

**REPORT ON  
LOCALITY-BASED COMPARABILITY  
PAYMENTS FOR THE  
GENERAL SCHEDULE**

*ANNUAL REPORT  
OF  
THE PRESIDENT'S PAY AGENT  
2002*



**The President's Pay Agent**  
Washington, DC 20415-0021

**MEMORANDUM FOR THE PRESIDENT**

**SUBJECT: Annual Report on Locality-Based Comparability Payments  
for the General Schedule**

Under current law, the President's Pay Agent must submit a report each year showing the locality-based comparability payments we would recommend for General Schedule employees in the following fiscal year if the adjustments were to be made in accordance with section 5304 of title 5, United States Code. In keeping with this statutory requirement, this report shows the adjustments we would recommend for January 2004 *if the methodology and rates required by current law were to be implemented*. Given the current national emergency situation and the consequent slowdown in the American economy, however, we believe it would be unwise to allow the locality pay increases shown in this report to take effect in January 2004. You do not need to make a decision on the 2004 rates at this time.

Our plans for locality pay area boundaries in 2004 and our decisions on the methodology for comparing Federal and non-Federal rates of pay also are contained in this report. The development of these recommendations has been greatly facilitated by the thoughtful work of the Federal Salary Council, and we have followed the Council's recommendation to phase in the use of salary survey data collected under the new National Compensation Survey program by averaging the pay disparities calculated under that program with the pay disparities calculated on the basis of data collected under the older Occupational Compensation Survey Program. However, we continue to believe any changes in locality pay area boundaries should be made after the Federal Salary Council and the Pay Agent have had an opportunity to review new commuting patterns data and new metropolitan area definitions to be released next year based on the 2000 census. Therefore, we have not adopted the Council's recommendation to modify the boundaries of the Boston locality pay area to include Barnstable County, Massachusetts.

Finally, the Pay Agent continues to have serious concerns about the utility of a process that requires a single percentage adjustment in the pay of all white-collar civilian Federal employees in each locality pay area without regard to the differing labor markets for major occupational groups or the performance of individual employees. We believe it is time to consider alternative approaches to the compensation of Federal employees that will lead to a Government that is citizen-centered, results-oriented, and market-based.

**The President's Pay Agent:**

**Elaine L. Chao**  
Secretary of Labor

**Mitchell E. Daniels, Jr.**  
Director, Office of  
Management and Budget

**Kay Coles James**  
Director, Office of  
Personnel Management

## TABLE OF CONTENTS

|   | <u>Page</u> |
|---|-------------|
| Introduction .....  | 1           |
| Across-the-Board and Locality Adjustments.....                                | 2           |
| Locality Pay Surveys .....  | 3           |
| Comparing General Schedule and Non-Federal Pay .....                          | 10          |
| Locality Pay Areas.....   | 16          |
| Local Pay Disparities and Comparability Payments.....                         | 20          |
| Cost of Locality Payments.....  | 23          |
| Recommendations of the Federal Salary Council and Employee Organizations..... | 26          |
| Future Surveys.....   | 27          |

### **Tables**

|  |    |
|--|----|
| 1. Full Job List for OCSP Locality Surveys .....               | 5  |
| 2. Number of OCSP Survey Jobs by Grade and PATCO Category..... | 11 |
| 3. Local Pay Disparities and 2004 Comparability Payments.....  | 21 |
| 4. Remaining Pay Disparities in 2002 .....                     | 22 |
| 5. Cost of Local Comparability Payments in 2003 .....          | 25 |

## INTRODUCTION

The Federal Employees Pay Comparability Act of 1990 (FEPCA) replaced the nationwide General Schedule (GS) with a method for setting pay for white-collar employees that uses a combination of across-the-board and locality pay adjustments. The policy for setting General Schedule pay contained in 5 U.S.C. 5301 is that—

- (1) there be equal pay for substantially equal work within each local pay area;
- (2) within each local pay area, pay distinctions be maintained in keeping with work and performance distinctions;
- (3) Federal pay rates be comparable with non-Federal pay rates for the same levels of work within the same local pay area; and
- (4) any existing pay disparities between Federal and non-Federal employees should be completely eliminated.

The across-the-board pay adjustment provides the same percentage increase to the statutory pay systems (as defined in 5 U.S.C. 5302(1)) in all locations. This adjustment is linked to changes in the wage and salary component, private industry workers, of the Employment Cost Index (ECI), minus 0.5 percentage points. Locality-based comparability payments for GS employees, which are in addition to the across-the-board increase, are mandated for each locality having a pay disparity between Federal and non-Federal pay of greater than 5 percent.

As part of the annual locality pay adjustment process, the Pay Agent prepares and submits a report to the President which—

- (1) compares rates of pay under the General Schedule with rates of pay for non-Federal workers for the same levels of work within each locality pay area, based on surveys conducted by the Bureau of Labor Statistics;
- (2) identifies each locality in which a pay disparity exists and specifies the size of each pay disparity;
- (3) recommends appropriate comparability payments; and
- (4) includes the views and recommendations of the Federal Salary Council (FSC), individual members of the FSC, and employee organizations.

The President's Pay Agent consists of the Secretary of Labor and the Directors of the Office of Management and Budget and the Office of Personnel Management. This report fulfills the Agent's responsibility under 5 U.S.C. 5304(d), as amended. It recommends locality pay adjustments for 2004 if they were made under 5 U.S.C. 5304.

## ACROSS-THE-BOARD AND LOCALITY ADJUSTMENTS

Under FEPCA, General Schedule salary adjustments, beginning in January 1994, consist of two components: (1) a general increase linked to the Employment Cost Index and applicable to the General Schedule, Foreign Service pay schedules, and pay schedules established under title 38, United States Code, for Veterans Health Administration employees; and (2) a General Schedule locality adjustment that applies only to specific areas of the continental United States where non-Federal pay exceeds Federal pay by more than 5 percent.

The formula for the general increase (defined in section 5303 of title 5, United States Code) provides that the pay rates for each statutory pay system be increased by a percentage equal to the 12-month percentage increase in the ECI, minus one-half of one percentage point. The 12-month reference period ends with the September preceding the effective date of the adjustment by 15 months.

The ECI reference period for the January 2004 increase is the 12-month period ending on September 30, 2002. During that period, the ECI increased by 3.2 percent. Therefore, the January 2004 general increase, if granted, would be 2.7 percent (3.2 percent minus 0.5 percentage points).

The locality component of the pay adjustment under FEPCA was to be phased in over a 9-year period. In 1994, the minimum comparability increase was two-tenths of the “target” pay disparity (i.e., the amount needed to reduce the pay disparity to 5 percent). For each successive year, the comparability increase was scheduled to be at least an additional one-tenth of the target pay disparity. For 2002 and thereafter, the law authorized the full amount necessary to reduce the pay disparity in each locality pay area to 5 percent. However, the schedule under FEPCA has not been followed. In 2002, for example, only 42.3 percent of the target disparity was closed, on average, due to separate legislation or the President’s alternative plan.

## LOCALITY PAY SURVEYS

In the past, the Bureau of Labor Statistics (BLS) conducted a survey of non-Federal pay each year in each locality pay area using survey methods approved by the Pay Agent. Commencing with the 1996/97 surveys, BLS implemented a new survey design for its salary surveys. The new survey program, called the National Compensation Survey (NCS) program, was used in all BLS salary surveys started after September 1996.

The Pay Agent deferred a decision on the use of data from the NCS program for locality pay purposes until receiving the views and recommendations of the Federal Salary Council. After careful examination and review of BLS tests and pilot surveys, the Federal Salary Council concluded that the NCS program was not suitable for use in the locality pay program and that the Pay Agent should direct BLS to reinstate the previous survey methodology, which had been approved by the Pay Agent. Some of the Council's concerns included the following:

- Whether the NCS grade leveling approach assigns the correct General Schedule grade equivalent to both supervisory and non-supervisory jobs;
- Whether a probability sampling approach adequately represents Federal jobs and whether results will be stable over time; and
- Whether probability sampling results in differences in jobs surveyed among cities that may cause differences in pay disparities.

