CHAPTER 1
Protecting Participants and Beneficiaries in a Phased Retirement World

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§ 1.01 ABSTRACT

The U.S. society is aging. The nature of work is changing from work that requires physical strength to work based on knowledge. As a result, workers are beginning to phase into retirement rather than going directly from full-time work to full retirement. From a retirement income perspective, many final average pay, defined-benefit plans have features that make phased retirement difficult at best and detrimental at worst. U.S. pension law and regulations present barriers to phased retirement if the phased retiree wants to receive a portion of available pension benefits during phased retirement.

This paper discusses the reasons for the trend toward phased retirement and looks at the legal and actuarial aspects of phased retirement as they apply to a simple defined-benefit plan. The calculation of final average pay is critical to the impact of phased retirement on the ultimate pension benefit. The plan’s early retirement reduction and late retirement increase can be set to maintain
actuarial equity throughout phased retirement, and this paper demonstrates one way of achieving this equity.

Phased retirement can also impact participant and spousal protections. This paper discusses some of those impacts and suggests possible safeguards.

The tables in the Appendix show various retirement patterns and their impact on retirement benefits. The tables also show the impact of various final average pay definitions on the phased retiree’s retirement benefits.

§ 1.02 INTRODUCTION

As America ages, the workforce will need to change. Because of the lower birth rates that followed the baby boom, the number of young workers declined by 14% in the 1990s, and there will be a shortage of talented young workers for decades to come.1 There were seven working-age persons for every elderly person in the United States in 1950, but that ratio will drop to less than 3-to-1 by 2030.2 Consequently, employers will want to find ways to retain their productive older workers.

At the same time, since the repeal of mandatory retirement,3 so-called “phased,” or gradual, retirement has started to replace the traditional “cliff” retirement pattern that had older workers leaving the workforce suddenly and never coming back.4 Many older Americans are staying in or reentering the workforce, especially in part-time and contingent work situations.5 According to a recent

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2 COMMITTEE FOR ECONOMIC DEVELOPMENT, NEW OPPORTUNITIES FOR OLDER WORKERS: A STATEMENT ON NATIONAL POLICY BY THE RESEARCH AND POLICY COMMITTEE OF THE COMMITTEE FOR ECONOMIC DEVELOPMENT 2 (1999).

3 Mandatory retirement is still allowed for certain highly compensated employees.

4 According to one definition, “Phased retirement is any arrangement that enables employees approaching normal retirement age to reduce their work hours and job responsibilities for the purpose of gradually easing into full retirement.” WATSON WYATT, PHASED RETIREMENT — RESHAPING THE END OF WORK (1999), summary available at <http://www.watsonwyatt.com>.

survey by Watson Wyatt, 16% of the companies surveyed now offer phased retirement programs. The survey also found that phased retirement programs were more prevalent at firms in which workers have an average age of 45 or higher. Also, according to one estimate, roughly one-third of older workers leave their long-held career jobs in favor of new jobs that serve as a bridge to full retirement.

Clearly, both employers and employees are interested in phased retirement. Unfortunately, however, the U.S. pension system was not designed with an eye toward phased retirement. Many companies face serious legal impediments to establishing an effective phased retirement program. In 2000, one of the working groups of the ERISA Advisory Council focused on phased retirement, and Representative Earl Pomeroy (D-ND) and Senator Charles Grassley (R-IA) introduced legislation that would change ERISA to permit employers to provide in-service distributions once an employee reaches age 59\(\frac{1}{2}\) or 30 years of service.

More and more workers are using phased retirement as a way to ease into retirement rather than going from full-time work to full retirement. This paper explores the impact of phased retirement on


6 Watson Wyatt, supra note 4.

7 Id. See also William M. Mercer, Inc., Capitalizing on an Aging Workforce: Phased Retirement & Other Options (October 2000, Revised April 2001); David Rajnes, Phased Retirement: Leaving the Labor Force, 22 EMPLOYEE BENEFIT RESEARCH INSTITUTE NEWSLETTER 1 (No. 9, Sept. 2001); When It’s Just a Phase: Transitioning into Retirement, TIAA-CREF PARTICIPANT, November 2001, at 10; Mary Beth Franklin, Exit Strategies, 55 KIPLINGER’S PERSONAL FINANCE 38 (No.3, March 2001).

8 Committee for Economic Development, supra note 2, at 9.


benefits provided by a traditional final average pay defined-benefit pension plan. The tables in the Appendix show the impact of phased retirement on benefit amounts under various payout patterns. They compare common offsets for benefits paid against continued accruals with an actuarially neutral approach that avoids excessive offsets when only part of the benefit is being paid out during phased retirement. This paper discusses some of the legal, administrative, and public policy concerns of phased retirement.

[1] What is Phased Retirement?

Phased retirement is generally used to refer to one of two situations:

- A person is working part-time after retiring from a full-time career job. The part-time job is often unrelated to the career job, and it is referred to as a “bridge” job.
- A person works a reduced work schedule in the career job before full retirement from that job.

This paper will focus on the second type of phased retirement described above.


Phased retirement is not a new phenomenon. It is expected to increase in importance for the economy as the large cohort of baby boomers begin to reach retirement age. The baby boom generation is often defined as those born between 1946 and 1964. The oldest baby boomers have already reached age 55 — a common age for early retirement eligibility in defined-benefit plans. These boomers will begin reaching age 65 in 2011. With increased longevity and more healthy years, many baby boomers will have an active life well beyond age 65. The Employee Benefit Research Institute’s 2001 Retirement Confidence Survey found that 26% of current retirees say they have worked either full-time or part-time since they retired.11

Because our economy is more dependent on knowledge and less on manufacturing, physical strength of workers has become less important. As a result, it is possible to remain highly productive even as physical strength declines. Phased retirement provides a way for older workers to continue using their lifetime skills and knowledge while easing into full retirement. Phased retirement also allows employers to lose their skilled knowledge workers gradually rather than losing the talents all at once as with traditional cliff retirement. It is expected that employers will want to retain experienced knowledge workers in part to help with the transition to younger, less experienced knowledge workers.

The current U.S. pension system does not facilitate phased retirement, especially for defined-benefit plans and for workers who want to begin phased retirement before the normal retirement age and receive benefits from the pension plan while still working. Not all employees will have other sources of income, such as investment income, to supplement their earned income during phased retirement, so they will need access to at least a portion of their pension as they ease into full retirement. Legislative and regulatory changes that will allow employers and workers to structure phased access to retirement benefits will be necessary if phased retirement is to become an attractive alternative to a significant segment of baby boomers.


This discussion of actuarial equity begins with the premise that phased retirement should be beneficial to both the employer and the employee. It benefits the employee by allowing him or her to design a phased retirement pattern. As long as that phased retirement is beneficial to the employer, the employer can implement that retirement pattern for that specific employee. The employer can then negotiate a different, or perhaps similar, phased retirement pattern with another employee. The employee enjoys freedom to design her transition from full-time work to full retirement. The employer enjoys the productivity and talent of the employee during this transition time.

Given the premise that phased retirement is beneficial to both the employer and the employee, the financial impact of whether the employee decides to supplement his or her phased retirement
income with pension plan distributions should be actuarially neutral. The employer is benefiting from the continued work of the phased retiree. Although the employer cannot be expected to subsidize the pension payouts during phased retirement, the employer should not expect to receive an actuarial benefit depending on whether or not the employee decides to receive some or all of the accrued pension benefits before full retirement.

If a participant terminates under a pension plan and is eligible to begin receiving pension distributions at early retirement, normal retirement, or any time in between, the employer does not participate in the participant’s decision of when to begin pension payments. Similarly, once the phased retirement pattern is negotiated, the employer should have no financial stake in the pension distributions.

The tables in the Appendix demonstrate various ways of achieving actuarial neutrality in phased retirement payouts. The key to this actuarial neutrality is for the plan to make a full actuarial reduction for early retirement distributions, as well as a full actuarial increase for continued employment after normal retirement age.

