# Response to the Report of Robert A. Bardwell, Ph.D.
# Wayne Tomlinson et al. v. El Paso Corporation and El Paso Pension Plan

## by Michael P. Ward

1. I am Senior Vice President and Senior Analyst at Welch Consulting. On April 15, 2008, I submitted a Statement of Qualifications and Report of Findings on behalf of defendant El Paso Corporation in this matter. My education, qualifications, experience and prior cases were listed in that report and are incorporated here by reference. In that report, I analyzed the effect of age on the annual accrual of pension benefits resulting from El Paso's transition from a final average pay formula to a cash balance formula. On April 18, 2008 I received a copy of the Preliminary Report produced by Plaintiffs' statistical expert Robert A. Bardwell, Ph.D. This report is a response to the methods and conclusions presented by Dr. Bardwell.

**Dr. Bardwell's Illogical Use of "Wear-Away"**

2. Dr. Bardwell's analysis of the age impact of El Paso's pension plan transition focused on so-called "wear-away" periods. He uses this term to refer to periods of time during which an employee's pension, calculated as an age-65 benefit under the final average pay formula, would result in a greater benefit than the benefit calculated under the cash balance plan. Because the age-65 benefit is fixed after the transition (even though it is higher) under the final average pay plan, Dr. Bardwell believes that the employee is disadvantaged during this period.

3. His calculation of the "wear-away" period started at the end of the five-year plan transition, and ended when an individual's cash balance plan benefit amount grew to exceed the age-65 benefit under the final average pay formula. Dr. Bardwell conducted age comparisons and determined that older workers had disproportionately longer "wear-away" periods than younger workers because they would receive higher age-65 benefits under the final average pay formula than from the cash balance plan. From this comparison, he concluded that there was an unfavorable, age-related impact on older employees.

4. Dr. Bardwell based his calculation of economic damages on the durations of these "wear-away" periods. Damages are calculated as the accrual in the cash balance plan during the wear-away period. The longer the wear-away, the higher the damages. He did not take into account the value of the minimum benefit at all in his damage calculations.

5. As I explain below, Dr. Bardwell's use of the "wear-away" to measure disparate treatment by age is confusing and fundamentally incorrect. He defines the "wear-away" in his report (page 4) as "a period of years during which the value of the actual retirement benefit ceased to grow at all." The confusion arises because Dr. Bardwell mistakenly equates the "wear-away" period with a "freeze" of pension benefits under the final average ("minimum benefit") pay plan. In my April 15, 2008 report I showed that in the years following the transition, most employees did not experience a freeze because the minimum benefit that was immediately



EXHIBIT E

receivable[1] continued to increase for older workers as they reached enhanced early retirement formulas.[2] In fact, most (97%) of employees who left El Paso after the transition were eligible for benefits under these plan provisions (usually taken in the form of an actuarially-equivalent lump sum).[3] This fact is simply ignored by Dr. Bardwell.

6. What Dr. Bardwell (through Plaintiffs' actuarial expert Claude Poulin) actually calculated was the period of time during which the age-65 minimum benefit was higher than the cash balance benefit. For many older workers, the value of the minimum benefit far exceeded the cash balance account benefit at the end of the five-year transition. This was because El Paso did not choose to simply terminate the final average pay plan on January 1, 1997 and replace it with an equal-valued cash balance plan. Instead, El Paso provided a five-year extension of the minimum benefit during which employees' service years and final average pay were allowed to continue to grow. Employees retiring after the transition would receive the higher of either the cash balance formula or the immediate minimum benefit formula with pay and service fixed at the transition end date.

7. Although the cash balance plan and the minimum benefit started the five-year transition period as actuarially equal, the minimum benefit formula was, by and large, a more generous benefit. During the five-year transition period, its value grew much faster than the cash balance plan for many older employees, and yielded a better immediate benefit by the end of the transition period. Although this was a distinct advantage to older employees, Dr. Bardwell's analysis turns this on its head as discriminatory, because it resulted in a longer period for the cash balance account to "catch-up" to the now-higher immediate minimum benefit. By focusing only on the period after the five-year transition, Dr. Bardwell ignores the initial benefit boost that El Paso provided, and then penalizes El Paso for the boost because it lengthened the "wear-away" period. Although El Paso's decision to extend the minimum benefit for an additional five years unquestionably benefited older employees, by Dr. Bardwell's logic it caused greater disparity and higher damages to older workers.

8. This can be seen in Figure 1, which shows the monthly annuity accrued by an El Paso employee at each potential retirement age, from 1996 to 2007. Employee # 370844 was 51 years old at the start of the transition. Figure 1 shows the age 65 minimum benefit used by Dr. Bardwell (blue diamonds), the immediate benefit (red triangles) and the cash balance benefit (green squares). All are expressed as monthly annuity values. Figure 1 also separates the 5-year transition period (which is not included in Dr. Bardwell's analysis), from the periods of presumed "wear-away" calculated by Dr. Bardwell.

