March 2010

United States Postal Service:

Methodologies for Allocation of the CSRS Pension Liability

HayGroup®

Prepared by:
Hay Group
4301 N. Fairfax Drive
Suite 600
Arlington, VA 22203
Phone: 703-841-3100
Fax: 703-841-3108

HayGroup®

Contents

I. Executive Summary

In a report issued to the USPS OIG in January 2010, Hay Group calculated the pension payments attributable to Postal Service after July 1, 1971 using a years of service allocation methodology applied to the total CSRS pension.

In this report we prepare two additional alternative measures of the Federal portion of the total pensions:

1. The amount that would have been paid using a years of service allocation – but with pay increasing after July 1, 1971 annually in line with federal pay increases
2. The amount that would have been paid using a years of service allocation – but with pay increasing after July 1, 1971 annually in line with inflation

Table I.1 shows the average annual increases for actual Postal Service pay, federal pay increases, and inflation. It also shows the amount of additional assets that would be in the Postal CSRS Fund as of September 30, 2009 using the three approaches: applying the years of service allocation methodology to actual pay increases, applying the years of service methodology to Federal pay increases, and applying the years of service methodology to inflation.

Table I.1
Additional Assets as of September 30, 2009
When Years of Service Methodology Used Instead of OPM Estimate
($billions)

	Average Annual Increase (a)	Additional Assets (b)
Years of Service with Actual Pay Increases	6.7%	$75.1
Years of Service with Federal Pay Increases	6.3%	$67.4
Years of Service with CPI Pay Increases	4.5%	$39.2

Using the years of service approach for allocation of the CSRS benefits with pre-1971 service accruals determined using actual Postal Service salaries, the Postal CSRS Fund balance would be $75.1 billion greater as of the end of 2009.

Applying typical federal pay increases to the pre-1971 service reduces the amount of additional assets to $67.4 billion, as federal salaries increased on average at 6.3 percent annually compared with 6.7 percent for Postal Service salary increases.

Applying CPI increases to the pre-1971 service reduces the additional fund assets to $39.2 billion, as CPI increased on average at 4.5 percent compared with 6.7 percent for Postal salary increases.

In making these calculations, actual pay data as of July 1, 1971 for USPS employees was not available. We therefore constructed a model to determine these payments using the following data:

A. A snapshot of the USPS workforce to capture the demographics of the workforce by age and years of service.
B. Actual inflation from 1971, using the CPI Index
C. Federal pay increases since 1971, based on GS schedules
D. Postal pay increases since 1971, based on craft bargaining contracts

For the demographics of the USPS workforce we used a snapshot obtained in 2003. Section II provides the details of the population.

Section III describes the current allocation methodology.

Section IV contains the detailed results from the various projections of the Postal CSRS Funds.

Section V describes the methodology used in the projections.

II. Snapshot of Postal Service Employees

In order to calculate the value of the Postal CSRS Fund under the different allocation methodologies, Hay Group assumed that the employee age and service distribution as of 1971 would be similar to that in 2003.

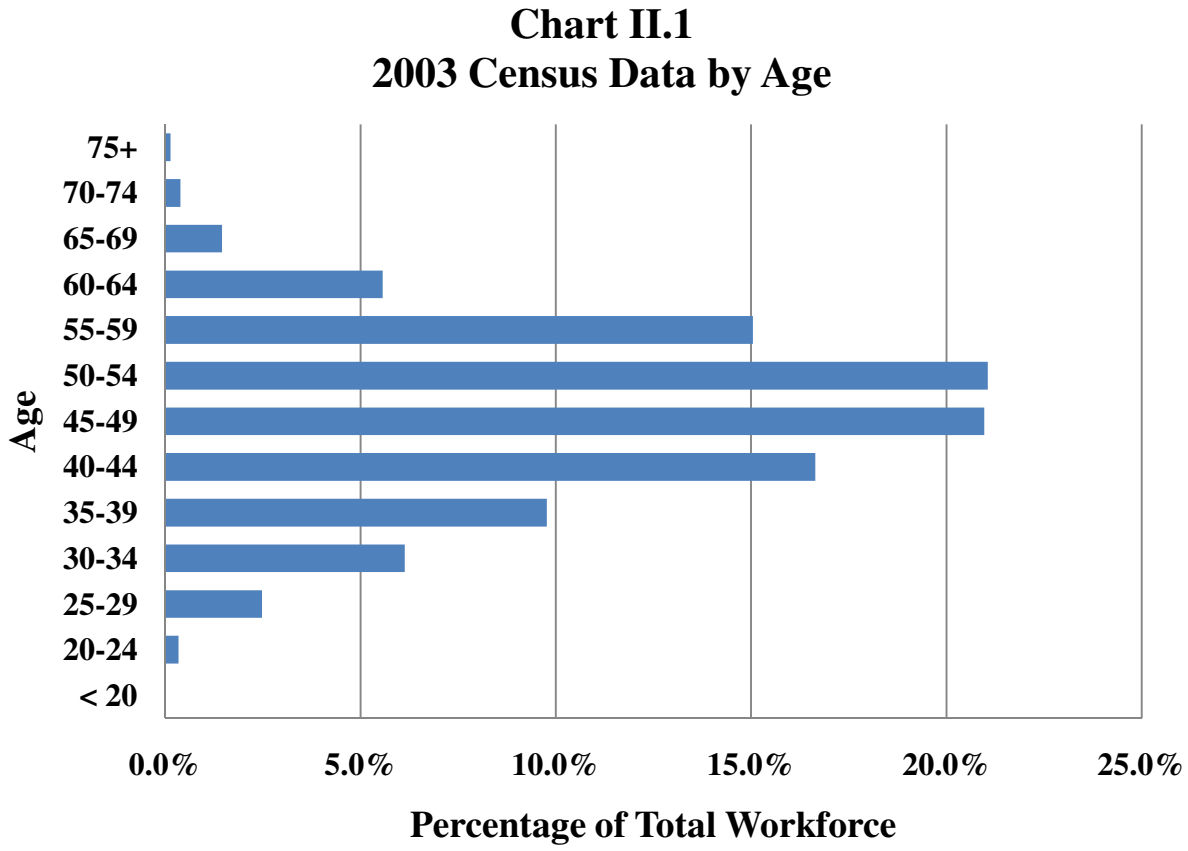
Table II.1 below shows the distribution, by age and service, of active Postal Service employees for the year 2003.