As more fully explained below, the tables in the Appendix compare various ways to pay retirement benefits to a hypothetical employee who works full-time for an employer from age 25 until age 60, works half-time from age 60 through age 69, and retires at age 70 with a pension based on 1% times Years of Service times Final Average Pay. At the outset, Table A-2 presents the simple situation in which this hypothetical worker receives no benefits until full retirement. Starting at age 70, this worker would begin to draw an annual retirement benefit of $66,342, based on 25 years of service.

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12 The employer and employee will presumably negotiate a compensation and employment arrangement that is mutually beneficial. That aspect of equity in phased retirement is outside the scope of this paper.

13 See infra § 1.14.

14 Actuarial assumptions must also be consistent to achieve this actuarial equity. If a defined-benefit plan pays lump sums to phased retirees, this actuarial equity may not be possible because of mandated actuarial assumptions for lump-sum calculations.

15 See infra § 1.02[5].

16 See infra Table A-2 in § 1.14.
of full-time service and 10 years of half-time service. At age 70, the present value of this worker’s retirement benefits is $637,800.

No doubt, however, many workers would find it difficult to make the financial transition from full-time pay at age 59 to half-time pay starting at age 60. Most of these workers would want to begin receiving at least a portion of their hard-earned retirement benefits prior to age 70. Tables B-1, B-2, and B-3 present three alternative retirement benefit payout patterns of equivalent value (i.e., also worth $637,800 at age 70). For example, in Table B-1, our hypothetical worker would draw a partial benefit of $9,842 from age 60 through 69, and then draw $50,737 a year for the rest of her life. Similarly, in Table B-2, our hypothetical worker would draw nothing until age 65 and then draw a full retirement benefit of $40,076 a year for the rest of her life. Finally, in Table B-3, our hypothetical worker would draw nothing until age 65, a partial retirement benefit of $20,038 a year from age 65 through age 69, and $53,209 a year for the rest of her life.


The definition of final average pay can also have a significant impact on the effect of phased retirement on the retirement benefits payable from a final average pay plan. Table C in the Appendix shows how several possible definitions of final average pay would affect a participant who is working half-time during phased retirement, starting at age 60. The worker receives a 4% annual salary increase each year, including during phased retirement, so the worker would generally see an increase in annual pay, but, of course, any worker going from full-time work to half-time work would see a substantial decline in annual salary.

Consequently, a traditional final average pay plan that averages the final 5 compensation amounts for determining benefits can penalize the phased retiree for continuing to work, because part-time pay during phased retirement would be used in determining final

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17 Final average pay is based on annualized pay during phased retirement, and partial years of service are earned during phased retirement.

18 See infra Summary Present Value Table in § 1.14.

19 See infra Tables B-1, B-2, and B-3 in § 1.14.

20 See infra Table C in § 1.14.
average pay. The result is final average pay that decreases from year to year as a year of full-time pay is dropped from the final 5 years and a year of part-time pay is added in its place. Once the entire final average pay is based on part-time pay during 5 years of phased retirement, the average will begin to increase because of salary increases in the rate of pay as a result of inflation, productivity, merit, and/or promotional increases. However, even then, that average will likely be much smaller than the average just before phased retirement.

Many plans, in fact, use this “Decreasing Final Average Pay” approach. Even plans that average the high 5 of the last 10 compensation amounts will have decreasing final average pay if the participant works a reduced schedule for more than 5 years and salary increases do not make up for the pay reduction as a result of the reduced work schedule.

Instead of having final average pay decrease during phased retirement, the plan could use the highest 5 consecutive compensation amounts throughout the entire service period. The disadvantage to this approach is that the participant does not benefit from any increases in the rate of pay during phased retirement. Because phased retirement should be structured to benefit both the employee and the employer, it seems unfair not to reflect pay increases in final average pay used to determine the benefit amount.

21 Id.; see also Table A-1 in § 1.14, infra. Unlike Table A-2, Table A-1 shows how retirement benefits are computed for a hypothetical employee who works full-time for an employer from age 25 until age 60, works half-time from age 60 through age 69, and retires at age 70; only her benefits are based on a typical final average pay formula that does not annualize the pay of part-time workers. Consequently, this worker’s final average pay at age 60 was $87,838, but if she works half-time that year, her half-time $49,327 salary that year will replace the higher full-time salary she earned when she was 55 — to yield a lower final average pay at age 61 of just $81,486. Similarly, her benefit from the formula would fall from $30,743 to $29,335. (Her accrued benefit payable does increase slightly, but that is because the actuarial adjustment required because she has deferred retirement for another year exceeded the decline attributable to the fall in her benefit from the formula.)

22 For example, in Table A-1, in § 1.14, infra, both final average pay and accrued benefits will start to increase at age 66, as this hypothetical worker’s sixth year of half-time pay replaces her lower-paid first year of half-time pay in the plan’s final average pay formula.

23 With today’s low inflation, it is unlikely that salary increases would compensate for the pay reduction from a 50% work schedule.
To be sure that the worker gets the benefit of pay rate increases during phased retirement, the plan could annualize pay during phased retirement years. This approach is similar to the approach many plans use for participants who do not work a full-time schedule. Under this approach, if the plan credits a partial year of service for a year in which a participant works less than a threshold number of hours, a participant working part-time while phasing into retirement would receive a partial year of service. The plan would then annualize the worker’s compensation for that year. For example, a plan could credit a half-time worker with a half a year of benefit accrual service and annualize the worker’s salary by doubling it. This is the “Average with Phased Years Annualized” approach in Table C of the Appendix, and it is the one we use in most of our tables.

A plan could, instead, annualize pay during phased retirement and credit a full year of benefit accrual service at the same time. However, this approach would result in a disproportionate benefit accrual during phased retirement years by using a full year of benefit accrual service and annualized pay, as if the participant received a full year of pay even though the participant is working part-time and phasing into retirement. We have not used this over-weighting approach in our tables.

Another alternative to using annualized pay during phased retirement in the calculation of final average pay would be to use a partial year in the divisor of the final average pay fraction. For example, the first year the participant works 50% of a full-time schedule, the divisor would be 4.5 and the pay amounts would be the four years just before phased retirement and the first year of phased retirement (not annualized). As Table C shows, this alternative is very close to the alternative that annualizes final average

24 The authors have encountered plans sponsored by health-care industry employers using this approach.

25 Some plans credit a full year of benefit accrual service for a year in which the participant earns 2,000 or more hours and credits a fraction of a year equal to hours worked divided by 2,000 for a year in which the participant works at least 1,000 hours but fewer than 2,000 hours. Many other service-crediting options are available.

26 See infra § 1.14.

27 This is the “Average Using Partial Years to Divide” approach in column 8 of Table C in § 1.14, infra.
compensation. To avoid an over-weighting of the phased retirement years (described above), the plan would need to credit a partial year of service during phased retirement rather than crediting a full year.

In general, we have adopted the approach that annualizes pay and credits partial service during phased retirement (the Average with Phased Years Annualized approach). For example, consider a worker with 35 years of service who just turned 60. This worker could earn, say, $100,000 this year if she worked full-time, but she, instead, chooses to work half-time and earn $50,000. Under this approach, in order to determine her retirement benefit at age 61, her age-60 salary would be annualized to $100,000, she would be treated as an employee with 35.5 years of service, and her final average pay would be based on the average of the $100,000 annualized salary at age 60 and her actual salaries in the four prior years.

This Average with Phased Years Annualized approach is allowed under current law. The approach that uses a partial year in the divisor of final average pay for each phased retirement year produces very similar results, but it may violate some of the rules that apply to plans that coordinate benefits with Social Security (integrated plans).

28 Id.
29 This is the “Average with Phased Years Annualized” approach in column 6 of Table C in § 1.14, infra. Thus, in Tables A-2, B-1, B-2, and B-3 in § 1.14, infra, final average pay is based on annualized pay during phased retirement and a partial year of service is earned for each year of phased retirement. Table A-1 in § 1.14, infra, does not annualize pay during phased retirement but does credit a full year of service. As more fully explained in the text, we think the approach in Table A-1 is inequitable to phased retirees.
30 To the same effect see infra Table A-2 in § 1.14, in which our hypothetical worker’s age 60 $49,327 salary is annualized to $98,654, and at age 61 she is credited with 35.5 years of service, and her final average pay at age 61 increases to $91,351 (up from $87,838 at age 60).
31 See infra note 27 and accompanying text.
32 The authors did not research the impact of integration rules on this alternative. Further study of this final average pay alternative should include this research.
Methodology Used in Payout Tables in Appendix

The tables in the Appendix illustrate benefit amounts under a simplified phased retirement scenario and a simple final average pay plan.\(^{33}\) Complete documentation of the formulas used in the tables is provided in Appendix to allow the reader to develop a spreadsheet model to study other plan and phased retirement designs.

