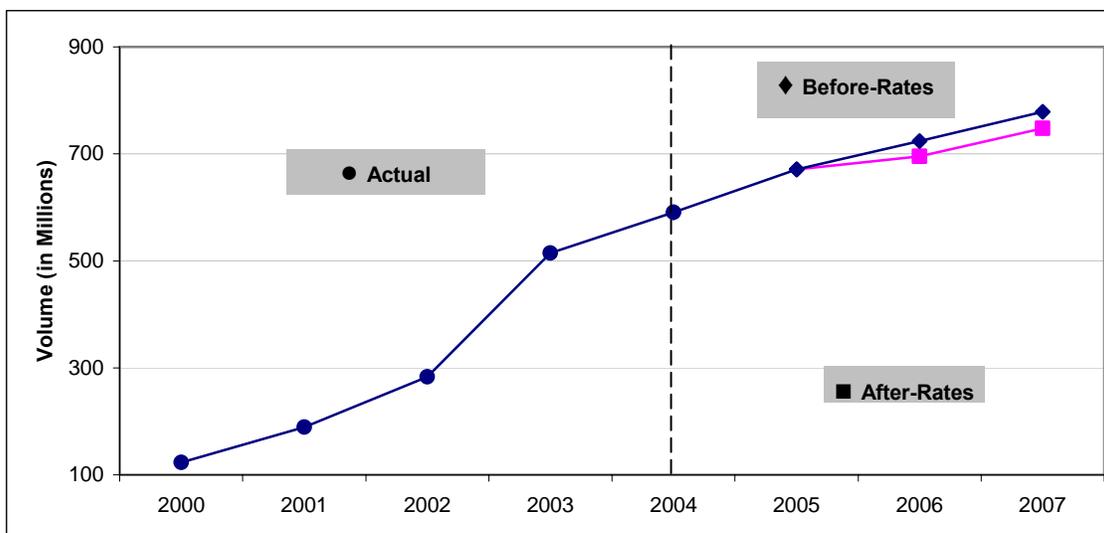
24

25

**5. Before- and After-Rates Volume Forecasts**

The before-rates and after-rates forecasts of Delivery and Signature Confirmation volumes are presented in Figure 32A, along with the recent volume history. The forecasts are obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to continue to rise, albeit at a somewhat slower pace than in the recent past, which is expected for a maturing product. The before-rates Test Year (GFY 2006) forecast of Delivery and Signature Confirmation volume is 724.011 million pieces. The Test Year after-rates forecast is 695.440 million pieces.

**Figure 32A  
Delivery and Signature Confirmation Volume Forecasts**



**I. Post Office Boxes**

**1. Definition**

Post Office Boxes are offered to any customer requiring more than free carrier delivery or general delivery. They are offered for no fee to customers ineligible for carrier delivery for no fee, but otherwise there is a charge for a Post Office Box. Customers can obtain mail whenever the box lobby is open or when access is otherwise

1 available. This service is provided through receptacles owned or operated by the Postal  
2 Service or its agents.