Table II.1
Age and Service Distribution of 2003 Postal Service Employees

Age	Years of Service								
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36+	Total
< 20	2	0	0	0	0	0	0	0	**2**
20-24	2,564	3	2	0	0	0	0	0	**2,569**
25-29	15,078	3,516	4	0	0	0	0	0	**18,598**
30-34	23,650	20,365	1,893	40	1	0	0	0	**45,949**
35-39	22,703	25,008	15,160	10,285	50	1	0	0	**73,207**
40-44	23,085	24,737	22,288	43,618	10,854	174	0	0	**124,756**
45-49	20,088	22,371	18,914	44,614	32,044	18,792	340	1	**157,164**
50-54	12,369	18,323	13,983	31,667	26,153	31,571	23,234	528	**157,828**
55-59	6,035	10,296	9,801	19,957	16,354	17,229	21,213	11,890	**112,775**
60-64	2,377	3,811	3,903	8,688	6,387	5,135	4,217	7,211	**41,729**
65-69	530	864	906	1,752	1,672	1,342	1,154	2,675	**10,895**
70-74	91	153	187	343	377	408	414	941	**2,914**
75+	14	28	47	95	127	128	154	445	**1,038**
Total	**128,586**	**129,475**	**87,088**	**161,059**	**94,019**	**74,780**	**50,726**	**23,691**	**749,424**

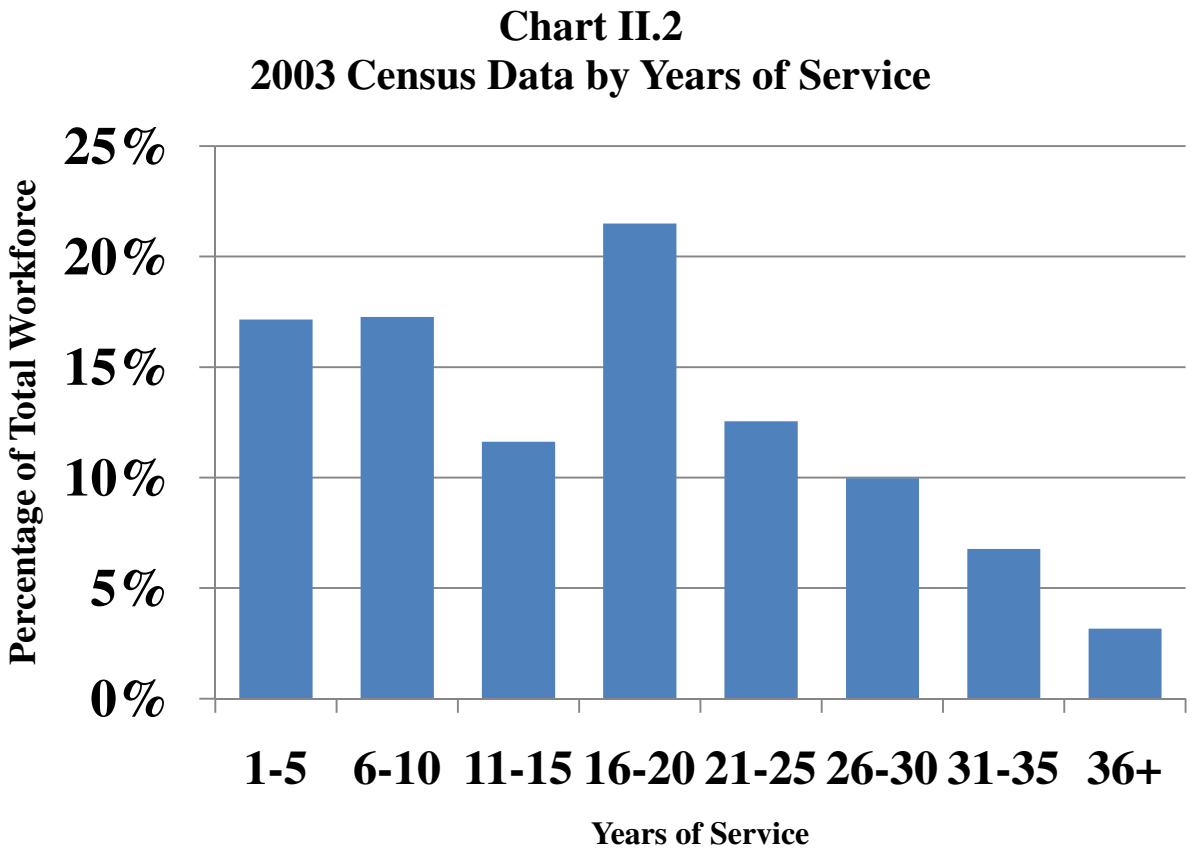
The model assumes the same distribution of employees existed in 1971, albeit with a different count of the number of employees.