The benefit formula illustrated in the tables is 1% times Years of Service times Final Average Pay. No service cap is used in the example, even though it is fairly common for plans in the real world to use a service cap. The benefit is payable annually at the beginning of the year as a single life annuity.

The participant in the example is hired at age 25 and begins phased retirement at age 60. The plan’s normal retirement age is 65. The participant fully retires at age 70. During phased retirement, the participant works 50% of a full-time schedule (“half-time”).

It is not common for an employee to retire from the company at which he or she was hired at age 25. A participant’s retirement decision will depend on the expected retirement income from all sources. However, it is cumbersome to show retirement benefits from several employers. This more common type of employment pattern does not provide the most straightforward illustration of various phased retirement designs on retirement plans. We have, instead, chosen to use a career employee to simplify our example.

The participant in the tables is assumed to earn $25,000 at age 25 and receive 4% annual pay increases until full retirement. Final average pay is the average of the last 5 compensation amounts. Pay is annualized as described elsewhere in this paper for Tables A-2, B-1, B-2, and B-3.\(^{34}\) For comparison purposes, Table A-1 uses a common definition of final average pay in which the average decreases during phased retirement.\(^{35}\)

Benefits commencing before normal retirement are reduced actuarially from normal retirement age (age 65). Benefits commencing after normal retirement are increased actuarially for delayed

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\(^{33}\) See *infra* Tables in § 1.14.

\(^{34}\) See *supra* § 1.02[4].

\(^{35}\) See *supra* note 21 and accompanying text.
retirement. These actuarial adjustments are based on 6.15% interest and GATT mortality.\footnote{GATT mortality is commonly used to determine lump-sum distributions under § 417(e). It is a male-female blended version of the GAM-83 mortality tables.}

§ 1.03 IS PHASED RETIREMENT GOOD PUBLIC POLICY?

Workers currently have the option of easing into retirement without changing jobs. However, we discuss below the pitfalls inherent in the current legal framework.\footnote{See infra § 1.04.} Is it good public policy to change the law to support phased retirement?

On the one hand, one could argue that providing workers with more opportunity to manage the end of their career is good public policy. Rather than forcing employees to change jobs in order to access their retirement benefits, employees would be able to continue their career job at a reduced schedule and receive a portion of their retirement benefits if the law is changed to make this option a realistic one.

There is always a concern that employers will force out older workers. Does phased retirement increase the risk that older workers who are not ready to reduce their work schedule will be forced out? There is nothing inherent in phased retirement that increases the opportunity for age discrimination. In fact, phased retirement may offer workers who feel that they are being pushed out an additional option of not fully retiring, but reducing their work schedule instead.

If some of the current legal obstacles to a flexible phased retirement program, discussed below,\footnote{See infra § 1.04.} were removed, phased retirement would have to be available on a nondiscriminatory basis. With widely available phased retirement, employers would be faced with the issue of whether a phased retirement program is retaining the highly skilled and effective workers or the ones who are no longer effective. Employers who offer early retirement incentive programs face the same type of problem. The solution to this problem does not lie in the particulars of the retirement program; it lies in effective workforce management.
We believe phased retirement is good public policy as long as the law is changed to facilitate phased retirement programs and protections are put in place to prevent abuse.

§ 1.04 BASIC LEGAL CONSIDERATIONS WITH PHASED RETIREMENT

There are many legal considerations that impact a phased retirement program. We will discuss some of the major ones that affect defined-benefit plans. These legal considerations impact three aspects of a phased retirement program:

- paying partial benefits before full retirement;
- offsetting continuing benefit accruals by the value of in-service distributions; and
- in-service distributions before the plan’s normal retirement age.

[1] Paying Partial Benefits Before Full Retirement

Although there is nothing specific in ERISA that prohibits defined-benefit plans from paying partial benefits, there are a number of obstacles that may make these benefits impractical. For example, a worker taking phased retirement might want to receive 50% of his accrued retirement benefit while working half-time. ERISA and the Internal Revenue Code and related regulations refer to commencement of benefits, calculation of accrued benefits, spousal consent, etc., as they apply to the full pension. The statutes and related regulations do not discuss paying some portion of the benefit beginning at one date and then paying the full benefit at a later date.

One question is how the remaining portion of the accrued benefit would be increased during phased retirement after normal retirement. If it were not actuarially increased, the participant would need to be given a suspension of benefits notice for the portion of the benefit for which payment is delayed. If the benefit is actuarially increased, how will the increase be calculated? Would it apply to the full accrued benefit or only the portion not in pay status? The examples in the Appendix show that the actuarial increase must
apply to the entire accrued benefit in order to achieve actuarial equity as defined in this paper.39

Tables B-1, B-2, and B-3 in the Appendix show benefit payout patterns if benefits are received during phased retirement.40 Normal retirement age under all three scenarios is age 65, and the participant works 50% of a full-time schedule beginning at age 60 and fully retires at age 70. Table B-1 shows phased retirement with 50% of the accrued benefit payable from age 60 through age 69 while the participant is working half-time and full retirement and full benefit payout at age 70.41 Table B-2 shows phased retirement with no in-service distributions before normal retirement age and 100% of the accrued benefit payable beginning at age 65. Any increase in accrued benefit from ages 65 to 70 would be payable beginning at age 70, when the participant fully retires. Table B-3 shows phased retirement with 50% of the age 65 accrued benefit payable from ages 65 to 70 and the full accrued benefit payable beginning at age 70. In all three scenarios, the full accrued benefit has been increased for delayed (full) retirement. The actuarial value of the benefits received is offset against the additional accruals.

[2] Offsetting Continued Accruals for Value of In-Service Distributions

ERISA and the Internal Revenue Code prohibit benefit accruals to be discontinued or the rate of benefit accrual to be reduced because of the attainment of any age.42 Proposed Treasury regulation § 1.411(b)-2 pertains to continued benefit accruals beyond normal retirement age.

The plan in Example 3 of § 1.411(b)-2 pays out the normal retirement benefit beginning at the participant’s normal retirement

39 See infra § 1.14.
40 Id.
41 We are, of course, talking hypothetically here. Such pre-normal-retirement-age distributions are not permitted under current law. Treas. Reg. § 1.401-l(b)(1)(i) states “[a] retirement plan within the meaning of section 401(a) is a plan established and maintained by an employer primarily to provide systematically for the payment of . . . benefits to his employees . . . after retirement.” In Priv. Ltr. Rul. 8137048 (June 16, 1981), the IRS applied this regulation and concluded that an employee may not receive a distribution from a pension plan before normal retirement while still an active employee.
42 IRC § 411(b)(1)(H); ERISA § 204(b)(1)(H).
age. The example shows an acceptable method of offsetting continued benefit accruals against the value of benefits paid out. The accumulated value of the benefits paid out is converted to the annuity that could be purchased with that accumulated value. The annuity value of the cumulative in-service distributions is offset against the cumulative value of additional benefit accruals since normal retirement age.\footnote{The proposed regulation applies the offset year by year. It offsets the annuity value at age 66 of the benefit paid out from age 65 to age 66 against the benefit accrual from age 65 to age 66 to determine whether an accrual is required at age 66. It offsets the annuity value at age 67 of the benefits paid out from age 65 to age 67 against the benefit accrual from age 65 to 67 to determine whether an additional benefit accrual is required at age 67. This treatment is consistent with its requirement that the actuarial increase for delayed retirement be applied to the greater of the accrued benefit or the prior year’s delayed retirement benefit increased actuarially for an additional year of delayed retirement. In practice, most plans ignore this year-by-year increase requirement in the proposed regulations. Instead, they compare the accrued benefit at age 68, for example, with the normal retirement benefit actuarially increased to age 68.}{43}

The examples in Tables B-1, B-2, and B-3 in the Appendix offset for the value of benefits paid, but they compare the benefit accrual from the time benefit payments begin with the annuity that can be purchased with the cumulative value of benefits received rather than the year-by-year approach in the proposed regulations.\footnote{See infra § 1.14.}{44}

The challenge for sponsors designing a balanced phased retirement program is how to offset for partial annuity distributions. In Table B-1, 50% of the age 60 accrued benefit is paid from ages 60 to 69, and then the full accrued benefit is paid beginning with full retirement at age 70. If the entire additional benefit accrual were offset by the annuity value of the benefits paid, it is likely that no further benefits would accrue after age 60. The only increase in the benefit ultimately paid out at age 70 over the benefit payable at age 60 would be the elimination of the early retirement reduction that applies at age 60.