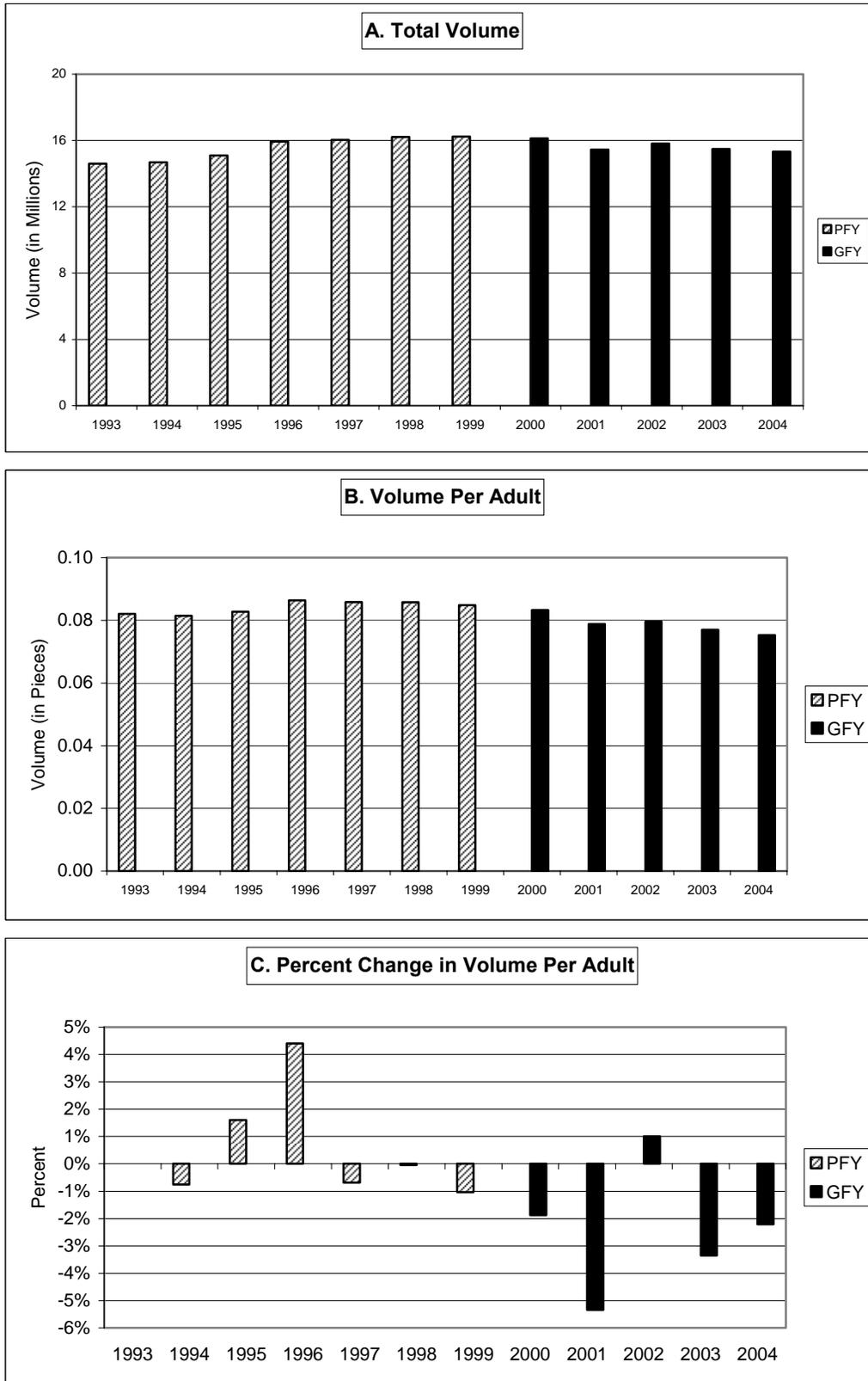
3 **2. Volume History**

4 Figure 33 shows the volume history of Post Office Boxes beginning in 1993.  
5 Volume has remained between 14.5 million and 16.5 million during this entire time.  
6 Volume in 2004 was higher than in 1993. Volume per adult, however, has fallen over  
7 this time period, having increased in only one of the past eight years.

8 **3. Factors Affecting Volume**

9 The number of Post Office Boxes has been fairly stable over the 1993 through  
10 2004 period. Volume is affected by the economy, as volume was on a generally upward  
11 trend during the 1990s and declined as the economy slowed and then went into  
12 recession in 2001. Increases and decreases in the number of small businesses would  
13 also be expected to affect the number of Post Office Boxes.

**Figure 33**  
**Post Office Boxes Volume History**



**4. Contributions to Recent Volume**

Table 53 shows that the volume of Post Office Boxes declined 4.19 percent over the past four years. The table also presents the contribution of individual factors to this four-year volume change, based on the econometric analysis of Thomas Thress.

| <b>Table 53</b>  |                                       |                                 |   |
|--|---------------------------------------|---------------------------------|---|
| <b>Contributions to Change in Post Office Boxes Volume<br/>For the Four Years Ending in 2005Q1</b> |                                       |                                 |   |
| <b>Variable</b>  | <b>Percent Change<br/>in Variable</b> | <b>Estimated<br/>Elasticity</b> | <b>Effect of<br/>Variable on<br/>Volume</b> |
| Own-Price  | 11.3%                                 | -0.608                          | -6.28%                                      |
| Employment - lag 4   | -5.1%                                 | 1.417                           | -7.20%                                      |
| Rate Case Adjustments  | -                                     | -                               | 1.31%                                       |
| Adult Population   | 5.2%                                  | 1.000                           | 5.21%                                       |
| Other Factors  | -                                     | -                               | 3.36%                                       |
| Total Change in Volume   | -                                     | -                               | -4.19%                                      |

**a. Price**

It is estimated that the own-price elasticity of Post Office Boxes is -0.608. The real price of Post Office Boxes increased 11.3 percent over the past four years, which combined with the estimated price elasticity results in a 6.28 percent decline in volume.