The Pay Agent agreed with the Council's conclusion that the NCS program, as originally configured, should not be used for the locality pay program, but it did not ask BLS to reinstate the previous methodology. The Pay Agent concluded that the NCS program has several advantages over the previous salary survey program, the Occupational Compensation Survey Program (OCS). These include offering greater occupational coverage, being less costly, and being less burdensome on respondents. However, the Pay Agent also concluded that certain major aspects of the NCS program, including some of those raised by the Council, would have to be improved before it would be prudent to use NCS data for making pay comparisons under the locality pay program. During the past year, Pay Agent and BLS staff implemented three of the five planned improvements in the NCS program, and the Federal Salary Council has recommended that we begin using NCS data to set locality pay this year. The three improvements made so far are the following:

- 1) The linkage of Federal and non-Federal jobs by developing an improved crosswalk between General Schedule occupations and the newly implemented Standard Occupational Classification System to permit weighting data by Federal employment.
- 2) The development of methods to identify and exclude survey jobs that would be graded above GS-15 in the Federal Government.
- 3) The development of an econometric model based on survey data to estimate salaries for jobs not found in the probability samples.

The improvements not yet made are the following:

- 1) The development of a four-factor job grading system with job family guides to improve grade leveling under NCS. Status: To be incorporated in surveys beginning in December 2003.
- 2) The development of better methods for grading supervisory jobs selected by probability sampling. Status: To be incorporated in surveys beginning in December 2003.

The Council recommended and we have agreed to measure pay disparities for this report by calculating the pay disparities using both the OCSP data and the NCS data for each area and averaging the results. It is not uncommon to use a phase-in methodology such as the Council's recommended averaging approach when first implementing a major change in methodology in order to lessen the impact of the methodology change.

Since both OCSP and NCS data have been used in this report, the report explains both methods and summarizes where they differ. OCSP methods are covered in more detail in previous reports of the Pay Agent. The 2001 Pay Agent's report is available at <http://opm.gov/oca/payagent/index.asp>.

### **Industrial and Establishment Size Coverage**

As required by FEPCA, BLS salary surveys (both OCSP and NCS) used for the locality pay program include the collection of salary data from private industry and State and local governments, which have large numbers of workers, especially in certain occupations that are unique to government functions. Before 1991, BLS surveys for the pay comparability process covered only private sector goods-producing and service-producing industries.

The industry scope of the surveys includes mining, construction, and manufacturing industries; service-producing industries, including transportation, communications, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; services industries; and State and local governments. Households, agriculture, and the self-employed were excluded. The surveys covered establishments with 50 or more workers. In the future, BLS plans to extend the NCS program to cover all establishment sizes. The Pay Agent will review the data and consider the recommendations of the Federal Salary Council before expanding the scope of data used in the locality pay program.

### **Occupational Coverage**

In the OCSP surveys, BLS surveyed 115 work levels distributed over 26 occupations, as shown in Table 1, below. These 26 occupations were selected to be "representative" of all GS occupations, but only about 30 percent of the GS workforce were actually in jobs covered by the surveys. Under the NCS program, BLS uses random sampling techniques to select occupations for survey within an establishment. The occupations are selected and weighted to represent all non-Federal occupations in the location and, based on the crosswalk in **Appendix VII**, also

Table 1. Full Job List for OCSP Locality Surveys

| Occupation by Category                    | Work Level by General Schedule (GS) Grade Equivalent |   |   |    |     |     |    |   |     |    |     |     |     |     |      |
|---|--|---|---|----|-----|-----|----|---|-----|----|-----|-----|-----|-----|------|
|   | 1  | 2 | 3 | 4  | 5   | 6   | 7  | 8 | 9   | 10 | 11  | 12  | 13  | 14  | 15   |
| <b>Professional</b>                       |  |   |   |    |     |     |    |   |     |    |     |     |     |     |      |
| Accountant                                |  |   |   |    | I   |     | II |   | III |    | IV  | V   | VI  |     |      |
| Accountant, Public                        |  |   |   |    |     |     | I  |   | II  |    | III | IV  |     |     |      |
| Attorney                                  |  |   |   |    |     |     |    |   | I   |    | II  | III | IV  | V   | VI   |
| Engineer                                  |  |   |   |    | I   |     | II |   | III |    | IV  | V   | VI  | VII | VIII |
| Buyer/Contracting Specialist <sup>1</sup> |  |   |   |    | I   |     | II |   | III |    | IV  |     |     |     |      |
| Scientist                                 |  |   |   |    | I   |     | II |   | III |    | IV  | V   | VI  | VII | VIII |
| <b>Administrative</b>                     |  |   |   |    |     |     |    |   |     |    |     |     |     |     |      |
| Budget Analyst                            |  |   |   |    | I   |     | II |   | III |    | IV  |     |     |     |      |
| Computer Programmer                       |  |   |   |    | I   |     | II |   | III |    | IV  | V   |     |     |      |
| Computer Systems Analyst                  |  |   |   |    |     |     |    |   | I   |    | II  | III | IV  | V   |      |
| Computer Sys Analyst Supv/Mgr             |  |   |   |    |     |     |    |   |     |    |     | I   | II  | III | IV   |
| Personnel Specialist                      |  |   |   |    | I   |     | II |   | III |    | IV  | V   | VI  |     |      |
| Personnel Supervisor/Mgr                  |  |   |   |    |     |     |    |   |     |    | I   | II  | III | IV  | V    |
| Tax Collector                             |  |   |   |    | I   |     | II |   | III |    |     |     |     |     |      |
| <b>Technical</b>                          |  |   |   |    |     |     |    |   |     |    |     |     |     |     |      |
| Computer Operator                         |  |   |   | I  | II  | III | IV | V |     |    |     |     |     |     |      |
| Drafter                                   |  |   | I | II | III |     | IV |   |     |    |     |     |     |     |      |
| Engineering Technician                    |  |   | I | II | III |     | IV |   | V   |    | VI  |     |     |     |      |
| Engineering Technician, Civil             |  |   | I | II | III |     | IV |   | V   |    | VI  |     |     |     |      |

<sup>1</sup> Levels I and II cover Federal employees in both professional and technical categories.



**Table 1. (continued)**  
**Work Level by General Schedule (GS) Grade Equivalent**

| Occupation by Category           | Work Level by General Schedule (GS) Grade Equivalent |    |     |     |     |     |    |   |   |    |    |    |    |    |    |
|----------------------------------|--|----|-----|-----|-----|-----|----|---|---|----|----|----|----|----|----|
|                                  | 1  | 2  | 3   | 4   | 5   | 6   | 7  | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| <b>GS-</b>                       |  |    |     |     |     |     |    |   |   |    |    |    |    |    |    |
| <b>Clerical</b>                  |  |    |     |     |     |     |    |   |   |    |    |    |    |    |    |
| Clerk, Accounting <sup>2</sup>   |  | I  | II  | III | IV  |     |    |   |   |    |    |    |    |    |    |
| Clerk, General                   | I  | II | III | IV  |     |     |    |   |   |    |    |    |    |    |    |
| Key Entry Operator               |  | I  | II  |     |     |     |    |   |   |    |    |    |    |    |    |
| Personnel Assistant <sup>3</sup> |  |    | I   | II  | III | IV  |    |   |   |    |    |    |    |    |    |
| Secretary                        |  |    |     | I   | II  | III | IV | V |   |    |    |    |    |    |    |
| Word Processor <sup>4</sup>      |  |    | I   | II  | III |     |    |   |   |    |    |    |    |    |    |
| <b>Officers, Protective</b>      |  |    |     |     |     |     |    |   |   |    |    |    |    |    |    |
| Corrections Officer              |  |    |     |     |     |     | I  |   |   |    |    |    |    |    |    |
| Firefighter                      |  |    |     |     | I   |     |    |   |   |    |    |    |    |    |    |
| Police Officers, Uniformed       |  |    |     |     | I   | II  |    |   |   |    |    |    |    |    |    |

<sup>2</sup> Levels III and IV cover Federal employees in both clerical and technical categories.

<sup>3</sup> Level IV covers Federal employees in the technical category.

<sup>4</sup> Level III covers Federal employees in both clerical and technical categories.

represent virtually all GS employees. OPM provided the crosswalk between GS occupational series and the Standard Occupational Classification (SOC) system used by BLS to group non-Federal survey jobs. OPM also provided March 2001 GS employment counts for use in weighting up survey job data to higher aggregates. (BLS completed delivery of the most recent NCS surveys in August, before March 2002 employment counts became available.)