Chart II.1 below shows the age distribution of Postal Service employees for the year 2003.



About 7.5 percent of the workforce is age 60 or older, with an additional 15 percent ages 55-59.

Chart II.2 below shows the count of 2003 Postal Service employees by length of service.



The projection model used five cohorts of employees to determine the affect of different pay increases. Group 1 was the portion of the population with the longest service and therefore closest to retirement. Group 1 represented 18.2 percent of all employees and had an average age of 60 and average service of 23 years. Group 2 was the next cohort and represented 21.3 percent of the population with an average age of 53 and average service of 21.

The middle cohort had an average age of 48 and average service of 17 years and represented 21.2 percent of the population. Group 4 had an average age of 43 and 13 years of service on average and represented 20.6 percent of the population. The youngest cohort, making up those employees who had most recently entered the Postal Service had an average age of 34 and average service of 7 years.

The population characteristics of the 2003 snapshot of the USPS workforce are shown in Table II.2.

Table II.2
Workforce Characteristics of Snapshot of USPS Population

Group	Average Age	Average Service	Percent of Population
1	60	23	18.2%
2	53	21	21.3%
3	48	17	21.2%
4	43	13	20.6%
5	34	7	18.7%

III. Current Allocation Methodology

The CSRS pension benefit amount received by each retiree can be divided into portions earned through each year of employment. The amount received for each year of employment is calculated based on the highest three consecutive salaries earned over an employee's career as a postal employee. Under current law, the Federal government's obligation for each pre-1971 year of service is calculated based on the salary earned as of June 30, 1971. The June 30, 1971 salary will, in almost all cases, be less than the highest three consecutive salaries earned over an entire career. In many cases, the average salary earned over a career can be significantly higher than the June 30, 1971 salary. Under the described methodology, for pre-1971 service, there is a gap between

A. The pension amount calculated based on the June 30, 1971 salary, and

B. The pension amount calculated based on overall career highest three consecutive salaries.

Item A above is the total liability which is allocated to the Federal government. Item B above is the amount actually received by the beneficiary for pre-1971 service. Under the current methodology, the liability associated with the gap between the two pension amounts is allocated to the Postal Service. This gap exists due to two factors: pre-1971 employment, and post-1971 salary increases.

IV. Postal CSRS Fund Projection

Table IV.1 below shows the estimates of the Postal CSRS Fund using the three years of service methologies compared to the estimate using OPM's methodology.

Table IV.1
Additional Assets as of September 30, 2009
Years of Service Methodology Compared with OPM Fund Value
($billions)

	Postal CSRS Fund Estimate (a)	OPM's Estimate[1] (b)	Additional Assets (c)
Years of Service with Actual Pay Increases	$271.7	$196.6	$75.1
Years of Service with Federal Pay Increases	$264.0	$196.6	$67.4
Years of Service with CPI Pay Increases	$235.8	$196.6	$39.2

Hay Group also calculated the value of the Postal CSRS Fund using various allocation methodologies and compared it to OPM's calculated surplus. These results are shown below. The first results presented use the OPM allocation methodology. Following these results, we present the results using three different allocation methodologies.

A. OPM Methodology

The current method used to allocate the pension liability was developed by the Office of Personnel Management (OPM). It came into effect in April 2003 with the passage of P.L. 108-18. Under this methodology, the first calculation is the total present value of future pension benefits. OPM then allocates the total cost between the Postal Service and the Federal government. The liability allocated to the Federal government is calculated as if employment had terminated upon reorganization in 1971; this calculation is based on the years of service up to June 30, 1971, and on the final salary earned as of June 1971. The Federal share is then subtracted from the total pension obligation, and the remaining amount is allocated as the responsibility of the Postal Service.