**b. Employment**

The volume of Post Office Boxes is affected by changes in employment, measured on a per adult basis with a lag of four quarters. The estimated employment elasticity is 1.417. Therefore, the 5.1 percent decline in the employment variable over the past four years explains a 7.20 percent decline in the volume of Post Office Boxes.

1                                   **c.     Rate Case Adjustments**

2           Reclassifications of Post Office Boxes following the R2000-1 and R2001-1 rate  
3 cases resulted in adjustments to the calculation of Post Office Box volumes. To  
4 account for this effect, separate dummy variables are included in the Post Office Box  
5 demand equation. The correction for the effect of the R2000-1 reclassification on the  
6 price index depresses volume, and the correction for the R2001-1 reclassification  
7 increases volume. The combined effect of these two adjustments is a net increase in  
8 volume of 1.31 percent over the past four years.

9                                   **d.     Adult Population**

10           Growth in adult population explains a 5.21 percent increase in the volume of Post  
11 Office Boxes over the past four years.

12                                   **e.     Other Factors**

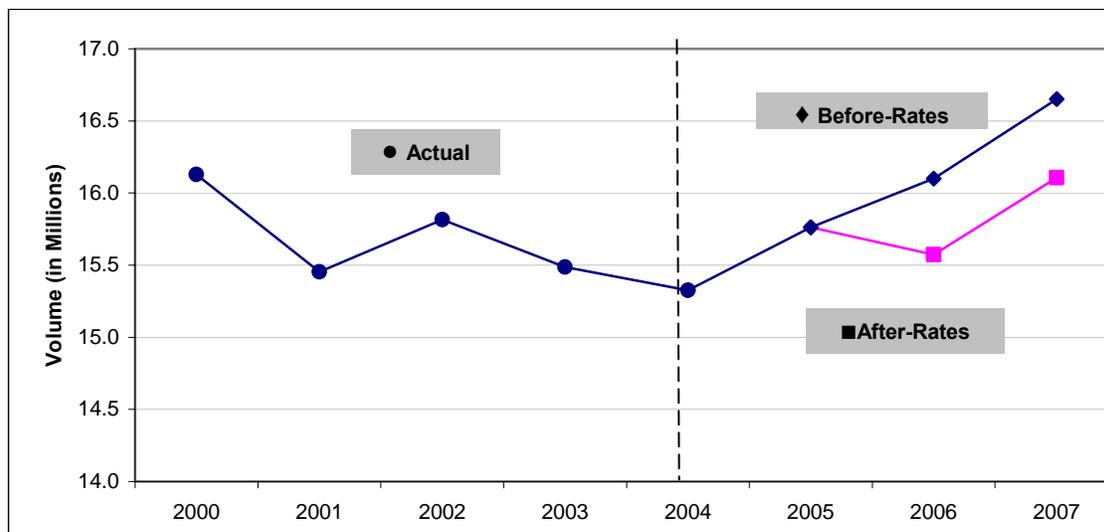
13           Table 53 shows that other factors were responsible for a 3.36 percent increase in  
14 the volume of Post Office Boxes over the past four years. Included in these other  
15 factors are seasonal variations as well as other influences included in the Base Volume  
16 of Post Office Boxes.

17                                   **5.     Before- and After-Rates Volume Forecasts**

18           The before-rates and after-rates forecasts of Post Office Boxes are presented in  
19 Figure 33A, along with the recent volume history. The forecasts are obtained from  
20 Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to  
21 rise in the before-rates scenario and remain essentially flat in the after-rates scenario.  
22 The before-rates Test Year (GFY 2006) forecast of Post Office Boxes is 16.100 million.  
23 The Test Year after-rates forecast is 15.573 million.