The crosswalk was developed by an inter-agency working group of Federal classifiers. For locality pay purposes, OPM staff made six changes in the crosswalk developed by the interagency group to match GS jobs to more specific SOC jobs. These changes involved using the non-Federal employment distribution as measured by the Occupational Employment Survey conducted by BLS to allocate GS employment where the Government does not record detailed information. For example, the interagency group matched all Federal computer programmers to the SOC Computer Specialists, All Other, job because we do not have detailed information on specialty occupations. However, BLS matches most of the data it collects to the specialty occupations--Computer Programmers, Software Engineers, Systems Analysts, Database Administrators, Network Administrators, and Data Communications Analysts. Similar modifications of the crosswalk were made for human resources specialists, drafters, engineering technicians, doctors, and secretaries. We anticipate that additional improvements can be made in the crosswalk and that OPM staff will provide updated GS employment information to BLS each year.

### **Matching Level of Work**

Under the former OCSP surveys, BLS field economists used a set list of survey job descriptions, which summarized work in a specific occupation at a single GS grade level. In the NCS surveys, BLS field economists cannot use a set list of survey job descriptions because BLS uses a random sampling method and any non-Federal job can be selected in an establishment for leveling (i.e., grading). In addition, it is not feasible for BLS field economists to consult and use the entire GS position classification system to level survey jobs because it would simply take too long to determine and gather all the needed information. This, in turn, would place an undue burden on survey participants. Therefore, in its original NCS methodology, BLS adopted the primary standard of the GS Factor Evaluation System (FES) for use in leveling jobs that are selected randomly in the survey. The primary standard is a framework that guides OPM when developing detailed standards for occupations under the FES. However, when the FES was designed and tested in the 1970s, OPM's predecessor, the Civil Service Commission, found a high error rate when only the primary standard was used in leveling jobs. The Federal Salary Council and OPM staff concluded that tests of the NCS program methods revealed similar problems.

To improve grade leveling under the NCS program, OPM developed a simplified four-factor grade leveling system with 20 job family guides. These guides were designed to provide occupational-specific leveling instructions for the BLS field economists. The four factors were derived and validated by combining the nine factors under the existing FES. The factors were validated against a wide variety of GS positions and proved to replicate current grade levels.

The 20 job family guides cover the complete spectrum of white-collar work found in the Government. BLS and OPM are now completing work on the guides, and BLS plans to introduce them in its surveys when the next survey cycle begins in December 2003. It will take 5 years to fully implement the conversion to the new leveling system because of BLS' data collection cycle. See **Appendix IV** for a summary of the BLS data collection cycle and for the reasons this improvement cannot begin to be implemented sooner than December 2003. **Appendix VI** contains drafts of the 20 job family leveling guides.

### **Jobs above GS-15**

Under the former OCSF program, the occupationally-specific survey job descriptions also included instructions for excluding non-Federal jobs that, if classified under the GS position classification system, would be graded above GS-15. For the NCS program, it was necessary to develop generic instructions for identifying white-collar jobs in the random surveys that would be graded above GS-15 if they existed in the Federal Government. BLS developed and tested the guidance with assistance from OPM. See **Appendix V** for details on excluding these jobs from the NCS program.

### **Grading Supervisory Positions**

The former OCSF survey job descriptions also included instructions on how to grade or whether to exclude non-Federal supervisory jobs. This presented another problem for the NCS program because the Government does not use the same FES approach to grade supervisory jobs. BLS' original NCS methodology included an experimental approach in which BLS first applied the FES to sampled supervisory positions and then added additional factor points for the level of supervision. OPM classifiers believed that this experimental approach would not yield the correct grade level and suggested a new approach based on the highest level of work supervised. Under the new approach, BLS would grade the work supervised using the appropriate four-factor leveling guide, not the supervisory job itself, and then add one grade for a first-level supervisor, two grades for a second-level supervisor, and three grades for a third-level supervisor. BLS and OPM are fine-tuning this procedure, and BLS plans to incorporate the improvement starting with the December 2003 surveys. At that time, BLS plans to resurvey all supervisory jobs currently in its database.

For this year's data, BLS excluded second- and third-level supervisors entirely from the NCS data. BLS graded first-level supervisors by using existing NCS grade leveling procedures. The Pay Agent issued these instructions to BLS because the grades of second- and third-level supervisors are more likely affected by their supervisory duties, while first-level supervisors are more likely graded based on other factors, such as technical expertise. This modification allowed us to use some of the data from supervisory positions.<sup>5</sup>

---

<sup>5</sup> Approximately 12 percent of the jobs sampled by BLS are supervisory, with 10 percent 1<sup>st</sup> level supervisors and 2 percent 2<sup>nd</sup> or 3<sup>rd</sup> level supervisors.

## Missing Data

While BLS surveys all white-collar jobs under the NCS program, it does not find all jobs at all work levels in each survey area. This is a serious problem with the NCS program (and was also a serious problem with OCSP surveys) because survey results and pay disparity measures can vary considerably based on which occupations are randomly selected. The Pay Agent instructed BLS to develop an econometric model to provide estimates for missing jobs. The model developed by BLS is described later in this report and in **Appendix II**.

## Differences in Results

While the NCS program results track the OCSP program results fairly well by grade, NCS average salaries generally are several percentage points below the OCSP results for grades GS-3 through 7 and for grades above GS-11. While the overall average pay gaps are only 4 percentage points apart, the results vary significantly for a number of locality pay areas. Many factors could cause pay measures under the NCS program to be different from those under OCSP. OPM staff identified a number of possible reasons for this outcome, including the following:

- OCSP data are out-of-date, and the nationwide rate of change measures (i.e., Employment Cost Index) used to age the data probably overestimate or underestimate pay on a locality or occupational basis.<sup>6</sup>
- OCSP used a fixed job list that may have been biased toward higher-paying jobs.<sup>7</sup>
- Certain key OCSP results are based on small samples and may overstate pay levels.<sup>8</sup>
- The FSC and OPM staff believe that test surveys indicated problems in assigning grades under the NCS program.
- NCS random samples may miss key high-paying jobs that are not common in non-Federal establishments.
- Between 30 and 80 percent of the weighted data in the NCS program are modeled. A review of the BLS model indicated that it tends to underestimate pay for high-paying jobs. We had actual survey data for about 70 percent of the OCSP jobs and modeled about 30 percent, but OCSP survey jobs directly represented only about 30 percent of the Federal workforce, so actual data under OCSP represented only about 21 percent of the Federal workforce—about the same as actual data under the NCS program. The OCSP model also tended to underestimate pay for certain jobs.
- Job definitions under OCSP were written to match specific Federal jobs, while the SOC crosswalk used in the NCS program has some more generic matches.

---

<sup>6</sup> If non-Federal pay, on average, increased by 3 percent each year since 1996, a location where pay increased by only 2 percent each year would be overestimated by about 6 percent in 2002.

<sup>7</sup> Under OCSP, the Technical category was represented by Computer Operator, Drafter, and Engineering Technician, while under the NCS program, all Technical jobs are surveyed; including Nursing Assistants and Licensed Practical Nurses. These jobs were lost from OCSP when the BLS Hospital survey was cancelled.

<sup>8</sup> The Accountant level VI job in the last OCSP survey of Detroit represented only 50 non-Federal workers. Likewise, Attorney I represented 63 workers, Budget Analyst I represented 14 workers, Personnel Supervisor II represented 55 workers, and Civil Engineering Technician I represented 35 workers.

## COMPARING GENERAL SCHEDULE AND NON-FEDERAL PAY

### How Local Pay Disparities Are Measured

Locality-based comparability payments are a function of local disparities between Federal and non-Federal pay. Pay disparities are measured for each locality pay area by comparing the annual scheduled rates of basic pay<sup>9</sup> of workers paid under the General Schedule (GS) pay plan in an area to the annual rates generally paid to non-Federal workers for the same levels of work in the same area. Under OCSP, non-Federal pay is represented by a survey of 115 jobs distributed over 26 occupations (as listed in Table 1). Each of the 115 surveyed jobs has been equated to a GS occupational definition and grade level and classified among five broad “PATCO” categories—professional (P), administrative (A), technical (T), clerical (C), and protective officer (O). Under the NCS program, BLS surveys or models salaries for all non-Federal jobs deemed to match GS positions as shown in the crosswalk in **Appendix VII**.

Non-Federal rates are estimated on a sample basis by BLS area surveys under both survey programs. The rate for each non-Federal job is an estimate of the mean straight-time earnings of full-time non-Federal workers in the job, based on the BLS survey sample. GS rates are determined from Federal personnel records for the relevant populations of GS workers. Each GS rate is the mean scheduled annual rate of all full-time permanent year-round GS workers in the relevant group.

