



## State and local government workers preparing for retirement: Do you understand your plan formula?

*By Natalie Kramer and Jesus Ranon-Hernandez*

The National Compensation Survey (NCS) publishes information on the coverage and provisions of employer-sponsored benefit plans for private industry and state and local government workers.<sup>1</sup> For workers approaching retirement age, trying to make sense of retirement options can be daunting. The NCS can provide answers to questions such as the following:

- How much of a benefit will I receive at retirement?

- If I retire early, will my benefits be reduced?
- Will my benefits be increased if I work a few more years?

This issue of **Beyond the Numbers** describes basic retirement formulas by using different retirement scenarios and formulas to illustrate the monthly retirement benefit. Two examples are provided for specificity.

Defined benefit plans, often referred to as pension plans, provide income during retirement—income that is guaranteed and defined in advance by a benefit formula.<sup>2</sup> The participant's retirement age, length of service, and preretirement earnings may affect the benefits received. In 2016, 75 percent of state and local government workers participated in defined benefit plans. Almost all of these workers (98 percent) had their benefits calculated on the basis of their final career earnings (terminal earnings) and years of service. Three-quarters of that 98 percent of workers were in plans that included a fixed, or flat, percentage as part of the formula to calculate their retirement benefits. The median percentage used by these plans was 2.0 percent. A worker's terminal earnings usually are based on more than just the last year of service. In fact, only 5 percent of workers' benefits are calculated on the basis of a single year, while the benefits for 48 percent of workers are calculated off their final 3 years and, for another 30 percent, the benefits are calculated on the basis of 5 years of service.

## Retirement calculations: some scenarios

The example that follows presents a basic calculation of a pension benefit under a traditional defined benefit plan based on terminal earnings.<sup>3</sup> Because terminal earnings tend to be employees' highest earnings, this example provides differences in the factors that contribute to the benefits received in retirement.

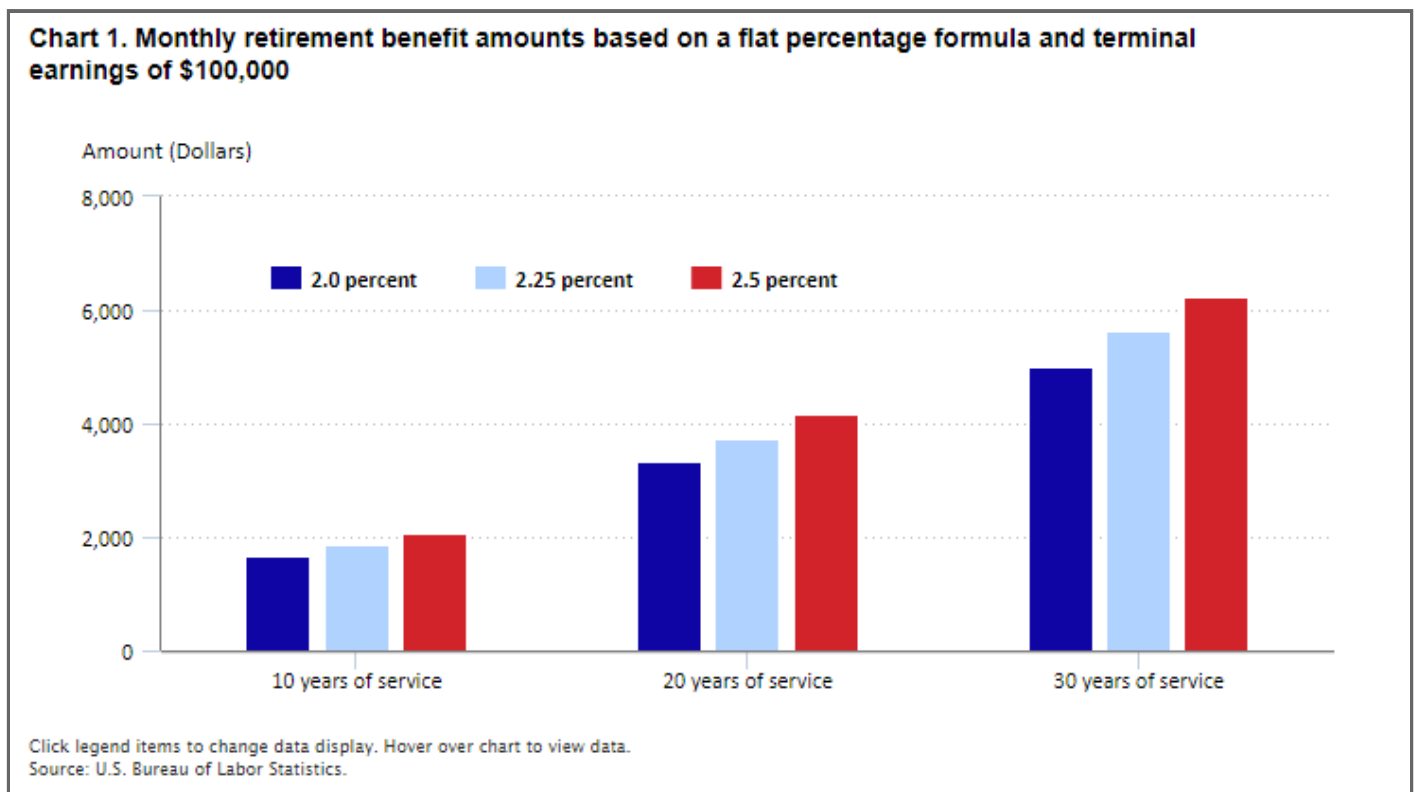
Consider Patience B. Virtue (age 62), a City College professor participating in a defined benefit plan for faculty members. Dr. Virtue is considering retiring after 30 years of teaching and wants to know what his monthly benefit might be in retirement. His terminal earnings are based on the "high three" years of his teaching career. Over the past 3 years, he earned \$95,000, \$100,000, and \$105,000, so his terminal earnings would be his average earnings over those years, or \$100,000.