24

**Figure 33A**  
**Post Office Boxes Volume Forecasts**



1           **J.     Stamped Cards**

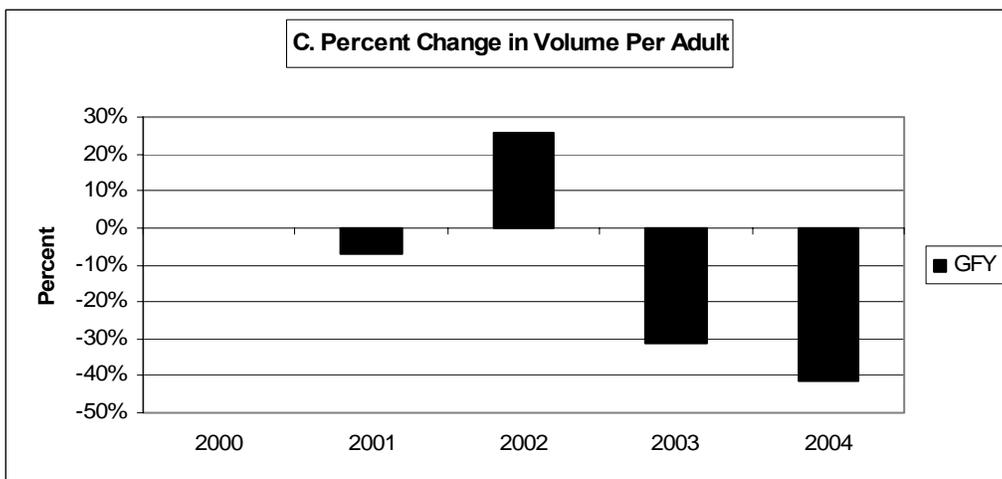
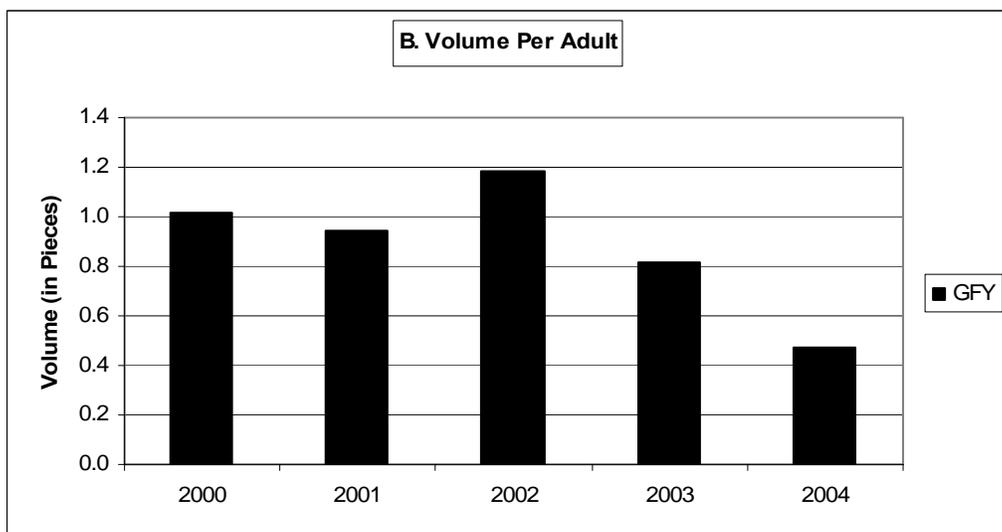
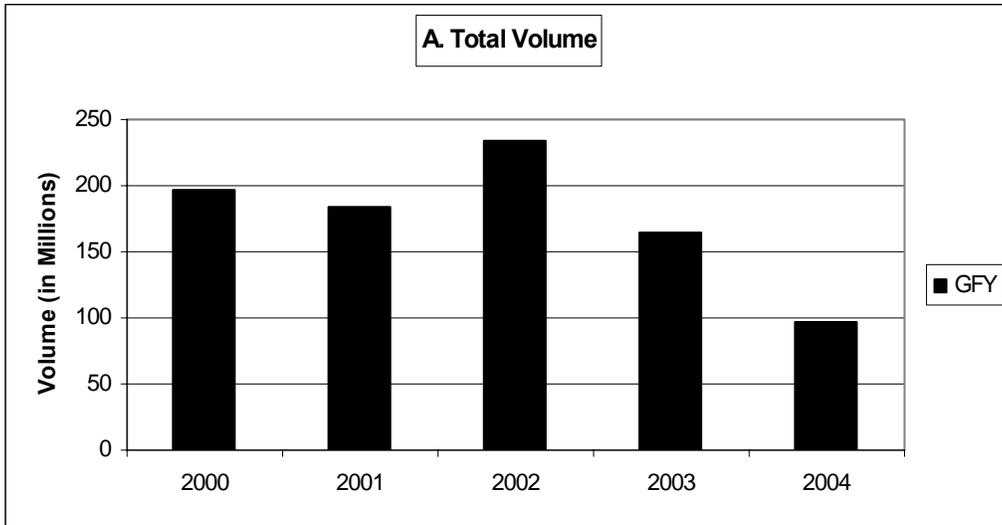
2                   **1.     Definition**

3           First-Class Cards include Stamped cards and Private cards. Stamped cards are  
4 postcards sold by the Postal Service with the postage imprinted. At present, there is a  
5 two-cent surcharge above the rate for a private single-piece card. Like other First-Class  
6 and Priority Mail, Stamped cards are forwarded without charge when postage is fully  
7 prepaid by the sender.