The reference dates of the BLS surveys vary over the cycle of non-Federal salary surveys conducted for the GS locality pay program under both OCSP and NCS. To ensure that local pay disparities are measured as of one common date, it is necessary to “age” the BLS survey data to a common reference date before comparing it to GS pay data of the same date. March 2002 is the common reference and comparison date used in this report. The Employment Cost Index (ECI) based on wages and salaries for white-collar civilian workers, excluding those in sales, was used to age the BLS data.<sup>10</sup>

Since 5 U.S.C. 5302(6) requires that each local pay disparity be expressed as a single percentage, the comparison of GS and non-Federal rates of pay in a locality requires that the two sets of rates be reduced to one pair of rates, a GS average and a non-Federal average. An important principle in averaging each set of rates is that the rates of individual survey jobs and job categories are weighted by Federal GS employment in equivalent classifications. Weighting by Federal employment ensures that the influence of each non-Federal survey job on the overall non-Federal average is proportionate to the frequency of that job in the Federal sector.

---

<sup>9</sup> The annual scheduled rate of basic pay is the General Schedule rate of basic pay for the employee’s grade and step (or relative position in the rate range), inclusive of a special rate under section 403 of FEPCA, but exclusive of a special rate under 5 U.S.C. 5305, a special law enforcement adjusted rate under subpart C of 5 CFR part 531, and a locality rate under subpart F of 5 CFR part 531.

<sup>10</sup> OCSP surveys are now 6 to 8 years old and had to be aged over an extended period. NCS surveys used in this report had reference dates between December 2000 and October 2001. See Appendix VIII.

**Table 2.**  
**Number of OCSP Survey Jobs by Grade and PATCO Category**

| <b>Grade</b>  | <b>P</b>  | <b>A</b>  | <b>T</b>  | <b>C</b>  | <b>O</b> | <b>Total</b> |
|---------------|-----------|-----------|-----------|-----------|----------|--------------|
| GS-1          |           |           |           | 1         |          | 1            |
| GS-2          |           |           |           | 3         |          | 3            |
| GS-3          |           |           | 3         | 5         |          | 8            |
| GS-4          |           |           | 4         | 5         |          | 9            |
| GS-5          | 4         | 4         | 4         | 4         | 2        | 18           |
| GS-6          |           |           | 2         | 1         | 1        | 4            |
| GS-7          | 5         | 4         | 4         | 1         | 1        | 15           |
| GS-8          |           |           | 1         | 1         |          | 2            |
| GS-9          | 6         | 5         | 2         |           |          | 13           |
| GS-11         | 6         | 5         | 2         |           |          | 13           |
| GS-12         | 5         | 5         |           |           |          | 10           |
| GS-13         | 4         | 4         |           |           |          | 8            |
| GS-14         | 3         | 3         |           |           |          | 6            |
| GS-15         | 3         | 2         |           |           |          | 5            |
| <b>Totals</b> | <b>36</b> | <b>32</b> | <b>22</b> | <b>21</b> | <b>4</b> | <b>115</b>   |

Table 2, above, summarizes the distribution of OCSP survey jobs by PATCO category and grade. The 115 OCSP jobs are distributed among 35 category levels, which are in turn distributed among 14 grade levels (there is no OCSP survey job at grade 10). For example under OCSP, grade GS-1 is represented by only one job in the clerical category (General Clerk I). By contrast, grade GS-5 is represented by 18 jobs distributed among all 5 categories, including 4 in the professional category (Accountant I, Engineer I, Scientist I, and Contracting Specialist I), 4 in the administrative category (Budget Analyst I, Computer Programmer I, Personnel Specialist I, and Tax Collector I), etc. Under the NCS program, all PATCO grade cells with Federal incumbents are represented.

Because of variations in local industry mix, labor force size, and other factors, BLS was not able to publish rates for all 115 OCSP jobs in any area surveyed. On average, an area survey resulted in published pay data for about 59 percent of the 115 jobs, ranging from a low of 39 jobs in the Richmond survey to a high of 94 in the Rest of U.S. survey. Salary data for unpublished jobs was substituted from alternative sources, as explained below in the section on “Publishability and Substitute Data.”

Under OCSP, the non-Federal rates from the BLS data are averaged in three stages. In the first stage, job rates are averaged within PATCO category by grade level. The jobs surveyed at each grade represent directly the Federal workers in equivalent job classifications (e.g., engineers) and indirectly other Federal workers in the same PATCO category (e.g., other professionals) at that grade. At grade 5, for example, the four job rates in the professional category are averaged to one rate for the GS-5 professional category. In the same manner, job rates are averaged within the administrative, technical, clerical, and protective officer categories at grade 5. For averaging within category, each job rate is weighted by the CONUS<sup>11</sup> full-time permanent year-round employment in GS positions that match the job.<sup>12</sup> The reason for CONUS weighting in the first stage is explained below.

Under the NCS program, BLS averages survey estimates (actual or modeled) for each non-Federal job within PATCO categories using national GS employment weights provided by OPM. This weighting is the same as under OCSP except that the GS employment data are from March 2001 instead of March 2002 to afford time for BLS to do the calculations and deliver the results. The NCS program covers all white-collar jobs, not just the 26 occupations at 115 work levels included in OCSP.

When the first stage averages are complete under OCSP, grade 5 is represented by 5 category rates in lieu of its original 18 job rates. Similarly, grades 1 and 2 are each represented by one category rate, grades 3 and 4 each by two category rates, grade 6 by three category rates, and so on. Under the NCS program, all PATCO/grade categories with Federal incumbents are represented.

In the second stage, the category rates are averaged by grade level to one grade level rate for each grade represented. Thus, at grade 5 the five category rates in OCSP are averaged to one GS-5 rate. For averaging by grade, each category rate is weighted by the local full-time permanent year-round GS employment in the category at the grade. This procedure is exactly the same under the NCS program except that all PATCO categories are represented.

In the third stage under OCSP, the 14 grade rates are weighted by the corresponding local full-time permanent year-round GS grade level employment and averaged to a single overall non-Federal rate for the locality. This overall non-Federal average is the non-Federal rate to which the overall average GS rate is compared. Under the NCS program, all 15 GS grades are represented.

---

11 Continental United States, comprising the 48 contiguous States plus the District of Columbia.

12 Five of the OCSP survey jobs match Federal series in two PATCO categories. Buyer I and II each match a Federal technical as well as a professional classification. Accounting Clerk III and IV and Word Processor III each match a technical and a clerical classification. Each of the five job rates is averaged under both categories in the first stage averaging, with appropriate weighting.

Since GS rates by grade are not based on a sample, but rather on a census of the relevant GS populations, the first two stages of the above process are omitted in deriving the GS average rate. For each grade level represented by a non-Federal average derived in stage two, we average the scheduled rates of all full-time permanent year-round GS employees at the grade in the area. The overall GS average rate is the weighted average of these GS grade level rates, using the same weights as those used to average the non-Federal grade level rates.

The pay disparity, finally, is the percentage by which the overall average non-Federal rate exceeds the overall average GS rate under either survey program.<sup>13</sup>

As indicated above, at the first stage of averaging the non-Federal data, the weights represent national or CONUS GS employment, while local GS employment is used to weight the second and third stage averages. GS employment weights are meant to ensure that the effect of each non-Federal pay rate on the overall non-Federal average reflects the relative frequency of Federal employment in matching Federal job classifications.

The methodology employed by the Pay Agent under OCSP to measure local pay disparities does not use local weights in the first (job level) stage of averaging because this would have an undesirable effect. A published survey job whose Federal counterpart has no local GS incumbents will “drop out” in stage one and have no effect on the overall average. This might be appropriate if the survey job represented only those GS workers in the Federal counterpart job; but in the second stage of averaging, each survey job represents part or all of a broader PATCO category level, and in the third stage each PATCO category level represents part or all of a broader grade level. If a job is allowed to drop out due to zero local GS employment, some GS incumbents of other classifications in the same PATCO category level—not represented by a specific survey job—will be unrepresented.

For this reason, national or CONUS weights are used in the first stage of averaging OCSP data. CONUS weights are used only where retention of each published OCSP survey observation is most important—at the job level or stage one. Local weights are used at all other stages.