[1] OPM value developed by projecting 9/30/2006 fund after $17.1 billion transfer with actual contributions and benefit payments and investment earnings of 5.632 percent for FY2007, 5.451 percent for FY2008, and assumed earnings of 6.25 percent for FY2009.

Table IV.A.1 shows the results of these calculations on the Postal CSRS Fund using the OPM methodology. The Postal CSRS Fund was found to be $207.6 billion; the Postal Liability was determined to be $190.5 billion, resulting in a surplus of $17.1 billion which was transferred to the Postal Service Retiree Health Benefits Fund (PSRHBF).

For comparison purposes, the Postal CSRS Fund is projected after September 30, 2006 both as if the $17.1 billion surplus was not transferred to the PSRHBF but remained in the Postal CSRS Fund (shown in Table IV.A.1), and after the $17.1 billion transfer to the PSRHBF (shown in Table IV.A.2)

The Postal Liability shown is the Actuarial Accrued Liability as determined by the Office of Personnel Management Office of the Actuary. The values shown as of September 30, 2007 and September 30, 2008 are the actual valuation results from that current year measurement. The September 30, 2009 value is the projected value based on the September 30, 2008 measurement.

The surplus shown as of September 30, 2006 in Table IV.A.1 is $17.2 billion. The amount differs from the $17.1 billion that was actually transferred as the projection is based on the most recent information from OPM and the amounts of historical benefit payments has changed slightly.

Table IV.A.1
Surplus Determination
Under the OPM Methodology
Before Transfer of $17.1 Billion to PSRHBF
($billions)

As of September 30,	**Postal CSRS Fund**	**Postal Liability (Current Valuation)**	**Surplus**
2006	$207.7	$190.5	$17.2
2007	$210.9	$196.9	$14.0
2008	$213.3	$204.1	$9.2
2009	$216.9	$207.1	$9.8

Table IV.A.2 Surplus Determination Under the OPM Methodology After Transfer of $17.1 Billion to PSRHBF ($billions)			
As of September 30,	**Postal CSRS Fund**	**Postal Liability (Current Valuation)**	**Surplus / (Deficit)**
2006	$190.6	$190.5	$0.1
2007	$192.8	$196.9	($4.1)
2008	$194.3	$204.1	($9.8)
2009	$196.6	$207.1	($10.5)

B. Years of Service Methodology Using Actual Pay Increases

Table IV.B.1 shows the results of these calculations on the Postal CSRS Fund using the years of service methodology for allocating pre-1971 service, based on actual USPS pay increases. The September 30, 2009 Postal CSRS Fund was found to be $292.0 billion; the Postal Liability was taken as $207.1 billion, resulting in a surplus of $84.9 billion. Note that the Postal Liability is taken from the OPM valuation on the current methodology and does not take account of prospective changes in the allocation of benefit payments on this basis on the liability.

For comparison purposes, the Postal CSRS Fund is projected after September 30, 2006 both as if the surplus was not transferred to the PSRHBF but remained in the Postal CSRS Fund (shown in Table IV.B.1), and after the $17.1 billion transfer to the PSRHBF (shown in Table IV.B.2)

Table IV.B.1
Surplus Determination Years of Service with Actual Pay Methodology
Before Transfer of $17.1 Billion to PSRHBF
($billions)

As of September 30,	Postal CSRS Fund	Postal Liability (Current Valuation)	Surplus
2006	$266.5	$190.5	$76.0
2007	$274.7	$196.9	$77.8
2008	$282.3	$204.1	$78.2
2009	$292.0	$207.1	$84.9

Table IV.B.2 shows the surplus as of September 30, 2009 on this basis is $64.6 billion.

Table IV.B.1
Surplus Determination Years of Service with Actual Pay Methodology
After Transfer of $17.1 Billion to PSRHBF
($billions)

As of September 30,	Postal CSRS Fund	Postal Liability (Current Valuation)	Surplus
2006	$249.4	$190.5	$58.9
2007	$256.7	$196.9	$59.8
2008	$263.3	$204.1	$59.2
2009	$271.7	$207.1	$64.6

C. Years of Service Methodology Using Federal Pay Increases

Table IV.C.1 shows the results of these calculations on the Postal CSRS Fund using the years of service methodology for allocating pre-1971 service, based on federal pay increases. The September 30, 2009 Postal CSRS Fund was found to be $284.2 billion; the Postal Liability was taken as $207.1 billion, resulting in a surplus of $77.1 billion. Note that the Postal Liability is taken from the OPM valuation on the current methodology and does not take account of prospective changes in the allocation of benefit payments on this basis on the liability.