In Table B-1, because only 50% of the age 60 accrued benefit is being paid out, the offset is applied only to half of the additional benefit accrual. As a result, the participant continues to accrue at least 50% of what would have been accrued if no distributions had been received.
This approach achieves actuarial equity as shown by the comparison of the present value of past and future benefit payments at age 70 in the Summary Present Value Table in the Appendix. If the plan uses a full actuarial reduction before normal retirement and a full actuarial increase after normal retirement, the plan does not experience an actuarial gain or loss as a result of any of the payout scenarios shown in the Appendix.

[3] In-Service Distributions Before Normal Retirement Age

A defined-benefit plan cannot make in-service distributions before the plan’s normal retirement age.45 Many defined-benefit plans use age 65 as the normal retirement age, so employees who want to begin phased retirement before the plan’s normal retirement age are not able to use pension benefits to supplement earned income during phased retirement. Two-thirds of the companies participating in the Watson Wyatt phased retirement survey favor eliminating the restrictions on paying in-service distributions before normal retirement as a way to facilitate phased retirement.46

§ 1.05 Discussion of Payout Tables in Appendix

The Cliff Retirement Table in the Appendix shows the common retirement pattern of going directly from full-time work to full-time retirement.47 The participant in this table works full-time until age 70 and then fully retires and begins receiving $70,763 annually as a single life annuity.

In Tables A-1, A-2, B-1, B-2, and B-3, the participant begins working 50% of a full-time schedule at age 60 in order to phase into retirement.48 The participant fully retires at age 70. These tables differ in their treatment of final average pay and in the benefit payout pattern during phased retirement.

Table A-1 shows a plan that averages the final 5 compensation amounts in order to determine benefits. During phased retirement, final average compensation decreases each year until age 65, when the final average uses only pay during phased retirement. Beginning

45 See supra note 41.
46 Watson Wyatt, supra note 4.
47 See infra Cliff Retirement Table in § 1.14.
48 See infra Tables A-1, A-2, B-1, B-2, and B-3 in § 1.14.
at age 66, final average pay increases as a result of the annual pay increase. The participant receives an annual pay increase in all prior years. However, the pay increase did not prevent final average pay from decreasing because a year of full-time pay was dropped from the average and was replaced by a year of part-time pay. The participant waits until fully retiring at age 70 to begin receiving benefit payments and then begins receiving $35,383 annually, about half of the benefit received by the cliff retiree.

In contrast, Table A-2 annualizes pay during phased retirement and credits a partial year of service equal to the portion of a full-time schedule worked during phased retirement. As in Table A-1, the participant does not receive any benefit payments until full retirement. The impact of annualized pay is partially offset by crediting partial service during phased retirement. The rationale for this treatment is discussed in the section of this paper covering actuarial equity in the phased retirement benefit calculation. The participant in Table A-2 receives $66,342 annually beginning at age 70 compared to $35,383 received by the participant in Table A-1 — an 87% increase in benefit. The comparison of Tables A-1 and A-2 shows the importance of annualizing pay during phased retirement in order to avoid penalizing the participant for phasing into retirement with a significantly reduced retirement benefit.

At first glance, the relationship between the cliff retirement benefit and the benefit in Table A-2 seems inconsistent. Because Table A-2 annualizes pay, final average pay is the same in both tables. By age 70, the cliff retiree has earned 45 years of service while the Table A-2 phased retiree has earned only 40 years of service. Yet the age-70 benefit in Table A-2 is approximately 94% of the cliff retirement benefit, not 89% like the credited service relationship. The reason for this result is that the actuarial increase in the normal retirement benefit is more valuable than the additional benefit accruals after normal retirement age. As a result, the relationship of the age-70 benefit payments is in proportion to the service relationship at age 65 (normal retirement age).

Tables B-1, B-2, and B-3 use the same annualized pay and partial year of credited service as was used in Table A-2. These tables show the impact on the ultimate benefit of various in-service distribution

49 See supra § 1.02[4].
patterns, as distinguished from barring benefit payments until full retirement. The section in this paper discussing the basic legal considerations with phased retirement talks about whether these options are allowed under current law. All three payout patterns are included as examples of alternatives participants could choose if the statute were changed to facilitate phased retirement.

In Table B-1, the participant begins receiving 50% of the age-60 early retirement benefit ($9,842) at the beginning of phased retirement. Because only 50% of the early retirement benefit is being paid, the offset of benefits received against future benefit accruals is limited to 50% of the additional accruals. As a result, the participant continues earning additional accruals until full retirement at age 70. Upon full retirement, the participant begins receiving $50,737 annually, and this benefit is payable as a single life annuity for the participant’s remaining lifetime. In spite of the different payout pattern, the actuarial value at age 70 of the accumulated benefits received and the benefits to be received in the future is the same for Tables A-2, B-1, B-2, and B-3. The key to this actuarial equivalence is for the plan to make a full actuarial reduction for early distributions, as well as a full actuarial increase for continued retirement after normal retirement age.

Table B-2 shows an alternative allowed under current law. In this table, the participant begins receiving the full accrued benefit equal to $40,076 at normal retirement while continuing to work 50% of a full-time schedule until full retirement at age 70. Because the full accrued benefit is payable during phased retirement, the offset for benefits received applies to the entire accrued benefit. As a result, the participant does not accrue any additional benefits from

50 See supra § 1.04.
51 The authors do not suggest one payout pattern is better than another. A phased retiree can select the best payout pattern based on total personal wealth.
52 This offset for partial benefit payments is not required under current law. As described elsewhere, current law does not facilitate payment of partial benefits. Current law also makes no effort to achieve actuarial equity when a participant receives in-service distributions.
53 See infra Summary Present Value Table in § 1.14.
54 See supra § 1.02[3].
55 See infra Table B-2 in § 1.14 (column 7, Increase in Benefit After Adjustment for Benefits Paid).
§ 1.06 REVIEW OF EMPLOYEE BENEFITS

age 65 to age 70. As noted above, the value of the payouts in this alternative equals the value of the payouts in Tables B-1 and B-3, in which the participant earns additional benefits during phased retirement after partial benefit payments begin.

Table B-3 shows a payout pattern in which the participant begins receiving 50% of the age 65 accrued benefit beginning at age 65. Because only 50% of the age 65 accrued benefit is payable before full retirement, the offset for benefits received before full retirement is applied to only 50% of the additional benefit accruals. As a result, the participant receives $20,038 beginning at age 65 and then $53,209 annually beginning at age 70.

§ 1.06 IMPACT OF PHASED RETIREMENT ON PARTICIPANT PROTECTION

One of the purposes of ERISA was to provide protection to participants. Some of the areas of protection will be impacted by phased retirement.

[1] Disclosure

Disclosure of information about the plan and its benefits is one of ERISA’s participant protections. Effective communication about the plan lets participants understand and take advantage of the benefits offered. It may be difficult for participants to understand the impact of phased retirement on their ultimate pension benefits. Plan sponsors could provide examples of the expected benefit with and without phased retirement, although there will be an associated administrative cost of this additional communication. The more phased retirement choices available to participants, the more

56 As an alternative, one might want workers in phased retirement to continue to earn additional benefit accruals even beyond the date on which they draw full retirement benefits. One approach would be to increase the annual retirement benefit each year for work done after normal retirement age. For example, the worker in Table B-2 would see a small increase in the $40,076 benefit at age 66 and beyond to take into account additional accruals for work beyond age 65. Alternatively, a single, larger adjustment might be made to the benefit to be paid once the worker fully retires at age 70. Cf., Jonathan Barry Forman, How Federal Pension Laws Influence Work and Retirement Decisions, 54 TAX LAWYER 143, 173-74, 180-81 (2000).