For introduction of NCS data this year, we left the weighting system essentially unchanged, although the first stage is now done by BLS to permit use of all job data, both published and unpublished. Under the NCS program, PATCO and grade weights may not be necessary, since all white-collar jobs at all grades are represented and weighted separately. However, the continued use of PATCO and grade weighting may be desirable to add the local Federal employment distribution to the calculations and to permit BLS to deliver data by PATCO

---

<sup>13</sup> An equivalent procedure for computing the pay disparity compares aggregate pay rather than average pay, where aggregate pay is defined as the sum across grades of the grade level rate times the grade level GS employment. In fact, the law defines a pay disparity in terms of a comparison of pay aggregates rather than pay averages (5 U.S.C. 5302(6)). Algebraically, however, the percentage difference between sector aggregates (as defined) is exactly the same as the percentage difference between sector averages.



category/grade so that published and unpublished data can be combined before delivery to the Pay Agent.

### **Publishability and Substitute Data**

Under OCSP, BLS was never able to publish data for all survey jobs. The fact that the set of published jobs varies from area to area was a concern because the disparity between Federal and non-Federal pay varies by job as well as by area. If area pay disparities are not based on the same set of jobs in each area, the differences between those disparities are caused not only by differences in the pay of Federal and non-Federal workers for the same jobs (as intended), but also by differences in the set of jobs for which pay data are published.

For OCSP, the Council and the Pay Agent agreed to use data from an earlier survey to fill in missing values where available, but also developed estimates of non-Federal pay produced by a multiple regression model to estimate salaries for jobs not published by BLS. OPM staff developed the model to estimate local non-Federal pay differentials for the survey jobs. It produced estimates of the pay of unpublished jobs based on multiple regression analysis of the pay of published jobs. The model assumed that pay varies with three factors—geographic area, occupation, and work level—and it accounted for about 96 percent<sup>14</sup> of the variation in the pay rates published by BLS. The use of the model was endorsed by the Federal Salary Council. A technical report on the OPM model was provided in Appendix II of the 1994 Report, and a summary of subsequent years' models appeared in Appendix II of later reports.

BLS staff developed and implemented a similar model using NCS data to produce pay estimates for missing non-Federal jobs in NCS. Both the NCS and the OCSP model predict pay as a function of location, occupation, and grade level.<sup>15</sup> The NCS model accounts for about 81 percent of the variations in pay, which is very good for models of this type.

The Federal Salary Council expressed concern about the amount of data modeled under the NCS program. Based on GS employment weights used to combine the data at the job level, an average of about 70 percent of the data are modeled in this year's NCS surveys. This varies by area from a high of 82 percent modeled in Huntsville to a low of 29 percent modeled in the Rest of U.S. locality pay area. The amount of modeled data also varies considerably by grade level and ranges from an average of 30 percent modeled at GS-4 to an average of 97 percent modeled at GS-15. The Pay Agent shares the Council's concerns about the amount of modeled data. However, we believe the model represents a significant improvement over using NCS data with no model. Modeling gives us a more standard job list over time and among areas, will likely

---

14 The OCSP model used survey averages by area to model missing values. Much of the variability in non-Federal pay was masked because averages were used. The NCS model developed by BLS uses all the individual survey estimates. Hence, the R squared values between the two models cannot be readily compared.

15 Both models use a transformed grade level variable, where grades 12 through 15 are treated as 13, 15, 17, and 19 for modeling purposes. This transformation was developed in the 1970s as part of the curve-fitting process used in the pre-FEPCA methodology to reflect the two-grade interval aspect of the GS position classification system.

stabilize NCS results, and permits estimates of pay levels at grades and for occupations that would otherwise not be included at all. Under OCSP, about 30 percent of the survey data were modeled, but the 115 survey jobs represented only about 30 percent of the GS workforce. That means 70 percent of GS employees were not directly represented by survey jobs, 21 percent were represented by survey data, and about 9 percent were represented by modeled data.

A comparison of actual and predicted values from the NCS model indicates that it consistently underestimates pay for jobs that pay above about \$50 per hour (the NCS model predicts hourly wages) or about \$104,000 per year. There are several technical reasons why this may occur. There is higher sampling variability for the relatively small number of jobs where pay exceeds \$50 per hour; the sampling weights used in the regression are greater for smaller establishments, where pay tends to be lower; and the functional form of the regression will, unavoidably, fit some parts of the wage distribution better than others.

The model uses the logarithm of wages and then converts the predicted logarithm of each wage into a wage level. Although this approach is widely used, it does have a slight drawback in that, on average, there will be an under prediction of wage levels, which in this case is on the order of 2 to 3 percent. Given that making an adjustment to account for this under prediction has both advantages and disadvantages, OPM staff instructed BLS not to include any such adjustment in data provided for locality pay purposes until the issue could be fully considered by both the Federal Salary Council and the Pay Agent.

Use of modeling is a generally accepted practice, and we have used modeled data in the locality pay program since 1994. The models used in both survey programs are similar in concept and form. They are also similar to the curve fitting process used in the pay comparability process prior to FEPCA. All jobs included on the crosswalk shown in **Appendix VII** were included in developing the model, with the exception of a handful of jobs for which BLS had no data.

We agree with the Council that BLS should explore ways to increase the sample size under the NCS program so that less modeling is needed. This could be accomplished by collecting data on a few more jobs at each establishment or by adding establishments to the sample. Pay Agent staff should work with BLS to determine how to increase the sample size.

## LOCALITY PAY AREAS

Under 5 U.S.C. 5304(e)(2)(A), the Federal Salary Council made a recommendation to the Pay Agent on the composition of locality pay areas for 2004. This recommendation was transmitted to the Pay Agent in a memorandum dated October 17, 2002. (See **Appendix I**.) The Council recommended the continuation of the 32 locality pay areas already established, which, with the exception of the “Rest of U.S.” (RUS) area and certain “areas of application” described below, correspond to the 1999 metropolitan area definitions set forth by the Office of Management and Budget (OMB) in the attachments to OMB Bulletin 99-04.

### Pay Disparities Below the RUS Pay Disparity

The Council has previously recommended that locations with little data available in BLS surveys and pay gaps 2/10 of a percentage point or more below the RUS pay area or below the RUS pay gap for three surveys be dropped from the BLS surveys, with the resources redirected to survey new locations. Under OCSP, the pay gaps in Huntsville, Indianapolis, and Kansas City are below that for the RUS locality pay area this year, and they have been for several years. Under the NCS program, the pay gaps for St. Louis, Orlando, and Kansas City are well below that for RUS, and pay gaps for Milwaukee, Dayton, Richmond, and Columbus are slightly below RUS. With averaged results, Indianapolis, Kansas City, Orlando, and St. Louis are below RUS.

The Council recommended that none of these locations be dropped as separate locality pay areas at this time. The Council intends to consider whether some of these areas should be dropped and the resources used to increase the sample in other locations or used to add a few new locality pay surveys during its general review of major aspects of the locality pay program scheduled for next year. In this regard, BLS will begin planning for its geographic sample redesign in relation to new metropolitan area definitions in the fall 2003/spring 2004 time period. The Pay Agent will consider the recommendations of the Council on this matter next year and may direct BLS to revise the geographic scope of its surveys at that time. In the meantime, we agree with the Council’s recommendation to continue these pay areas but combine the pay gaps in the locations below RUS with that for RUS in a cost-neutral fashion for the 2004 locality payments.

### Combining Areas with Pay Gaps Below RUS

| <u>Area</u>   | OCSP/NCS<br>Average<br><u>Pay Disparity</u> | <u>GS Payroll</u>     |
|---------------|---|-----------------------|
| Kansas City   | 21.70%                                      | \$ 725,849,751        |
| Orlando       | 22.81%                                      | 182,788,869           |
| St. Louis     | 24.75%                                      | 541,990,010           |
| Indianapolis  | 25.14%                                      | 298,789,581           |
| RUS           | <u>25.58%</u>                               | <u>22,390,696,999</u> |
| AVERAGE/TOTAL | 25.42%                                      | \$24,140,115,210      |

## **Existing Areas of Application**

As of 2002, there are seven approved “areas of application.” These locations are not formally a part of the metropolitan statistical area as defined by OMB that the Pay Agent has included in the area for locality pay purposes. The State of Rhode Island and a small portion of Bristol County, MA, are included in the Boston locality pay area; New London County, CT, is included in the Hartford locality pay area; Edwards Air Force Base and Santa Barbara County, CA, are included in the Los Angeles locality pay area; Monterey County, CA, is included in the San Francisco locality pay area; and St. Marys County, MD, is included in the Washington, DC-Baltimore locality pay area. With the exception of a small portion of Bristol County, MA, each of these locations passed the applicable area-of-application criteria proposed by the Council and approved by the Pay Agent at the time it was added to the locality pay area. The Pay Agent included a small portion of Bristol County, MA, in the Boston locality pay area at the same time it added Rhode Island to that area. It did so because adding Rhode Island otherwise would have resulted in leaving a small portion of Bristol County, part of the Providence MSA but with a high level of commuting into Boston, completely surrounded by the newly expanded Boston locality pay area.