For comparison purposes, the Postal CSRS Fund is projected after September 30, 2006 both as if the surplus was not transferred to the PSRHBF but remained in the Postal CSRS Fund (shown in Table IV.C.1), and after the $17.1 billion transfer to the PSRHBF (shown in Table IV.C.2)

Table IV.C.1
Surplus Determination Years of Service with Federal Pay Methodology
Before Transfer of $17.1 Billion to PSRHBF
($billions)

As of September 30,	Postal CSRS Fund	Postal Liability (Current Valuation)	Surplus
2006	$260.6	$190.5	$70.1
2007	$268.2	$196.9	$71.3
2008	$275.3	$204.1	$71.2
2009	$284.2	$207.1	$77.1

Table IV.C.2 shows the surplus as of September 30, 2009 on this basis is $56.9 billion.

Table IV.C.2
Surplus Determination Years of Service with Federal Pay Methodology
After Transfer of $17.1 Billion to PSRHBF
($billions)

As of September 30,	Postal CSRS Fund	Postal Liability (Current Valuation)	Surplus
2006	$243.5	$190.5	$53.0
2007	$250.2	$196.9	$53.3
2008	$256.2	$204.1	$52.1
2009	$264.0	$207.1	$56.9

D. Years of Service Methodology Using Pay Increases in Line with CPI

Table IV.D.1 shows the results of these calculations on the Postal CSRS Fund using the years of service methodology for allocating pre-1971 service, based on pay increases in line with inflation. The September 30, 2009 Postal CSRS Fund was found to be $256.1 billion; the Postal Liability was taken as $207.1 billion, resulting in a surplus of $49.0 billion. Note that the Postal Liability is taken from the OPM valuation on the current methodology and does not take account of prospective changes in the allocation of benefit payments on this basis on the liability.

For comparison purposes, the Postal CSRS Fund is projected after September 30, 2006 both as if the surplus was not transferred to the PSRHBF but remained in the Postal CSRS Fund (shown in Table IV.D.1), and after the $17.1 billion transfer to the PSRHBF (shown in Table IV.D.2)

Table IV.D.1
Surplus Determination Years of Service with Pay Increases at CPI
Before Transfer of $17.1 Billion to PSRHBF
($billions)

As of September 30,	**Postal CSRS Fund**	**Postal Liability (Current Valuation)**	**Surplus**
2006	$238.9	$190.5	$48.4
2007	$244.5	$196.9	$47.6
2008	$249.5	$204.1	$45.4
2009	$256.1	$207.1	$49.0

Table IV.D.2 shows the surplus as of September 30, 2009 on this basis is $28.7 billion.

Table IV.D.1
Surplus Determination Years of Service with Pay Increases at CPI
After Transfer of $17.1 Billion to PSRHBF
($billions)

As of September 30,	**Postal CSRS Fund**	**Postal Liability (Current Valuation)**	**Surplus**
2006	$221.8	$190.5	$31.3
2007	$226.5	$196.9	$29.6
2008	$230.5	$204.1	$26.4
2009	$235.8	$207.1	$28.7

V. Projection Methodology

To compare historical pay increases granted to employees of the Postal Service and the federal government, we sought and obtained the following information.

1. Target Comparators:

   Federal Government: General Schedule ("white collar" positions, a/k/a PATCO – Professional, Administrative, Technical, Clerical, and Other) and Wage Grade Schedule ("blue collar/craft" positions)

   USPS Pay Schedules: Executive and Administrative (EAS) ("white collar" positions) and four separate bargaining units ("craft" positions): APWU, NALC, NRLCA, and NPMHU. Insufficient data on NRLCA was available, given the large number of variables and schedules.

2. Secondary Data Sources:

   We supplemented the pay schedules with information obtained from general Web searches including the following Sites: OPM, DoD/CPMS, USPS, APWU, NALC, NRLCA, NPMHU, DoL, CRS, and GAO.

   Reports: Federal Personnel Guide (1984 through 2001); Federal Employees Almanac (2001 through 2009).

   Hay Group's previous studies for USPS.

3. Data Availability on Salary Levels and Pay Increase Percentages:

   1971 through 2010 data available for Federal Government

   1971 through 2007 data available for APWU

   From 1971 through 1978, all 4 unions had the same basic agreement and thus the same pay increase percentages

   NALC and NPMHU data unavailable for about 4 years each

4. Complicating Data Challenges

   Typical bargaining unit agreements included both annual percentage increases (specified) and semi-annual COLA increases (not specified).

Beginning on January 1, 2004, Federal Government pay (both GS and WG) included both a base pay increase and a locality pay increase which varied by MSA or CMSA and Rest of US (RUS). About 60% of GS employees are in an MSA or CMSA locality; the remaining employees are in the RUS locality. Typically, in each year each locality area receives an increase in locality pay percentage in addition to the base pay increase percentage. Thus, as a result, by FY10, the cumulative locality pay increases above base pay increases ranges from 14.16% (RUS) to 35.15% (San Jose-San Francisco-Oakland, CA). In contrast, the USPS does not have locality pay.