57 See supra note 53 and accompanying text.
important it will be that participants understand the impact of various choices on their lifetime pension income. It is important to disclose the impact, if any, of reduced pay and credited service on the ultimate retirement benefit. The participant also needs to understand the impact of in-service distributions on the ultimate annuity amount. Some mechanism for helping the participant assess the relative value of various options will help the participant make the best personal choice.

The section below discussing the communication challenges of phased retirement offers some disclosure alternatives.58

[2] Vesting

Vesting protections will not be impacted by phased retirement.59 Once a participant becomes vested, a reduced work schedule on account of phased retirement will not reduce the vesting status. If the participant is not fully vested when phased retirement begins, the participant must work sufficient hours in enough plan years to earn additional years of vesting service to become vested in the pension benefit. Participants who commence phased retirement before becoming fully vested — typically 5 years — are not the focus of protections discussed in this paper.60


The benefit accrual rules look at the rate of benefit accrual throughout the full employment period.61 Their basic purpose is to prevent backloading of benefits,62 and the demonstration of

58 See infra § 1.12.
59 I.R.C. § 411(a); ERISA § 203.
60 Workers who begin phased retirement before becoming vested (e.g., before they have completed 5 years of service) are most likely older workers who are changing from their career job to a bridge job. These workers cannot realistically expect to earn more than meager supplemental retirement benefits from the bridge job. The retirement benefits that accrue over short job tenures could, at best, generate only a small retirement benefit to supplement Social Security and the worker’s primary pension from her career job.
61 I.R.C. § 411(b); ERISA § 204.
62 Backloading refers to benefit accruals that increase steeply either as service increases or after a certain number of years of service. For example, a benefit formula providing 0.25% of average pay for each of the first 20 years of service and 2% of pay for each of the next 5 years of service would be considered a back-
compliance of the benefit formula with the rules is typically based on a full-time employee. In general, a plan that allows phased retirement should not have a problem satisfying one of the accrual rules. Participants will continue earning benefit accrual service as long as they work the required number of hours, assuming the plan uses hours to credit service.\textsuperscript{63}

\section*{4 \ Nondiscrimination Protection}

The mechanical nondiscrimination rules can create problems for employers who try to accommodate employees who want to phase into retirement.\textsuperscript{64} Under current law, a defined-benefit plan cannot make in-service distributions before normal retirement age. If the employer considers lowering the normal retirement age to accommodate in-service distributions, the plan must be able to pass nondiscrimination tests using that earlier normal retirement age.\textsuperscript{65}

The impact of phased retirement on final average pay, discussed in the Actuarial Equity in Phased Retirement Benefit Calculations section of this paper, will present a challenge for a sponsor who wants to facilitate phased retirement.\textsuperscript{66} If the sponsor chooses not to annualize pay for those phasing into retirement, then those workers choosing phased retirement will see decreases in their final average pay and accrued pension benefits.\textsuperscript{67} If the sponsor decides

\begin{itemize}
\item Plans requiring a certain number of hours for a year of service may credit less than a year of service during phased retirement, depending on the hours actually worked.
\item Query, however, whether a plan that uses elapsed time for service credits and credits a full year of service for each full year of phased retirement might be viewed as backloaded. For example, compare a young, full-time worker who earns one year of service credit for a full year of service with an old, half-time, phased retiree who also earns one full year of service but for only half as much work. It would be helpful if guidance on this question could be provided.
\item Of course, there are many other problems for traditional final average pay plans that use an early normal retirement age, such as much higher plan costs unless the benefit formula is modified.
\item See supra § 1.02[4].
\item See, e.g., infra Table A-1 in § 1.14.
\end{itemize}
to annualize pay for those phasing into retirement, the pay definition may fail nondiscrimination tests if a disproportionate share of phased retirees are highly compensated employees.

If phased retirees are the only participants who can receive certain payout options, such as partial benefit distributions, the sponsor must be careful that the effective availability of those options does not discriminate in favor of highly compensated employees. The demographics of those actually taking phased retirement will determine whether these special payout options are discriminatory under current nondiscrimination rules.

The 2000 ERISA Advisory Council’s Working Group on Phased Retirement recommended the following nondiscrimination test alternatives to the Secretary of Labor:

- Permitting a facts and circumstances test for phased retirement provisions in a pension plan as an alternative to passing the mechanical nondiscrimination test.
- Developing safe harbors and/or special rules addressed to phased retirement programs that accommodate their special characteristics.  

§ 1.07 IMPACT OF PHASED RETIREMENT ON SPOUSAL PROTECTIONS

The primary areas of spousal protection are the following ERISA requirements:

- Spousal consent for certain forms of benefit payment.
- Amount of qualified surviving spouse annuity (QJSA) and qualified preretirement spousal death benefit (QPSA).

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70 A qualified joint and surviving spouse annuity (QJSA), as defined in § 417(b), is an annuity that pays the surviving spouse no less than 50% and no more than 100% of the amount payable while the participant is living and receiving benefits.
[1] Spousal Consent

Spousal consent is an effective protection only if the spouse understands the impact of waiving the QJSA. This communication challenge is not unique to phased retirement. If the participant works a reduced schedule during phased retirement, but he or she does not elect to receive any pension benefits before full retirement, spousal consent will not be affected by phased retirement.

If the participant elects to receive benefits during phased retirement, spousal consent would be required if the benefit were not payable in the form of a QJSA when phased retirement benefits begin. Upon full retirement, another spousal consent would be required for the additional benefit that will be payable. The requirement of multiple spousal consents may be confusing to the spouse, so the plan sponsor should try to ensure that the spouse understands that the initial consent applies only to the initial partial benefit.

[2] Amount of QJSA and QPSA

If a participant elects phased retirement in a final average pay plan and the final average pay decreases during phased retirement, the ultimate retirement benefit may be lower than if the participant continued working full-time. Therefore, the QJSA as well as the QPSA will be lower as a result of lower annual pay during phased retirement.

When the participant elects to begin receiving a lifetime distribution at an earlier age, the amount of the monthly benefit is smaller than if the benefit had begun at a later age. As a result, the survivor benefit payable to the spouse under the QJSA payment method is smaller than if the participant had not retired as early.

Although it is not reasonable to expect the spouse to have the right to consent to a reduced work schedule as part of phased retirement, there is an erosion of some of the spousal protections on account of phased retirement. Education about the impact of phased retirement on pension benefits could include segments

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71 Treas. Reg. § 1.401(a)-20, Q-9.
72 See supra § 1.02[4] for a discussion of various final average pay alternatives that could be used in phased retirement programs.
geared to educating spouses about the effect of phased retirement on their portion of the pension benefit.

§ 1.08 SUBSIDIZED EARLY RETIREMENT BENEFITS AND PHASED RETIREMENT

Subsidized early retirement benefits are benefits payable before normal retirement that are more valuable than the actuarial equivalent of the normal retirement benefit determined at the early retirement age. Most traditional defined-benefit plans provide subsidized benefits to those who elect to commence benefits before normal retirement.\textsuperscript{73} Do these subsidized early retirement benefits make sense in a phased retirement world?

Subsidized early retirement benefits provide an incentive to participants to retire before normal retirement. If plans are not legally able to pay partial benefits during phased retirement, as is the case currently, participants must forfeit the early retirement subsidy in order to ease into retirement through phased retirement. On the other hand, participants who do not want to give up the early retirement subsidy are forced to retire from their career job and take a bridge job.

If it is good public policy to allow workers to delay full retirement by facilitating phased retirement, is it also good public policy for pension plans to encourage early retirement at the same time? These policies seem contradictory. Making pension plans age-neutral by requiring a full actuarial reduction is one way to eliminate this contradiction.\textsuperscript{74} Requiring an actuarial increase for delayed

\textsuperscript{73} A common early retirement reduction in a plan with age 65 as the normal retirement age reduces the benefit 20% at age 62, 33% at age 60, and 50% at age 55. An actuarial reduction using 6% interest and GAM 94 mortality would reduce the benefit 25%, 37%, and 58%, respectively. The common early retirement reduction provides benefits more valuable (with a lower reduction) than an actuarial reduction and is referred to as subsidized early retirement.