New London County, CT, with 1,267 GS employees, and Santa Barbara County, CA, with 1,954 GS employees, no longer meet the criterion that counties have 2,000 or more GS employees. Edwards Air Force Base, with 905 GS employees, no longer meets the 1,000 employee criterion for installations crossing locality pay area boundaries.

The Council continues to believe it is not prudent management or sound compensation policy to precipitously drop locations previously approved as areas of application. The Council recommended that these areas continue to be included in their respective locality pay areas at the very least until new census data are available and new metropolitan areas are defined in 2003. We agree with the Council’s assessment.

## **Requests for New Locality Pay Areas or New Areas of Application**

At its public meetings on August 15, and October 1, 2002, the Council reviewed petitions from Federal employees in four areas seeking to be added to an existing locality pay area. In addition, the Council’s Working Group received a briefing on contacts OPM staff had received over the past year from employees in more than 40 areas seeking special consideration. Employees in several of these areas had asked for their area to become a separate locality pay area. As we complete work on improving BLS salary surveys, it may be possible to add additional locality pay areas if survey resources become available. While it might be desirable to cover more metropolitan areas, it is also desirable to increase the amount of survey data available in existing locality pay areas. We ask that the Council consider these issues during its 2003 review of major aspects of the locality pay program.

None of the areas requesting special consideration pass the existing area-of-application criteria. In its recommendations to the Pay Agent, the Council reiterated its conclusion that since new population and commuting patterns data and new metropolitan area definitions will become available next year, now is not the time to make wholesale modifications in the boundaries of locality pay areas. However, the Council did recommend that the Pay Agent make an exception in the case of Barnstable County, MA, and add it to the Boston locality pay area.

In the Council's view, Barnstable County constitutes an "egregious situation" because it is cut off from the rest of the country by the Boston locality pay area, is the only county on the eastern seaboard from southern Maine to Delaware that is not in a separate locality pay area, and passes all of the area-of-application criteria except that it does not have 2,000 GS employees. However, the Council did not wish to change the 2,000 GS employment criterion prior to reviewing new census data on commuting patterns and new metropolitan area definitions, which will become available next year.

The Pay Agent respectfully disagrees with the Federal Salary Council's assessment regarding the desirability of designating Barnstable County as an area of application to the Boston locality pay area. We believe an ordered set of rules is necessary to define locality pay area boundaries and that once the rules are established, exceptions to the rules should be avoided and changes made in the rules only with good cause. Moreover, our review of available data on turnover, accessions, the use of special salary rates, and other pertinent information does not indicate that Federal agencies in Barnstable County are experiencing serious staffing problems. The data indicate that Federal installations in Barnstable County lose about 1.5 percent of their workforce to Federal installations located in the Boston locality pay area each year, but that more than 2 percent relocate to Federal installations located elsewhere. The 2.0 percent quit rate in Barnstable County in fiscal year 2001 was slightly below the national average of 2.1 percent. About 14.6 percent of GS employees in Barnstable County now receive special salary rates, but the national average is 15.4 percent, and OPM has not received any recent requests to establish new or higher special rates for employees in Barnstable County.

Therefore, the Pay Agent has determined that it would not be prudent to add Barnstable County, MA, to the Boston locality pay area at this time. We encourage the Council to study this matter further as part of its 2003 review of the locality pay program. In the meanwhile, we encourage Federal agencies with installations in Barnstable County to make strategic use of existing pay flexibilities to address any recruitment or retention problems that may exist for specific groups of employees. In many cases, the use of these pay flexibilities does not require prior review or approval by OPM.

Accordingly, we approve continuation of the following areas of application in 2004:

| <u>Area of Application</u>     | <u>Locality Pay Area</u> |
|--------------------------------|--------------------------|
| Portions of Bristol County, MA | Boston CMSA              |
| Edwards Air Force Base, CA     | Los Angeles CMSA         |

Monterey County, CA  
 New London County, CT  
 Santa Barbara County, CA  
 State of Rhode Island  
 St. Marys County, MD

San Francisco CMSA  
 Hartford MSA  
 Los Angeles CMSA  
 Boston CMSA  
 Washington, DC CMSA

### **Metropolitan Statistical Areas**

The metropolitan portions of locality pay areas currently are linked to Metropolitan Statistical Areas (MSAs), as defined and published by OMB. If OMB modifies an MSA boundary, the boundary of the affected locality pay area changes automatically.

OMB and the Census Bureau have announced plans to make changes in the way metropolitan areas are defined. In mid-2003, metropolitan areas will be redefined using new criteria and 2000 census data. The Council recommended in 2000 and 2001 that the Pay Agent should not adopt the new metropolitan area definitions until it has had an opportunity to assess their impact on the locality pay program. The Pay Agent agreed with this recommendation, and OPM published a proposed rule on behalf of the Pay Agent in the *Federal Register* on September 11, 2002. The comment period expired on November 12, and OPM plans to issue a final regulation on behalf of the Pay Agent soon.<sup>16</sup>

### **Locality Pay Areas for 2004**

The Pay Agent will continue the following 32 areas as locality pay areas in 2004:

|                  |                    |                       |
|------------------|--------------------|-----------------------|
| Atlanta MSA      | Houston CMSA       | Pittsburgh MSA        |
| Boston CMSA +    | Huntsville MSA     | Portland CMSA         |
| Chicago CMSA     | Indianapolis MSA   | Richmond MSA          |
| Cincinnati CMSA  | Kansas City MSA    | Sacramento MSA        |
| Cleveland CMSA   | Los Angeles CMSA + | St. Louis MSA         |
| Columbus, OH MSA | Miami CMSA         | San Diego MSA         |
| Dallas CMSA      | Milwaukee CMSA     | San Francisco CMSA +  |
| Dayton MSA       | Minneapolis CMSA   | Seattle CMSA          |
| Denver CMSA      | New York CMSA      | Washington, DC CMSA + |
| Detroit CMSA     | Orlando MSA        | Rest of U.S.          |
| Hartford MSA +   | Philadelphia CMSA  |                       |

The symbol “+” indicates one or more areas of application.

---

<sup>16</sup> We cannot summarize the comments received or announce the final decision on this proposed regulation here because the comment period expired only 18 days before this report was due.

## LOCAL PAY DISPARITIES AND COMPARABILITY PAYMENTS

Table 3, below, lists the pay disparities for 32 localities under OCSP and the NCS program and the average of the two pay disparities. Table 3 also derives the recommended local comparability payments under 5 U.S.C. 5304(a)(3)(I) for 2004 based on the average disparities, and it shows the disparities that would remain if the recommended payments were adopted.

Table 3 includes a number of locations with pay disparities below the Rest of U.S. pay disparity. The Pay Agent has adopted the Federal Salary Council's recommendation to continue these locations as separate locality pay areas, but to combine their average pay disparities with that for the RUS locality pay area. The adjusted RUS pay disparity is the weighted average of the pay disparities for RUS, Indianapolis, Kansas City, Orlando, and St. Louis, or 25.42 percent, using the GS base payroll in each area for weights. The "RUS-adjusted disparity" column contains the adjusted RUS pay disparity for all five locations.

The law requires comparability payments only in localities where the pay disparity exceeds 5 percent; the goal was to reduce local pay disparities to no more than 5 percent not later than the year 2002 (5 U.S.C. 5304(a)(3)(I)). The "Disparity to Close" shown in the table represents the pay disparity to be closed in each area based on the 5 percent remaining disparity threshold. The "Locality Payment" shown in the table represents 100 percent of the disparity to close. (Note: Since FEPCA contemplated that the target pay disparity would be closed by 2002, the amounts shown in columns 5 and 6 are the same.) The last column shows the pay disparity that would remain in each area if the indicated payments were made. For example, in Atlanta, the 33.13 percent average pay disparity would be reduced to 5.00 percent if the locality rate were increased to 26.79 percent  $(133.13/126.79-1) \times 100 = 5.00$  percent).

