

# Implicit Compensation for Career Public Employees

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## Summary

*The Colorado Division of Human Resources (DHR) conducts an annual compensation survey to support a state policy that provides competitive total compensation to ensure a qualified and competent workforce. Because this survey is significantly flawed in its estimation of retirement compensation, the comparison between private and public sector compensation is distorted.*

*In particular, DHR substantially understates retirement compensation for career public employees in Colorado. To indicate the magnitude of understatement, our study of PERA retirement benefits provides an historical baseline from which to evaluate retirement compensation.*

*Improved estimates of implicit retirement compensation would allow a more realistic comparison between private and public sector compensation, and would support better decision making about allocation of scarce tax dollars for public employee compensation.*

## Mismatch between Retirement Benefits and Compensation Survey

State and local governments in Colorado, through the Public Employees Retirement Association (PERA), provide retirement benefits to many former public employees. At the start of 2006, PERA

had more than 180,000 contributing members and 71,000 benefit recipients, according to the PERA website ([www.copera.org](http://www.copera.org)). PERA members can retire with a specified percentage of their highest average salary (HAS) based on service years and retirement age. For employees hired before July 2005, a retiree receives a standard benefit rate of 2.5 percent of HAS for each service year if the rule of 80 (sum of service years and retirement age) is reached when retiring with a minimum age of 50. For example, an employee retiring at age 50 with a HAS of \$100,000 and 30 service years would receive \$75,000 in the first year of retirement with benefits increased 3.5 percent in subsequent years. These benefit formulas, combined with the ability to purchase service credits, will enable large numbers of state employees in the next 10 years to retire at younger ages and at

### **Example: PERA Retiree Benefit Formula**

*Public employee Susan retires at age 50 with a highest average salary (HAS) of \$100,000 and 25 years of service. Since she has reached the rule of 80 (age 50 + 30 years of service), she will receive \$75,000 in her first year of retirement:*

$$(2.5\% \times 30) = 75\% \text{ of } \$100,000 \text{ } (\$75,000)$$

*Susan's retirement benefits will increase 3.5 percent in subsequent years.*



higher benefit levels than comparable private sector employees.

In a somewhat surprising contrast, the 2007 – 2008 Annual Compensation Survey conducted by the Colorado Division of Human Resources (DHR) finds approximate parity between retirement compensation in the public and private sectors. For the private sector, retirement compensation is estimated as 11.85 percent (7.65 percent FICA and an average 4.2 percent to defined contribution plans) while employer PERA contributions average 11.35 percent.

The reality seems far different from DHR's assessment. Most private sector employees retire at substantially older ages. Most of their retirement assets are subject to market risks supplemented by modest social security income at the whim of political pressure to lower benefits.

With a strong economy and the looming retirement of many public employees, pressure is growing to raise compensation for state and local govern-

ment workers in Colorado. The Colorado Association of Public Employees is correct that the compensation system is flawed, but their remedy to fix the compensation system is not. Their recommendation to concentrate increased compensation on long-term employees ignores the importance of deferred retirement compensation already available to retain long-term employees.

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The flaw is due to the large amount of unmeasured (implicit) deferred compensation in retirement benefits for career employees. The large amount of deferred compensation encourages employees to retire in periods of peak productivity and limits budgets in areas of strong competition with the private sector.

An important step in rationalizing compensation is a total compensation model that recognizes the large

amount of deferred compensation earned by career employees. Increased compensation could be targeted towards high priority areas, and career employees could be given the choice of immediate additional compensation or deferred compensation.

## **Historical Compensation Value of PERA Retirement Benefits**

In response to these concerns, we performed a detailed study about lump-sum deferred compensation benefits under PERA. Specifically, our study estimated the present value of expected retirement benefits using a sample of 278 university retirees from 1999 to 2006, with salary histories from 1970 to 2006.

In estimating the present value of future retirement benefits, we used the highest average salaries from our sample, PERA mortality rates, and interest rates from the Single Premium Insurance Annuity (SPIA) marketplace. SPIA products provide the private sector alternative to achieve a guaranteed stream of lifetime income.

We also created hypothetical retirement accounts for each retiree using PERA guaranteed rates and portfolio returns to estimate the retirement account balances if contributions (employee and employer) and earnings were accumulated until retirement. We refer to the difference between the purchase price of a lifetime annuity from the SPIA market place less the hypothetical retirement account balance, as implicit compensation.

The key results of our study are the level of implicit compensation and the impact of retirement age, job classification, and retirement period. Based on guaranteed PERA interest rates on account balances and interest rates available in SPIA products at retirement dates, the average retiree's lump-sum deferred compensation was more than \$520,000.

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Since retirement benefits are guaranteed, it is appropriate to judge the value of PERA benefits using a risk-free rate of return with PERA guaranteed rates substantially larger than traditional risk-free rates. As evidence of the value placed on the risk-free nature of retirement benefits, the Colorado Association of Public Employees website emphasizes their victory in preserving secure retirement benefits rather than gambling their retirement in individual risk accounts. Even using PERA's portfolio returns, the average lump-sum deferred compensation was more than \$290,000. Lump-sum deferred compensation was substantially larger for administrative and professional employees, employees retiring at younger ages (receiving longer periods of future benefits), and retirements in periods of low market interest rates.

Seven extreme observations had between \$1,275,000 and \$1,860,000 of lump-sum deferred compensation. Extreme outliers generally were administrative retirees who retired in their 50s with six-figure salaries and high-salary growth over their last five years of employment.

From a total compensation perspective, using employer contribution rates (currently about 11.35 percent) substantially understates retirement compensation for career employees. When the lump-sum deferred compensation is allocated to all service years with PERA-guaranteed interest rates on the additional contributions, the average additional employer contribution rate in our study was 26 percent. Restated, each retiree would have had to receive on average a 26 percent higher salary each working year invested at PERA-

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If the allocation is weighted to the number of service years, the average additional employer contribution rate was 36 percent. Most turnover among state employees occurs among younger employees with

few service years. Therefore, a weighted approach is preferred to allocate more deferred compensation to older employees with many service years. The additional contribution rate was substantially larger for younger, administrative and higher-paid professional retirees in periods of low market interest rates.

We believe our study would generalize to the larger population of state and local government employees in PERA, although our sample involved only university retirees. Most administrative university employees are not in PERA, but most administrative employees in other parts of state and local government remain in PERA.

We believe the other university employee groups (professional and non-professional) are comparable to other parts of state and local government. Universities may provide a model for other parts of state government to attract talented administrative employees without defined PERA benefits.

## Conclusion

The current practice in DHR annual compensation surveys about retirement compensation contradicts the results of our study and the reality between public and private sector retirees. A realistic assessment of the value of deferred retirement compensation is an important part of a total compensation model for public employees in Colorado.

Recognizing implicit compensation in PERA retirement benefits will support rational decision making about attracting new talented employees, while achieving desired levels of job performance, hiring/retention effort, organizational learning, customer service, and cost control. The current practice of non-recognition of implicit retirement compensation may lead to misallocation of resources, difficulties in attracting talented employees, poor government service, and high taxpayer cost.

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