\textsuperscript{74} Pension plans are considered age-neutral if nothing in the plan favors or disadvantages employees on account of age. There are protections to prevent unfair age discrimination, but pension benefits before normal retirement seem to be excluded from that protection. As a result, the plan can provide subsidized early retirement benefits that are most valuable at the earliest retirement age and become less valuable as the participant nears normal retirement. An age-neutral benefit would have the same actuarial value regardless of the age at which the benefit begins. Requiring a full actuarial reduction would require plans to either increase
retirement and not allowing suspension of benefits are other ways to ensure actuarial neutrality. As mentioned earlier, Tables B-1, B-2, and B-3 use a full actuarial reduction before normal retirement and a full actuarial increase after normal retirement, achieving actuarial neutrality. 75 Regardless of the payout pattern selected by the participant, the present value of the benefits paid from the plan does not change.

The Phased Retirement Liberalization Act, introduced by Congressman Earl Pomeroy and Senator Charles Grassley in 2000, would allow in-service distributions at the earlier of age 59\(\frac{1}{2}\), 30 years of service, or normal retirement age. 76 The bill would eliminate the 10% additional income tax on premature distributions for anyone with 30 years of service who is receiving in-service distributions before age 59\(\frac{1}{2}\). The bill did not address paying partial benefits upon phased retirement before age 59\(\frac{1}{2}\) or 30 years of service.

§ 1.09 EARLY RETIREMENT WINDOWS AND PHASED RETIREMENT

Some employers offer an early retirement window as a means of reducing their workforce. Early retirement windows provide some form of extra benefits as an incentive to participants to retire during a particular time period (the “window”).

If the law and regulations are modified to facilitate phased retirement, early retirement windows take on a new aspect. Can a plan require participants taking an early retirement window to retire fully when the plan otherwise allows participants to receive early retirement benefits and continue working a reduced schedule? Age discrimination rules will likely have an impact on how this conflict would be resolved.

Phased retirement might be an alternative to early retirement windows, depending on the extent of downsizing being targeted. The employer may be able to realize sufficient payroll savings by

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75 See supra note 14 and accompanying text and § 1.05.
76 The Phased Retirement and Liberalization Act, supra note 10.
having a larger number of participants take partial retirement without as large a window subsidy as would be required for employees to take full early retirement. Of course, the law would have to allow in-service distributions for this approach to work.

Early retirement window programs present a significant opportunity to discriminate against older workers. Employers often use these programs as a tool to push expensive older workers into premature retirement. These programs are geared toward reducing the workforce, and they are generally available only to older workers. If phased retirement could be an alternative to a window program, it would replace a program that discriminates against older workers with one that gives older workers more choices for managing their retirement.

§ 1.10 DEFERRED RETIREMENT OPTION PLANS — DROPS

Some public sector plans include DROPs — Deferred Retirement Option Plans — that allow workers to continue working and have retirement benefits deposited into a separate account that earns interest. The participant receives the value of the DROP account upon full retirement, generally no more than 5 years after electing to have benefits deposited into the DROP. DROPs are generally not available to private sector employers.

A DROP can be structured to apply once the participant has become eligible for unreduced benefits or to apply also to participants who are eligible for an early retirement subsidy. If it applies


78 For example, DROPS will not be able to satisfy the rules on coverage and nondiscrimination unless they are made available to a broad group of employees, and while I.R.C. § 414(k) permits a defined-benefit plan to contain separate accounts that are treated as a defined contribution plan, recent IRS interpretations have made it difficult for private sector employers to do so. See Pamela Perun, Phased Retirement Programs: A Look at the Issues 28-31 (Feb. 12, 2002) (unpublished manuscript, on file with the authors). The authors did not conduct a study of ERISA to determine whether DROPs would satisfy the ERISA requirements and, therefore, be available to private sector plans. This research would be a helpful addition to the information available on phased retirement options. See also Amy L. Cavanaugh, A Closer Look at DROP Plans, 8 J. of Pension Benefits 34 (No. 2, Winter 2001).
to participants who are eligible for unreduced benefits, the DROP lets the participant take the unreduced benefit without having to retire. DROPs would be attractive to participants who do not need retirement income as a supplement during phased retirement.

If the DROP applies to participants eligible for subsidized early retirement benefits, it allows the participant to receive that subsidy without having to terminate employment. The subsidized benefit is deposited in the DROP and earns interest until retirement. At retirement, the subsidized early retirement benefit would be the monthly benefit payable to the participant. As long as the earnings on the DROP are sufficient to protect the value of the early retirement subsidy, the participant will end up with more valuable lifetime benefits because the participant will receive the value of the early retirement subsidy. Even though the benefits paid out after retirement are reduced as if the participant had retired early, the value of the DROP will more than compensate for the cost of the early retirement reduction in the lifetime benefit.

A more equitable alternative to DROPs is to have early retirement benefits reduced for the full actuarial reduction. As a result, there is no economic incentive for retiring early.

§ 1.11 ADMINISTRATIVE ISSUES SURROUNDING PHASED RETIREMENT

There is an administrative cost to the employer of allowing participants to continue working while receiving retirement benefits. Benefit calculations are more complicated because they are required at more than one time for each participant. Actuarial fees and internal staff time will be higher in order to maintain data on phased retirees and to calculate their benefits. Also, if the law is changed to permit paying a portion of the accrued benefit during phased retirement, the plan must specify exactly how the ultimate retirement benefit will be adjusted to reflect additional accruals and to reflect the value of benefits paid during phased retirement. In the Appendix, we illustrate calculation alternatives during phased retirement.79

79 See infra Summary Payout Table and Tables A-2, B-1, B-2, and B-3 in § 1.14.
§ 1.12 COMMUNICATION CHALLENGES RELATED TO PHASED RETIREMENT

Public policy is not well-served if workers enter into phased retirement thinking that they will continue to earn additional pension benefits, only to find out they have earned no additional benefits when they move into full retirement. Safeguards are needed to protect workers. The ideal protection would require additional benefit accruals if the worker is taking partial benefits during phased retirement, as illustrated in the tables in the Appendix.80

At a minimum, the protections should ensure that participants understand the impact of phased retirement on their ultimate retirement benefits. For example, whether the participant continues to earn benefit accrual service may depend on whether the participant continues working at or above a certain threshold number of hours, for example, 1,000 hours.

Depending on how the plan defines final average pay, phased retirement can have a significant impact on final average pay used to calculate retirement benefits. Various alternatives for calculating final average pay were discussed above and are shown in the documentation for Table C.81 Any communication about phased retirement must help ensure that the participant understands the impact of phased retirement on the final average pay used in the plan and the impact of final average pay on the pension benefit.

Additional communication material will be needed to explain phased retirement options. The complexity of the communication materials depends on the flexibility of the phased retirement options available to participants. Because phased retirement is an individual arrangement, the communications will need to be tailored to each participant’s particular situation. As mentioned above, it would be helpful if a section of the communication were geared to the spouse because spousal benefits will likely be impacted by phased retirement.82

The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA)83 enhanced the notice requirements for plans that

80 Id.
81 See supra § 1.02[4] and Table C in § 1.14, infra.
82 See supra § 1.07.
reduce the rate of future benefit accruals. Although these requirements will not apply to phased retirement, they provide useful guidance on protections that could apply in a plan that facilitates phased retirement. Under the EGTRRA disclosure rules, the average participant should be able to understand the communication, and it must give the participant enough information to understand the impact of the provision on the participant.

Software that allows participants to model their benefits under various phased retirement scenarios can be helpful for participants who are comfortable using these tools. In other situations, the sponsor could use a workbook or a series of benefit exhibits to help participants understand the effect of phased retirement on their retirement benefits.

§ 1.13 CONCLUSION

Phased retirement programs provide employees with important options for managing the end of their working careers. These programs can provide employers with a way to retain valuable knowledge workers who no longer want to work full-time. It is important for U.S. pension law and regulations to be modified to facilitate phased retirement, but those changes should include safeguards to protect workers and spouses as they make decisions that will have a lifetime financial impact.