The actual remaining pay disparity as of January 2004 may differ from the calculations above for two reasons. First, Federal pay will have increased by the amount of the general increases effective in January 2003 and 2004. Second, non-Federal pay will have increased by some amount from March 2002 to January 2004. For the purpose of this report, we assume that future changes in Federal and non-Federal pay will substantially cancel each other out and that the pay disparities will remain about the same.

**Table 3. Local Pay Disparities and 2004 Comparability Payments**

| Locality       | -1-<br>OCSP<br>Disparity<br>(percent) | -2-<br>NCS<br>Disparity<br>(percent) | -3-<br>Average Pay<br>Disparity<br>(percent) | -4-<br>RUS Adj.<br>Disparity<br>(percent) | -5-<br>Disparity to<br>Close<br>(percent) | -6-<br>Locality<br>Payment<br>(percent) | -7-<br>Remaining<br>Disparity<br>(percent) |
|----------------|---------------------------------------|--------------------------------------|--|---|---|---|--|
| Atlanta        | 31.19                                 | 35.06                                | 33.13  | 33.13                                     | 26.79                                     | 26.79                                   | 5.00                                       |
| Boston         | 39.96                                 | 33.56                                | 36.76  | 36.76                                     | 30.25                                     | 30.25                                   | 5.00                                       |
| Chicago        | 43.44                                 | 33.86                                | 38.65  | 38.65                                     | 32.05                                     | 32.05                                   | 5.00                                       |
| Cincinnati     | 38.26                                 | 23.95                                | 31.11  | 31.11                                     | 24.87                                     | 24.87                                   | 5.00                                       |
| Cleveland      | 33.33                                 | 28.96                                | 31.15  | 31.15                                     | 24.90                                     | 24.90                                   | 5.00                                       |
| Columbus       | 31.20                                 | 22.27                                | 26.74  | 26.74                                     | 20.70                                     | 20.70                                   | 5.00                                       |
| Dallas         | 33.70                                 | 32.19                                | 32.95  | 32.95                                     | 26.62                                     | 26.62                                   | 5.00                                       |
| Dayton         | 31.01                                 | 22.39                                | 26.70  | 26.70                                     | 20.67                                     | 20.67                                   | 5.00                                       |
| Denver         | 39.75                                 | 30.55                                | 35.15  | 35.15                                     | 28.71                                     | 28.71                                   | 5.00                                       |
| Detroit        | 43.01                                 | 32.63                                | 37.82  | 37.82                                     | 31.26                                     | 31.26                                   | 5.00                                       |
| Hartford       | 40.38                                 | 43.29                                | 41.84  | 41.84                                     | 35.09                                     | 35.09                                   | 5.00                                       |
| Houston        | 50.45                                 | 42.92                                | 46.69  | 46.69                                     | 39.70                                     | 39.70                                   | 5.00                                       |
| Huntsville     | 26.61                                 | 28.96                                | 27.79  | 27.79                                     | 21.70                                     | 21.70                                   | 5.00                                       |
| Indianapolis*  | 26.94                                 | 23.34                                | 25.14  | 25.42                                     | 19.45                                     | 19.45                                   | 5.00                                       |
| Kansas City*   | 27.77                                 | 15.63                                | 21.70  | 25.42                                     | 19.45                                     | 19.45                                   | 5.00                                       |
| Los Angeles    | 46.06                                 | 38.66                                | 42.36  | 42.36                                     | 35.58                                     | 35.58                                   | 5.00                                       |
| Miami          | 37.95                                 | 27.41                                | 32.68  | 32.68                                     | 26.36                                     | 26.36                                   | 5.00                                       |
| Milwaukee      | 33.72                                 | 22.43                                | 28.08  | 28.08                                     | 21.98                                     | 21.98                                   | 5.00                                       |
| Minneapolis    | 37.07                                 | 33.95                                | 35.51  | 35.51                                     | 29.06                                     | 29.06                                   | 5.00                                       |
| New York       | 43.17                                 | 45.36                                | 44.27  | 44.27                                     | 37.40                                     | 37.40                                   | 5.00                                       |
| Orlando*       | 29.00                                 | 16.62                                | 22.81  | 25.42                                     | 19.45                                     | 19.45                                   | 5.00                                       |
| Philadelphia   | 36.80                                 | 33.59                                | 35.20  | 35.20                                     | 28.76                                     | 28.76                                   | 5.00                                       |
| Pittsburgh     | 29.67                                 | 25.20                                | 27.44  | 27.44                                     | 21.37                                     | 21.37                                   | 5.00                                       |
| Portland       | 37.33                                 | 27.75                                | 32.54  | 32.54                                     | 26.23                                     | 26.23                                   | 5.00                                       |
| Richmond       | 31.62                                 | 22.34                                | 26.98  | 26.98                                     | 20.93                                     | 20.93                                   | 5.00                                       |
| Sacramento     | 37.42                                 | 32.79                                | 35.11  | 35.11                                     | 28.68                                     | 28.68                                   | 5.00                                       |
| St. Louis*     | 29.65                                 | 19.85                                | 24.75  | 25.42                                     | 19.45                                     | 19.45                                   | 5.00                                       |
| San Diego      | 38.37                                 | 38.38                                | 38.38  | 38.38                                     | 31.79                                     | 31.79                                   | 5.00                                       |
| San Francisco  | 55.10                                 | 54.93                                | 55.02  | 55.02                                     | 47.64                                     | 47.64                                   | 5.00                                       |
| Seattle        | 38.17                                 | 35.99                                | 37.08  | 37.08                                     | 30.55                                     | 30.55                                   | 5.00                                       |
| Washington, DC | 35.35                                 | 35.08                                | 35.22  | 35.22                                     | 28.78                                     | 28.78                                   | 5.00                                       |
| Rest of U.S.   | 28.71                                 | 22.45                                | 25.58  | 25.42                                     | 19.45                                     | 19.45                                   | 5.00                                       |

\* The location has been combined with RUS.



### Average Locality Rate

The average locality comparability rate using the basic GS payroll as of March 2002 to weight the individual rates would be 25.73 percent in 2004 under the methodology used for this report. The average rate authorized in 2002 was 10.93 percent. We do not know the level of comparability payments that will be authorized in 2003.

### Overall Remaining Pay Disparities

The pay disparities contained in this report average 32.02 percent using the basic GS payroll as of March 2002 to weight the local pay disparities. However, this calculation excludes existing locality payments. When the existing locality payments (i.e., those paid in 2002) are included in the comparison, the overall remaining pay disparity as of March 2002 was  $(132.02/110.93-1) \times 100$ , or about 19 percent. Table 4, below, shows the overall remaining pay disparity in each of the 32 locality pay areas established by the Pay Agent.

**Table 4.**  
**Remaining Pay Disparities in 2002**

| Locality Pay Area | Remaining Disparity | Locality Pay Area | Remaining Disparity |
|-------------------|---------------------|-------------------|---------------------|
| Atlanta           | 21.31%              | Miami             | 17.99%              |
| Boston            | 20.42%              | Milwaukee         | 16.38%              |
| Chicago           | 21.01%              | Minneapolis       | 21.47%              |
| Cincinnati        | 16.97%              | New York          | 25.20%              |
| Cleveland         | 18.87%              | Orlando           | 15.41%              |
| Columbus          | 14.49%              | Philadelphia      | 20.60%              |
| Dallas            | 19.88%              | Pittsburgh        | 16.36%              |
| Dayton            | 15.58%              | Portland          | 18.72%              |
| Denver            | 19.24%              | Richmond          | 15.78%              |
| Detroit           | 20.15%              | Sacramento        | 20.64%              |
| Hartford          | 24.30%              | St. Louis         | 15.09%              |
| Houston           | 23.67%              | San Diego         | 22.79%              |
| Huntsville        | 17.15%              | San Francisco     | 30.23%              |
| Indianapolis      | 15.22%              | Seattle           | 22.64%              |
| Kansas City       | 14.77%              | Washington, DC    | 21.30%              |
| Los Angeles       | 22.67%              | Rest of U.S.      | 15.45%              |

## COST OF LOCALITY PAYMENTS

### Estimated Cost of Locality Payments

The cost of locality payments is the sum of all individual locality payments during a calendar year, offset by special rates and geographic adjustments for law enforcement officers (LEOs). This amount is estimated using OPM records of all Federal employees with duty stations within the continental United States (CONUS) as of March 2002 and covered by the General Schedule or other pay plan to which locality pay has been extended, together with the percentage locality payments from Table 3. The estimate assumes that the average number and distribution of employees (by locality, grade, and step) in CONUS in 2004 will not differ from the number and distribution in March 2002. The estimate does not include increases in premium pay costs or Government contributions for retirement, life insurance, or other employee benefits that may be attributed to locality payments.