Wage Grade analysis is complicated by the number of wage grade areas (approximately 130) and the number of pay plans with the Wage Grade system (5). Unlike the GS Schedule with its base pay plus locality pay, annual Wage Grade pay determinations are calculated separately for each wage grade area by pay surveys within each such area.

General Observations

Comparing GS & EAS percentage salary increases over a 25-year period from 1982 to 2007 excluding locality pay, the GS schedule increased 91.7% and the EAS schedule 94.4%. However, using the RUS locality percentage (which typically is the lowest of the locality pay range of increases each year), the GS schedule increased by an additional 12.5%. Thus the combined figures would be 104.2% for the GS schedule versus 94.4% for the EAS Schedule. Importantly, this increase covered only a 13-year period from 1994 through 2007 – a period that is about half of the 25-year period for the base salary increase.

Using just the 13-year period from 1994 through 2007 and again excluding locality pay, the GS schedule increased 39.7% and the EAS schedule 22.7%. Adding the 12.54% locality pay increase, the combined figures would be 52.3% for the GS schedule versus 22.7% for the EAS Schedule.

A similar analysis of Wage Grade pays versus USPS bargaining unit pays would be an enormous undertaking given the number of Wage Grade localities with their different pays and the number of Wage Grade pay plans and the fact that since 1994 Wage Grade pay is determined at different times of the year, varying by locality. Before 1994, Wage Grade employees got the same increases as the General Schedule.

USPS bargaining unit pay systems do not include locality pay differentials. The Wage Grade pay system is inherently locality-based pay. It does not have a base salary and then a locality pay add-on. Wage Grade pay is based on what private industry is paying for comparable levels of work in a local wage area. Labor organizations are represented on each Local Wage Survey Committee (1 of 3 members) and each surveyed employer is visited by a two-person team representing labor and management.

If the USPS EAS Schedule pay systems and their bargaining unit pay systems are reasonable close in their cumulative annual pay increases in order to maintain some internal equity, one may

reasonably conclude that the differences between the GS and EAS Schedule pays would have a parallel in the Wage Grade and USPS bargaining unit pays.

Federal Government

The base annual pay increases after 1970 to 2009 were found to be 4.3 percent. The average annual step/grade increases were found to 1.9 percent, leading to a combined average annual pay increase rate of 6.3 percent.

United States Postal Service

The base annual pay increases after 1970 to 2009 were found to be 4.6 percent. The average annual step/grade increases were found to 2.0 percent, leading to a combined average annual pay increase rate of 6.7 percent.

Inflation

Based on the all urban consumers price index, the average annual increases after 1970 to 2009 were 4.48 percent. Appendix A shows the CPI table used.

Appendix A

Inflation was measured using the Consumers Price Index – All urban Consumers, US City Average.

The compound annual average from 1970 to 2009 is 4.4823 percent, using the annual factors of 214.5 for 2009 and 38.3 for 1970.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	37.8	38.0	38.2	38.5	38.6	38.8	39.0	39.0	39.2	39.4	39.6	39.8	38.8
1971	39.8	39.9	40.0	40.1	40.3	40.6	40.7	40.8	40.8	40.9	40.9	41.1	40.5
1972	41.1	41.3	41.4	41.5	41.6	41.7	41.9	42.0	42.1	42.3	42.4	42.5	41.8
1973	42.6	42.9	43.3	43.6	43.9	44.2	44.3	45.1	45.2	45.6	45.9	46.2	44.4
1974	46.6	47.2	47.8	48.0	48.6	49.0	49.4	50.0	50.6	51.1	51.5	51.9	49.3
1975	52.1	52.5	52.7	52.9	53.2	53.6	54.2	54.3	54.6	54.9	55.3	55.5	53.8
1976	55.6	55.8	55.9	56.1	56.5	56.8	57.1	57.4	57.6	57.9	58.0	58.2	56.9
1977	58.5	59.1	59.5	60.0	60.3	60.7	61.0	61.2	61.4	61.6	61.9	62.1	60.6
1978	62.5	62.9	63.4	63.9	64.5	65.2	65.7	66.0	66.5	67.1	67.4	67.7	65.2
1979	68.3	69.1	69.8	70.6	71.5	72.3	73.1	73.8	74.6	75.2	75.9	76.7	72.6
1980	77.8	78.9	80.1	81.0	81.8	82.7	82.7	83.3	84.0	84.8	85.5	86.3	82.4
1981	87.0	87.9	88.5	89.1	89.8	90.6	91.6	92.3	93.2	93.4	93.7	94.0	90.9
1982	94.3	94.6	94.5	94.9	95.8	97.0	97.5	97.7	97.9	98.2	98.0	97.6	96.5
1983	97.8	97.9	97.9	98.6	99.2	99.5	99.9	100.2	100.7	101.0	101.2	101.3	99.6
1984	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3	103.9
1985	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3	107.6
1986	109.6	109.3	108.8	108.6	108.9	109.5	109.5	109.7	110.2	110.3	110.4	110.5	109.6