In particular, given the fact that phased retirement is beneficial to both the employer and the employee, we believe that the financial impact of whether the employee decides to supplement his or her phased retirement income with pension plan distributions should be actuarially neutral. The employer should not be required to subsidize pension payouts during phased retirement, nor should the employer be allowed to receive an actuarial benefit when an employee decides to receive some or all of her accrued pension benefits before full retirement.

The tables in this paper show one approach for achieving actuarial neutrality in phased retirement programs. These tables show that the definition of final average pay can have a significant impact on the effect of phased retirement on the retirement benefits payable under a final average pay defined-benefit plan. These tables also demonstrate that the key to actuarial neutrality is for the plan
to make a full actuarial reduction for early retirement distributions, as well as a full actuarial increase for continued employment after normal retirement age.

§ 1.14 APPENDIX

[1] Listing and Brief Description of Tables in the Appendix

Basic Assumptions Used for Retirement Tables. This section describes the plan design and provides the demographic assumptions used in the retirement tables that follow in the Appendix. It also describes some underlying principles used in the tables.

Summary Payout Table. This table shows the payouts from the Cliff Retirement Table and Tables A-1, A-2, B-1, B-2, and B-3.

Summary Present Value Table. This table compares the actuarial value at age 70 of the benefits received before age 70 and the lifetime benefits payable after age 70 for the payouts in the Cliff Retirement Table and Tables A-1, A-2, B-1, B-2, and B-3.

Cliff Retirement Table. This table shows benefits under a typical cliff retirement pattern for a participant who works full-time until age 70 and then retires.

Table A-1. This table shows the impact of phased retirement on a participant in a plan that averages compensation in the last five years of employment with no protection for those who do not work a full-time schedule. The participant in this example works half-time beginning at age 60 and fully retires at age 70. No retirement benefits are received during phased retirement.

Table A-2. This table shows the impact of phased retirement on a participant in a plan that averages compensation in the last five years of employment and in which compensation is annualized during phased retirement and a partial year of benefit service is earned. The participant in this example works half-time beginning at age 60 and fully retires at age 70. No retirement benefits are received during phased retirement.

Table B-1. This table shows the impact of phased retirement on a participant in a plan that averages compensation in the last five years of employment and in which compensation is annualized during phased retirement and a partial year of benefit service is earned. The participant in this example works half-time beginning
at age 60 and fully retires at age 70. The participant receives 50 percent of the age 60 accrued benefit during phased retirement. Early retirement and deferred retirement benefits are actuarially adjusted. The offset for in-service benefits received is limited to 50 percent of the accrued benefit because the participant is receiving only 50 percent of the age 60 accrued benefit during phased retirement.

Table B-2. This table shows the impact of phased retirement on a participant in a plan that averages compensation in the last five years of employment and in which compensation is annualized during phased retirement and a partial year of benefit service is earned. The participant in this example works half-time beginning at age 60 and fully retires at age 70. The participant receives 100 percent of the age 65 (normal retirement age) accrued benefit during phased retirement beginning at age 65. Early retirement and deferred retirement benefits are actuarially adjusted. The offset for in-service benefits received is applied to the full accrued benefit because the participant is receiving 100 percent of the age 65 accrued benefit.

Table B-3. This table shows the impact of phased retirement on a participant in a plan that averages compensation in the last five years of employment and in which compensation is annualized during phased retirement and a partial year of benefit service is earned. The participant in this example works half-time beginning at age 60 and fully retires at age 70. The participant receives 50 percent of the age 65 (normal retirement age) accrued benefit during phased retirement beginning at age 65. Early retirement and deferred retirement benefits are actuarially adjusted. The offset for in-service benefits received is limited to 50 percent of the accrued benefit because the participant is receiving only 50 percent of the age 65 accrued benefit during phased retirement.

Table C. This table compares the following definitions of final average compensation:

Decreasing Final Average Pay: Final average pay is the average of the last five compensation amounts, and final average pay decreases during phased retirement.

Non-Decreasing Final Average Pay: Final average pay is the average of the last five compensation amounts but not less than
any prior final average pay. Unlike Decreasing Final Average Pay above, final average pay remains level during phased retirement.

Average With Phased Years Annualized: Compensation during phased retirement is annualized. Final average pay is the average of the last five compensation amounts using annualized compensation during phased retirement.

Average Using Partial Years to Divide: A partial year is used in the divisor during phased retirement years and compensation is not annualized. Final average compensation averages the last five compensation amounts and divides it by the sum of the portions of a full-time schedule worked in those five years. For example, after two years of working half-time, the divisor would be 4: 1 for each of the three years in which the participant worked full-time and $1/2$ for each of the two years the participant worked half-time.

[2] Basic Assumptions Used for Retirement Tables

Underlying principles used in tables:

- Under current law, final average pay can decrease in a plan that uses the high $x$ of the last $y$ if the participant takes phased retirement and receives reduced pay for more than $y-x$ years.
- Before normal retirement, the accrued benefit can decrease as a result of decreasing pay.
- The accrued benefit payable (after early retirement reduction) cannot decrease as a result of decreasing pay.
- Benefits are payable annually at the beginning of the year.

Plan provisions used in tables:

Benefit Formula:

$1\% \times \text{Final Average Pay} \times \text{Credited Service} \ [\text{No service cap}]$

Normal Payment Method:

Single life annuity payable annually
§ 1.14[2] REVIEW OF EMPLOYEE BENEFITS

Final Average Pay (FAP):

Average of the five prior compensation amounts. At age 60, final average pay is the average of the compensation amounts from age 55 through age 59.

Retirement Ages:

Normal retirement: age 65
Early retirement: age 55 with 10 years of service

Early Retirement Reduction and Late Retirement Increase:

Actuarial adjustment using 6.15 percent interest and GATT mortality (blended GAM-83)

Participant information assumed in table:

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<tr>
<th>Hire Age:</th>
<th>25[^84]</th>
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<tr>
<td>Salary at Hire:</td>
<td>$25,000</td>
</tr>
<tr>
<td>Annual Salary Increase:</td>
<td>4%</td>
</tr>
<tr>
<td>Retirement Age:</td>
<td>See</td>
</tr>
</tbody>
</table>

[^84] The authors understand that it is not all that common for an employee to work for the same employer from age 25 until retirement. A participant’s retirement decision will depend on the expected retirement income from all sources. However, it is cumbersome to show retirement benefits from several employers. This more common type of employment pattern does not provide the most straightforward illustration of various phased retirement designs on retirement plans. We have, instead, chosen to use a career employee to simplify our example.
### Summary Payout Table

<table>
<thead>
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<th>Age</th>
<th>Cliff Retirement</th>
<th>A-1</th>
<th>A-2</th>
<th>B-1</th>
<th>B-2</th>
<th>B-3</th>
<th>Age</th>
</tr>
</thead>
<tbody>
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<td>—</td>
<td>—</td>
<td>$9,842</td>
<td>—</td>
<td>—</td>
<td>60</td>
</tr>
<tr>
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<td>—</td>
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<td>—</td>
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Comparison of Actuarial Value of Benefits at Age 70

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<th>Cliff</th>
<th>Accumulated value at age 70 of benefits received from ages 60 to 69</th>
<th>Present value at age 70</th>
<th>Actuarial value of past and future benefit payments at age 70</th>
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Summary Present Value Table
## Cliff Retirement Table
### NO PHASED RETIREMENT

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<th>Accrued Benefit Adjusted for Early or Late Ret</th>
<th>Accrued Benefit Received</th>
<th>Age</th>
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### Table A-1
#### Benefits Payable Only After 100% Retirement
#### Decreasing Final Average Pay
#### Full Year of Service Earned During Phased Retirement

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<th>Benefit From Formula</th>
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<th>Accrued Benefit Received</th>
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Note: Documentation for this table follows Table A-2.