8                   **2.     Volume History**

9           The volume of Stamped cards is included as part of the volume of First-Class  
10 cards, shown in Figure 5 earlier in this testimony. Figure 34 shows the Stamped cards  
11 subset of total First-Class cards from 2000 through 2004. Volume has been erratic and  
12 has fallen sharply over the past two years, from 234.4 million pieces to 96.8 million  
13 pieces.

**Figure 34**  
**Stamped Cards Volume History**



1 Section C of Figure 34 shows Stamped cards volume per adult. Volume per  
2 adult fell more than 30 percent in 2003 and fell more than 40 percent in 2004. Overall,  
3 Stamped cards represented less than two percent of total First-Class cards in 2004.

4 **3. Factors Affecting Volume**

5 The volume of Stamped cards is affected by many of the same factors that affect  
6 the volume of total First-Class cards discussed in Chapter II of this testimony. Volume  
7 has also been affected by changes in Postal Service pricing for Stamped cards. Prior  
8 to the R2000-1 rate case, there was no additional charge for Stamped cards. In R2000-  
9 1, a one cent charge for Stamped cards was instituted. In R2001-1, the charge was  
10 increased to two cents.

11 **4. Recent Contributions to Volume**

12 Table 54 shows that the volume of Stamped cards declined 45.42 percent over  
13 the past four years. The table also presents the contribution of individual factors to this  
14 four-year volume change, based on the econometric analysis of Thomas Thress.

15

| <b>Table 54</b>  |                               |                         |                                    |
|--|-------------------------------|-------------------------|------------------------------------|
| <b>Contributions to Change in Stamped Cards Volume<br/>For the Four Years Ending in 2005Q1</b> |                               |                         |                                    |
| Variable   | Percent Change<br>in Variable | Estimated<br>Elasticity | Effect of<br>Variable on<br>Volume |
| First-Class Cards Volume   | -11.4%                        | 0.782                   | -9.02%                             |
| Volume Reporting Change  | -                             | -                       | -8.18%                             |
| 2004 Dummy   | -                             | -                       | -41.96                             |
| Adult Population   | 5.2%                          | 1.000                   | 5.21%                              |
| Other Factors  | -                             | -                       | 7.00%                              |
| Total Change in Volume   | -                             | -                       | - 45.42%                           |

**a. First-Class Cards Volume**

1 The volume of Stamped cards is a function of the volume of First-Class single-  
2 piece cards. Over the past four years, the volume of First-Class single-piece cards per  
3 adult declined 11.4 percent. The estimated elasticity of Stamped cards volume with  
4 respect to First-Class single-piece cards volume is 0.782. Therefore, the decline in  
5 First-Class single-piece cards volume is estimated to have reduced Stamped cards  
6 volume by 9.02 percent over the past four years.

**b. Volume Reporting Change**

7  
8 In 2000Q4, the Postal Service changed the way it reported Stamped cards fee  
9 revenue, which changed the calculation of Stamped cards volume. To account for this  
10 change, a dummy variable is included in the Stamped cards equation. Table 54 shows  
11 that this variable explains a one-time 8.18 percent decrease in volume.

**c. 2004 Dummy**

12  
13 The large decline in Stamped cards volume in 2004 is accounted for by a dummy  
14 variable which explains a 41.96 percent decline in volume.

**d. Adult Population**

15  
16 Increases in adult population explain a 5.21 percent increase in the volume of  
17 Stamped cards over the past four years.

**e. Other Factors**

18  
19 Other factors, beyond those described above, explain a 7.00 percent increase in  
20 the volume of Stamped cards over the past four years. Included in these other factors  
21 is the impact of seasonal variation as well as other influences captured in the Base  
22 Volume of Stamped cards.

23  
24

**5. Before- and After-Rates Volume Forecasts**

The before-rates and after-rates forecasts of Stamped Cards are presented in Figure 34A, along with the recent volume history. The forecasts are obtained from Attachment A of the testimony of Thomas Thress (USPS-T-7). Volume is projected to decline over the next few years. The after-rates forecast is below the before-rates forecast because of the proposed increase in the price of First-Class cards, which affects Stamped Cards as well. The before-rates Test Year (GFY 2006) forecast of Stamped Cards is 90.352 million pieces. The Test Year after-rates forecast is 89.429 million pieces.

**Figure 34A  
Stamped Cards Volume Forecasts**