Cost estimates are derived as follows. First, both the “scheduled annual rate of pay,” as defined in 5 CFR 531.602, and the annual rate inclusive of special rates and LEO geographic adjustments are determined for each employee. (These rates are adjusted to include an assumed 3.1 percent across-the-board increase in 2003 and the 2.7 percent across-the-board increase that would go into effect in 2004 under current law.) Both annual rates are converted to expected annual earnings by multiplying each by an appropriate work schedule factor.<sup>17</sup> The “gross locality payment” is computed for each employee by multiplying expected annual earnings from the scheduled annual rate by the locality payment percentage for the employee’s locality pay area. The sum of these gross locality payments is the cost of locality pay before offset by special rates and LEO geographic adjustments.

Second, for each employee, the gross locality payment is compared to the amount by which expected annual earnings from the annual rate inclusive of special rates and LEO geographic adjustments exceeds the expected annual earnings from the scheduled annual rate. This second amount is the “cost” of any special rate or LEO geographic adjustment. If the gross locality payment is less than or equal to the cost of any special rate or LEO geographic adjustment, the net locality payment is set to zero. In this case, the locality payment is completely offset. If the gross locality payment is greater than the cost of any special rate or LEO adjustment, the net locality payment is equal to the gross locality payment minus the cost of any special rate or LEO geographic adjustment. In this case, the locality payment is at most partially offset. If the scheduled annual rate is the same as the annual rate inclusive of special rates and LEO geographic adjustments (i.e., the cost of any special rate or LEO geographic adjustment is zero), then there is no offset and the net locality payment equals the gross locality payment. The sum of the net locality payments so derived is the estimated cost of local comparability payments.

---

<sup>17</sup> The work schedule factor equals 1 for full-time employees and one of several values less than 1 for the several categories of non-full-time employees.

### **Estimated Cost of Locality Payments in 2004**

Table 5, below, compares the cost of 2002 locality rates to those that would be authorized in 2004 under 5 U.S.C. 5304(a)(3)(I), as identified in Table 3. For the purpose of this cost estimate, we have assumed that there will be a 3.1 percent across-the-board increase in January 2003 but have used the locality rates in effect for 2002. The “2003 Baseline” cost would be the cost of locality pay in 2004 if the 2002 locality rates were not increased, i.e., the percentage locality payments in 2002 on top of base pay increased by the 3.1 percent across-the-board adjustment in January 2003 and the 2.7 percent adjustment in January 2004.

The “100 Percent of Target in 2004” columns show what the total locality payments would be and the net increase in 2004. The “2004 Increase” column shows the 2004 total payment minus the 2003 baseline—i.e., the net increase in locality pay in 2004 attributable to higher locality pay rates. Based on the assumptions outlined above, we estimate the total cost of the net pay increases attributable to the locality rates that otherwise would be required by current law to be about \$8.830 billion on an annual basis. This amount does not include the cost of benefits or the amount of the assumed increase in rates of basic pay that would take effect in January 2004 under current law.

This cost estimate excludes 1,747 records of white-collar workers, which were unusable because of errors. Many of these employees may receive locality pay. Including these records would add about \$12 million to the net cost of locality payments. The cost estimate covers only the General Schedule and employees in pay plans who receive locality pay by action of the Pay Agent. It excludes the cost of pay raises for employees under other pay systems that may be linked in some fashion to locality pay increases. These other pay systems include the Federal Wage System for blue-collar workers, under which raises often are capped based on the increase in locality rates for white-collar workers; pay raises for employees of the Federal Aviation Administration and other agencies which have independent authority to set pay; and pay raises for employees covered by various demonstration projects.

**Table 5.**  
**Cost of Local Comparability Payments in 2004 (in millions of dollars)**

| Cost Component                         | 2003<br>Baseline | 100% of Target in 2004 |               |
|--|------------------|------------------------|---------------|
|  |                  | Total<br>Payments      | 2004 Increase |
| Gross locality payments                | \$7,091          | \$16,237               | \$9,146       |
| Special rates offsets                  | 653              | 965                    | 312           |
| LEO geographic<br>adjustments offsets* | 143              | 147                    | 4             |
| Net locality payments                  | \$6,295          | \$15,125               | \$8,830       |

\*LEO geographic adjustments are pay adjustments to which law enforcement officers are entitled in certain metropolitan areas.

## RECOMMENDATIONS OF THE FEDERAL SALARY COUNCIL AND EMPLOYEE ORGANIZATIONS

The Federal Salary Council's deliberations and recommendations have had an important and constructive influence on the findings and recommendations of the Pay Agent. The Council's recommendations appear in **Appendix I**. We have adopted all of their recommendations except for a recommendation to add Barnstable County, MA, to the Boston locality pay area. The members of the Federal Salary Council are:

|                       |   |
|-----------------------|---|
| Samuel J. Wallace     | Chairman;   |
| Mary M. Rose          | Vice Chair;   |
| Rudy J. Maestas       | Director, Labor and Industrial Division, New Mexico<br>Department of Labor; |
| Bobby L. Harnage, Sr. | National President,<br>American Federation of Government Employees/AFL-CIO; |
| Peter A. Tchirkow     | American Federation of Government Employees/AFL-CIO;                        |
| Colleen M. Kelley     | National President,<br>National Treasury Employees Union;                   |
| Richard N. Brown      | National President,<br>National Federation of Federal Employees/AFL-CIO;    |
| Thomas Bastas         | National President,<br>Association of Civilian Technicians; and             |
| James Pasco           | Executive Director,<br>Fraternal Order of Police                            |

The Council's recommendations were provided to organizations not represented on the Council. These organizations were asked to send comments for inclusion in this report. These comments appear in **Appendix XI**.

## FUTURE SURVEYS

BLS has implemented three of the five improvements designed for its National Compensation Survey (NCS) program:

- (1) Problems associated with random selection of survey jobs.

Progress: BLS has designed an econometric model that was used to estimate salaries for jobs not randomly selected in the surveys. NCS program data used for this report include modeled data when survey data were not available.

- (2) Matching Federal and non-Federal jobs.

Progress: OPM formed an interagency working group that developed a crosswalk between Federal job classifications and the new Standard Occupational Classification System, which BLS uses in its surveys. OPM staff made a few improvements designed to better match certain jobs, and BLS used the new crosswalk and March 2001 GS employment data to weight the NCS data used in this report.

- (3) Excluding randomly selected jobs that would be classified above GS-15 in the Government.

Progress: BLS developed methods for identifying and excluding non-Federal jobs that would be classified above GS-15 in the Federal Government. These jobs were excluded from data delivered to the Pay Agent for use in the locality pay program.

Two other improvements are still under development and will not be introduced into the surveys until December 2003. These are:

- (1) Assigning GS grades to randomly selected survey jobs.

Progress: OPM has designed and tested a four-factor evaluation system for use in the surveys, and BLS has successfully used the new approach in field tests. OPM also developed 20 job family grade leveling guides that cover the range of work under the General Schedule and provide occupation-specific information for use in the surveys. Pay Agent and BLS staff plan to phase the new approach into BLS surveys beginning in December 2003. This improvement will take 5 years to fully implement because BLS conducts detailed job leveling interviews only when it first adds an establishment to its surveys and replaces only 1/5 of its establishment sample each year.

- (2) Assigning GS grades to randomly selected survey jobs with supervisory duties.

Progress: BLS has identified survey establishments where supervisory jobs were surveyed, discussed new collection procedures with its staff, and tested a new method of grading supervisory jobs based on grading the highest level of work supervised.

BLS completed additional testing of the new procedures in late 2002, and Pay Agent and BLS staff plan to fully incorporate the new approach into BLS surveys with the next survey cycle beginning in December 2003.

We look forward to reviewing the results of NCS data delivered next year, when we will have 2 years of modeled data to consider. The last two improvements in NCS surveys will begin to affect data delivered in 2005. We encourage BLS and Pay Agent staff to expedite completion of these last two improvements in the NCS program.