---

\(^{85}\) Accrued Benefit Adjusted for Early or Late Retirement at current age, but not less than any prior Accrued Benefit Payable.
<table>
<thead>
<tr>
<th>Age</th>
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<th>Portion of Year Worked</th>
<th>Annualized Salary</th>
<th>Final Average Pay</th>
<th>Credited Service @ Beginning of Year</th>
<th>Benefit From Formula</th>
<th>Adjusted Benefit</th>
<th>Accrued Benefit Payable</th>
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<td>$66,342</td>
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</tr>
</tbody>
</table>

Note: See next page for documentation of calculations in this table.
Phased Retirement Assumptions:

- Participant takes phased retirement and works half-time beginning at age 60 and fully retires at age 70.
- No benefits are payable during phased retirement and full benefits are received at full retirement.

Salary and Final Average Pay (FAP) — Table A-1:

- Salary is $25,000 at age 25 accumulated to current age at 4 percent salary increase.
- FAP is the average of the prior five years’ salary.

Salary and Final Average Pay (FAP) — Table A-2:

- Salary is $25,000 at age 25 accumulated to current age at 4 percent salary increase.
- Salary is annualized by dividing pay for the year by the percentage of a full-time schedule worked in the year. During phased retirement, because the participant works half-time, the salary is divided by 0.5.
- FAP is the average of the prior five years’ annualized salary.

Credited Service @ Beginning of Year — Table A-2:

- A partial year of service equal to the portion of a full-time schedule worked during the year is credited during phased retirement.

Adjusted Accrued Benefit:

- The accrued benefit reduced actuarially for early retirement for ages less than 65 and increased actuarially for late retirement for ages more than 65.

Accrued Benefit Payable:

- The Adjusted Accrued Benefit for the current age, but not less than any prior accrued benefit payable.
<table>
<thead>
<tr>
<th>Age</th>
<th>Salary</th>
<th>FAP</th>
<th>Benefit From Formula</th>
<th>Adjusted Accrued Benefit</th>
<th>Cumulative Offset for Benefits Paid</th>
<th>Increase in Benefit After Adj for Benefits Paid</th>
<th>Accd Benefit After Adj for Bens Paid</th>
<th>Benefit Received</th>
<th>Age</th>
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Note: Documentation of formulas and calculations for this table follow Table B-3.
Table B-2

Full Benefits Payable During Phased Retirement After Normal Retirement Age
Full Benefits Paid at Full Retirement
Pay Annualized During Phased Retirement
Partial Year of Service Earned During Phased Retirement
Offset for Benefits Paid Applies to Full Benefit Earned

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<th>Age</th>
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<th>Benefit From Formula</th>
<th>Adjusted Accrued Benefit</th>
<th>Cumulative Offset for Benefits Paid</th>
<th>Increase in Benefit After Adj for Benefits Paid</th>
<th>Accd Benefit Payable After Adj for Bens Paid</th>
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Note: Documentation of formulas and calculations for this table follow Table B-3.
### Table B-3
Partial Benefits Payable During Phased Retirement After Normal Retirement Age

<table>
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<th>Benefit From Formula</th>
<th>Adjusted Benefit</th>
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<th>Accd Benefit Payable After Adj for Bens Paid</th>
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Note: See next page for documentation of formulas and calculations for this table.
Phased Retirement Assumptions:

- Participant takes phased retirement and works half-time beginning at age 60.
- Participant fully retires at age 70.

Salary and Final Average Pay:

- Salary is $25,000 at age 25 accumulated to current age at 4 percent salary increase.
- FAP is the average of the prior five years' annualized salaries whereby annualized salary is the actual salary divided by portion of the year worked.

Benefit From Formula:

- Benefit formula shown above using final average pay and credited service whereby credited service is the sum of all prior portions of year worked.
- Partial year of service is credited during phased retirement.

Adjusted Accrued Benefit:

- The accrued benefit reduced actuarially for early retirement for ages before normal retirement age and increased actuarially for years after normal retirement age.
- Formula for early retirement reduction to age $x$:

$$ \text{Benefit from Formula} \frac{N_{65}}{N_x} $$

but not less than any prior adjusted accrued benefit.

- Formula for late retirement increase to age $y$:

$$ \text{Benefit from Formula} \frac{N_{65}}{N_y} $$

but not less than the benefit from formula at age $y$.

Cumulative Offset for Benefits Paid:

- The adjustment reflects the annual benefit that could be purchased with the benefits that were received in prior years.
• Prior benefit payments are actuarially increased to the current age.
• This formula follows Example 3 of Treasury Regulation § 1.411(b)-2.
• PRBA = phased retirement beginning age.
• Accumulation of prior benefits paid:

\[
\text{Ben Paid} \times \frac{\sum_{j=1}^{x-1} D_j^{\text{PRBA}}}{D_x} = \text{Ben Paid} \times \frac{N_{\text{PRBA}} - N_x}{D_x}
\]

• Annuity purchased by accumulation of prior benefits paid:

\[
\text{Ben Paid} \times \frac{N_{\text{PRBA}} - N_x}{D_x} = \text{Ben Paid} \times \frac{N_{\text{PRBA}} - N_x}{N_x} \times \frac{N_x}{D_x}
\]

Increase in Accrued Benefit After Adjustment for Benefits Paid:
• PRBA = the age at which benefit payments begin during phased retirement.
• PR% = percentage of accrued benefit received during phased retirement.
• Before age at which benefits are paid = Accrued Benefit Payable \( x \) – Accrued Benefit Payable After Adjustment for Benefits Paid \( x-1 \).
• Beginning with age at which benefits are first paid (this adjustment is the cumulative increase in the accrued benefit at age PRBA) =

\[
\text{Max}\{0, (\text{Accrued Benefit Payable}_x - \text{Accrued Benefit Payable}_{\text{PRBA}}) \times \text{PR}\% - \text{Cumulative Offset}_x \} + (1-\text{PR}\%) \times (\text{Accrued Benefit Payable}_x - \text{Accrued Benefit Payable}_{\text{PRBA}})
\]

Accrued Benefit Payable After Adjustment for Benefits Paid:
• Before PRBA, the prior year’s accrued benefit payable after adjustment for benefits paid plus the current year’s increase in accrued benefit after adjustment for benefits paid.
Beginning with the age at which benefits are first paid, \( \text{Accrued Benefit Payable} + \text{Increase in Accrued Benefit After Adjustment for Benefit Paid} \).

**Benefit Payout Assumptions — Table B-1**
- 50 percent of the accrued benefit at initial phased retirement is payable during phased retirement.
- Accrued benefit payable after adjustment for benefits paid at full retirement begins at that age.

**Benefit Payout Assumptions — Table B-2:**
- 100 percent of the accrued benefit is payable beginning at normal retirement.
- Accrued benefit payable after adjustment for benefits paid at full retirement begins at that age.

**Benefit Payout Assumptions — Table B-3:**
- 50 percent of the accrued benefit is payable beginning at normal retirement.
- Accrued benefit payable after adjustment for benefits paid at full retirement begins at that age.
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<th>Non-Decreasing Final Average Pay</th>
<th>Annualized Phased With Partial Years</th>
<th>Average With Partial Years Annualized</th>
<th>Divide by Partial Years</th>
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Note: See next page for documentation of this table.
Basic Assumptions:

- Hire age = 25
- Starting salary = $25,000
- Annual salary increase = 4%
- Years to Average in Final Average Pay = 5
- Percentage of Full-Time Work During Phased Retirement = 50%
- Phased Retirement Beginning Age = 60
- Full Retirement Age = 70

Salary:

- Prior year’s salary multiplied by $1 + salary increase.

Decreasing Final Average Pay:

- Final average pay is the average of the prior five years of salary.

Non-Decreasing Final Average Pay:

- Final average pay is the average of the prior five years of salary, but not less than any prior final average pay.

Annualized Phased Years:

- During phased retirement, salary is annualized by dividing the pay received by (1 - % of full-time schedule worked during phased retirement).
- Annualized salary at age 61 equals $51,300 \div (1 - 0.5) = $102,600

Average With Phased Years Annualized:

- Final average pay is the average of the prior five years of annualized salary.

Divide by Partial Years:

- Portion of full-time worked in current year.
Average Using Partial Years to Divide:

- Final average pay is the sum of the prior five years of salary divided by the sum of the prior five years’ portions of full-time schedule worked.