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1987	111.2	111.6	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4	113.6
1988	115.7	116.0	116.5	117.1	117.5	118.0	118.5	119.0	119.8	120.2	120.3	120.5	118.3
1989	121.1	121.6	122.3	123.1	123.8	124.1	124.4	124.6	125.0	125.6	125.9	126.1	124.0
1990	127.4	128.0	128.7	128.9	129.2	129.9	130.4	131.6	132.7	133.5	133.8	133.8	130.7
1991	134.6	134.8	135.0	135.2	135.6	136.0	136.2	136.6	137.2	137.4	137.8	137.9	136.2
1992	138.1	138.6	139.3	139.5	139.7	140.2	140.5	140.9	141.3	141.8	142.0	141.9	140.3
1993	142.6	143.1	143.6	144.0	144.2	144.4	144.4	144.8	145.1	145.7	145.8	145.8	144.5
1994	146.2	146.7	147.2	147.4	147.5	148.0	148.4	149.0	149.4	149.5	149.7	149.7	148.2
1995	150.3	150.9	151.4	151.9	152.2	152.5	152.5	152.9	153.2	153.7	153.6	153.5	152.4
1996	154.4	154.9	155.7	156.3	156.6	156.7	157.0	157.3	157.8	158.3	158.6	158.6	156.9
1997	159.1	159.6	160.0	160.2	160.1	160.3	160.5	160.8	161.2	161.6	161.5	161.3	160.5
1998	161.6	161.9	162.2	162.5	162.8	163.0	163.2	163.4	163.6	164.0	164.0	163.9	163.0
1999	164.3	164.5	165.0	166.2	166.2	166.2	166.7	167.1	167.9	168.2	168.3	168.3	166.6
2000	168.8	169.8	171.2	171.3	171.5	172.4	172.8	172.8	173.7	174.0	174.1	174.0	172.2
2001	175.1	175.8	176.2	176.9	177.7	178.0	177.5	177.5	178.3	177.7	177.4	176.7	177.1
2002	177.1	177.8	178.8	179.8	179.8	179.9	180.1	180.7	181.0	181.3	181.3	180.9	179.9
2003	181.7	183.1	184.2	183.8	183.5	183.7	183.9	184.6	185.2	185.0	184.5	184.3	184.0
2004	185.2	186.2	187.4	188.0	189.1	189.7	189.4	189.5	189.9	190.9	191.0	190.3	188.9
2005	190.7	191.8	193.3	194.6	194.4	194.5	195.4	196.4	198.8	199.2	197.6	196.8	195.3
2006	198.3	198.7	199.8	201.5	202.5	202.9	203.5	203.9	202.9	201.8	201.5	201.8	201.6
2007	202.4	203.5	205.4	206.7	207.9	208.4	208.3	207.9	208.5	208.9	210.2	210.0	207.3
2008	211.1	211.7	213.5	214.8	216.6	218.8	220.0	219.1	218.8	216.6	212.4	210.2	215.3
2009	211.1	212.2	212.7	213.2	213.9	215.7	215.4	215.8	216.0	216.2	216.3	215.9	214.5

Appendix B

For each cohort group (representing about 20 percent of the USPS workforce), a projection was made until all employees in the group were expected to have retired.

Step 1 – The population was projected and the proportion of employees expected to retire in each year was determined using the 2003 OPM retirement assumptions.

Step 2 – The 1971 pay was projected to increase at the average rate applicable to the model (6.7 percent for USPS actual, 6.3 percent of Federal, and 4.48 percent for inflation) for each year of the projection period until retirement. For example, if 20 percent of retirement eligible employees are projected to retire in the first year, then the pay increase would apply for one year for 20 percent of the employees. If 18 percent of remaining employees are expected to retire, then the pay increases would apply for two years for 14.4 percent of employees (80 percent times 18 percent = 14.4 percent). The projection for each future year is made until the group's average age reached age 75, the last retirement age.

Step 3 – The 1971 base pay is projected to determine a "High Three Pay" based on USPS pay increases of 6.7 percent, federal pay increases of 6.3 percent and inflation of 4.5 percent.

Step 4 – The ratio of the "High Three Pay" amounts for each year on the alternate basis (Federal Pay, Inflation) to the USPS High Three Pay was determined.

Step 5 – The ratio in Step 4 was weighted by the percent of the cohort that was expected to have retired in each projection year.

The process was applied separately for each of the five cohort groups.

- For Group 1, 50 percent of the employees were projected to have retired by 1974 – with the remainder fully retired by 1986.
- For Group 2, 50 percent of the employees were projected to have retired by 1980 – with the remainder fully retired by 1993.
- For Group 3, 50 percent of the employees were projected to have retired by 1984 – with the remainder fully retired by 1998.
- For Group 4, 50 percent of the employees were projected to have retired by 1989 – with the remainder fully retired by 2004.
- For Group 5, 50 percent of the employees were projected to have retired by 1996 – with the last retirement expected in 2012.