The flat formula percentage is 2.5 percent in Dr. Virtue's retirement plan. In other words, each year of his 30 years of service is multiplied by 2.5 percent of \$100,000. Thus, upon retirement, his annual benefit amount would equal \$75,000 (a \$6,250 monthly benefit) and would replace 75 percent of his preretirement earnings.

## Other factors in calculating retirement

But what if Dr. Virtue had decided to retire 10 years early instead? Then, given that his terminal earnings were still \$100,000, instead of multiplying the \$2,500 (2.5 percent x \$100,000) by 30 years, the plan would now compute his annual benefit on the basis of 20 years of service. In that case, his annual benefit would be \$50,000 (a \$4,167 monthly benefit).

Chart 1 gives an example of how changes to the number of years of service and the plan's flat percentage affect the monthly retirement benefit amounts, holding the terminal earnings constant.



Now, suppose that Dr. Virtue’s colleague, Dr. Getts (age 55), started teaching at City College a few years after Dr. Virtue and, by that time, some of the plan provisions had changed. Instead of calculating benefits on the basis of a flat 2.5 percent, her plan uses 2.0 percent. Given the difference of 0.5 percent between her plan and Dr. Virtue’s, Dr. Getts wonders what her retirement benefits would be if she also retires after 30 years of service with terminal earnings of \$100,000. Based on this information, the annual benefit amount would be \$60,000 (\$5,000 monthly), or 60 percent of her “high three” earnings. As this example shows, a 0.5-percent drop in the formula’s percentage can result in a 20-percent reduction in the retirement benefit received.

Dr. Virtue and Dr. Getts took into account that their plans also contained age and length-of-service requirements. In fact, 53 percent of plans had age and service requirements in 2016, with a median age of 60 years and 28 years of service. Although they both intend to work for 30 years, allowing them to meet their plans’ age and service requirements, these two provisions may limit their ability to retire earlier than other workers.

## Conclusion

Understanding how retirement benefits are calculated and being aware of the differences in monthly retirement benefits are important in assessing the tradeoffs between working additional years and retiring. Even as the private sector has largely phased out the defined benefit plan as the main employer-sponsored retirement plan option, the majority of state and local government workers have access to defined benefit plans, and it is important to understand one’s particular plan provisions and what they mean in planning for retirement. As individuals join the workforce, evaluating their benefit package is important for a complete understanding of their total compensation. Knowing the provisions of retirement benefits, such as vesting and eligibility requirements, can help individuals decide when to look for new opportunities, when to remain with their current employer, when to consider negotiating for a raise or benefit package, and what to consider in doing so.

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## NOTES

<sup>1</sup> See “National Compensation Survey: Employee Benefits in the United States, March 2017,” [www.bls.gov/ncs/ebs/benefits/2017/home.htm](http://www.bls.gov/ncs/ebs/benefits/2017/home.htm), and “National Compensation Survey: Retirement Plan Provisions in State and Local Government in the United States, 2016,” [www.bls.gov/ncs/ebs/detailedprovisions/2016/ownership/govt/home.htm](http://www.bls.gov/ncs/ebs/detailedprovisions/2016/ownership/govt/home.htm). For the latest data on the National Compensation Survey, visit the NCS publications homepage, [www.bls.gov/ncs/ncspubs.htm](http://www.bls.gov/ncs/ncspubs.htm).

<sup>2</sup> For additional terms used by the NCS, see “National Compensation Survey: Glossary of Employee Benefit Terms,” [www.bls.gov/ncs/ebs/glossary20162017.htm](http://www.bls.gov/ncs/ebs/glossary20162017.htm).

<sup>3</sup> For information regarding the calculation of the incidence and provisions of benefits, see *Handbook of Methods*: “National Compensation Measures: Overview,” [www.bls.gov/opub/hom/ncs/home.htm](http://www.bls.gov/opub/hom/ncs/home.htm).

## SUGGESTED CITATION

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