Step 6 - A weighted average factor was developed for each year from 1971 to 2009, based on a weighted average value from each of the cohorts – assigning 20 percent weight to each cohort's value. Table B.1 shows the calculated ratios.

Table B.1		
Year	Federal Ratio	CPI Ratio
1972	0.99867	0.99263
1973	0.99609	0.97847
1974	0.99236	0.95813
1975	0.98864	0.93822
1976	0.98493	0.91872
1977	0.98124	0.89962
1978	0.97756	0.88093
1979	0.97390	0.86262
1980	0.97025	0.84469
1981	0.96661	0.82713
1982	0.96299	0.80994
1983	0.95938	0.79311
1984	0.95578	0.77662
1985	0.95220	0.76048
1986	0.94863	0.74467
1987	0.94507	0.72920
1988	0.94153	0.71404
1989	0.93800	0.69920
1990	0.93448	0.68467
1991	0.93098	0.67044
1992	0.92749	0.65650
1993	0.92401	0.64286
1994	0.92055	0.62950
1995	0.91710	0.61641
1996	0.91366	0.60360
1997	0.91023	0.59105
1998	0.90682	0.57877
1999	0.90342	0.56674
2000	0.90003	0.55496
2001	0.89666	0.54343
2002	0.89330	0.53213
2003	0.88995	0.52107
2004	0.88661	0.51024
2005	0.88329	0.49964
2006	0.87998	0.48925
2007	0.87668	0.47908
2008	0.87339	0.46913
2009	0.87012	0.45937

Step 7 – The revised total pension payments were determined by applying the ratios in Table B.1 to the actual total pension amounts reported by OPM for each year of the projection period. The revised total pension is therefore the amount that would have been paid had USPS employees received pay increased in line with federal pay increases (using the Federal Ratio) or in line with inflation (using the CPI Ratio).

Step 8 – The revised USPS share of the pension was determined by applying the Years of Service percentages to the revised dollar amounts from step 7.

Step 9 – The revised USPS dollar payments were subtracted from the original USPS dollar payments based on the Years of Service allocation of the actual pensions. The amount in step 9 can therefore be considered the "excess cost" to the federal government on the pre-1971 service attributable to the difference between USPS actual pay increases and the rate of federal pay increases (using the Federal Ratio) or attributable to inflation (using the CPI Ratio).

Table B.2 shows the revised CSRS Pension payments attributable to the USPS for purposes of projecting the Postal CSRS Fund. Column A shows the amount determined by applying the years of service method to the actual pay increases and therefore actual total pensions. Column B adds to the amount in A the allocated portion of costs attributable to pay increases faster than the federal pay rises for the portion of the total benefit attributed to the federal government for pre-1971 service. Column C adds to the amount in A the allocated portion of the costs attributable to pay increases faster than CPI for the portion of the total benefit attributed to the federal government for pre-1971 service.

Table B.2
USPS CSRS Benefit Payments Under Alternative Methodologies

Year	USPS Actual Pay Rates (A)	Federal Pay Rates (B)	CPI Pay Rates (C)
1972	1	1	1
1973	22	21	18
1974	52	51	45
1975	95	93	83
1976	184	181	169
1977	206	205	201
1978	277	278	282
1979	364	368	382
1980	485	492	522
1981	643	657	713
1982	782	798	865
1983	910	930	1,009
1984	1,043	1,068	1,171
1985	1,197	1,230	1,361
1986	1,366	1,406	1,568
1987	1,520	1,568	1,757

Table B.2 USPS CSRS Benefit Payments Under Alternative Methodologies			
Year	USPS Actual Pay Rates (A)	Federal Pay Rates (B)	CPI Pay Rates (C)
1988	1,769	1,828	2,058
1989	1,978	2,046	2,309
1990	2,222	2,301	2,601
1991	2,492	2,584	2,928
1992	2,620	2,714	3,065
1993	3,064	3,193	3,669
1994	3,218	3,345	3,810
1995	3,413	3,540	4,000
1996	3,588	3,716	4,175
1997	3,847	3,979	4,452
1998	4,075	4,212	4,696
1999	4,283	4,425	4,920
2000	4,548	4,698	5,215
2001	4,885	5,044	5,589
2002	5,208	5,375	5,944
2003	5,509	5,685	6,276
2004	5,912	6,103	6,741
2005	6,343	6,543	7,203
2006	6,808	7,018	7,704
2007	7,256	7,477	8,193
2008	7,668	7,894	8,619
2009	8,289	8,531	9,299

Step 10 – Using the revised amounts of the pension payments in Table B.2, the USPS CSRS Fund can be determined for all years after 1971 taking into account actual contributions made to the fund and the year by year investment performance.