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[1] In my April 15 report, I used the term "minimum benefit" to refer to the annuity payable immediately upon termination, as either an early retirement benefit, a terminated vested benefit for employees not eligible for early retirement benefits or an age 65 benefit. In the present report, I use the term "immediate benefit" to distinguish it from the "Age 65 minimum benefit" calculated by Dr. Bardwell. Only the term, not the calculations, changed between my April 15 report and this report.

[2] These formulas can include an early retirement reduction, a supplemental early retirement benefit, and a terminated vested benefit, depending on age and service at the date of termination.

[3] It is my understanding that some employees were terminated through layoffs, which resulted in enhanced early retirement provisions. These individuals were not identifiable in the data I received, and so their benefits were computed according to the regular provisions in the plan.

9. During the five-year transition period, the immediate minimum benefit (red triangles) more than quadrupled, averaging 35% growth per year. Over the same period the cash balance plan (green squares), which started out actuarially equal to the minimum benefit, grew at only half that rate (about 17% per year). This resulted in an immediate minimum benefit that was considerably higher than the cash balance benefit by the end of the transition period. This advantage in the immediate minimum benefit over the cash balance plan rose to approximately $1,100 by 2002, and is the source of the "wear-away" that Dr. Bardwell identifies as a having a negative impact on older workers.

10. El Paso's decision to grant the five-year transition benefit was unquestionably advantageous to older workers, and is completely omitted from Dr. Bardwell's analysis. To assess the value of this plan provision, I computed the value of retirement benefits under the assumption that the transition period never took place and instead age-65 benefits under the final average pay formula were frozen as of the date of conversion to the Cash Balance Plan. I compared these hypothetical benefits with the actual value of retirement benefits at the end of the transition period[4], and found that those extra years of accrual represented a gain of $ 8,270 per year in retirement benefits for older workers (age 40 and over) versus $ 1,982 per year gain for younger workers. The number of standard deviations separating these two numbers is 27.92. By allowing its employees to accrue benefits under the old plan for five more years El Paso improved the retirement benefits of older workers significantly, relative to younger workers.

11. Figure 1 also illustrates a key point in my April 15 report – that for a significant period of time for which Plaintiffs assert benefits were frozen, the immediate minimum benefit continued to grow.[5] For employee #370844, the immediate minimum benefit grew for four more years, from 2001 to 2005. For the next two years, the immediate minimum benefit was at its maximum amount and did not grow. Dr. Bardwell's "wear-away" calculation of six years for this employee is three times too long.

12. Interestingly, Figure 1 also shows that the cash balance plan can also experience periods without growth. For Employee # 370844, the cash balance plan (green squares) did not grow from 2001 and 2002 because of a grandfather Rule of 85 clause providing a separate minimum benefit for the cash balance plan.[6] Once the computed value of the cash balance plan exceeded the guaranteed grandfathered amount, it resumed annual increases. For some employees affected by the Grandfather benefit, the period without growth to the cash balance plan value went on for several years. Neither Dr. Bardwell nor Mr. Poulin address this in their analyses.

13. To correct for Dr. Bardwell's errors, I recalculated the time periods for which benefits were "frozen" (i.e. that employees had reached their maximum benefit under the plan) using the immediate minimum benefit. Under this definition, only 2.9% of the employees experienced any period of "frozen" minimum benefit.[7] Of all of the years of employee data that were compiled

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4 In the case of Coastal, where the transition period ended in March 2006, the end of 2006 was used.

5 The Mercer Calculation Reference Manual states, at page 40: "Note that for purposes of Early Retirement eligibility and Early Retirement factors, Credited Service continues past December 31, 2001."

6 The Grandfathered Rule of 85 amount is described on page 43 of the Mercer Calculation Reference Manual.

7 Similar to Dr. Bardwell's analysis, this is calculated only for the periods the immediate minimum benefit is not exceeded by the cash balance plan benefit.

(from the end of the transition periods to the end of 2007), only 1.8% of the years show a "frozen" period.[8]

**Dr. Bardwell's Misleading Estimates of Economic Damages**

14. Dr. Bardwell's calculations of economic damages are similarly infected by this erroneous method. In section 5 of Dr. Bardwell's report he calculates benefit reductions and "damages." The description of these calculations, and the "Reduction in Benefits" figures in Table 1, differ from the damages that he actually presents in his Table 2. Also, they are entirely misleading.

15. In his introduction to Section 5, and in his calculations in Table 1, Dr. Bardwell calculates[9] the difference between benefits that would accrue under the cash balance plan and the benefits that would have accrued *had the final average pay plan continued on unaltered.* This calculation is totally irrelevant and has nothing to do with the claims raised in this case.

16. Moreover, the "Percent Reduction in Benefits" calculations in Dr. Bardwell's Table 1 have *nothing at all to do with a reduction in benefits*. Not surprisingly, employees over the age of 60 did not have their benefits reduced by over 90%--that is nonsense. These numbers are simply a calculation showing what percent of the *cash balance accruals* contributed to an increase in the employee's benefit. Obviously, if an employee is in a "wear-away" period, none of these accruals impact the employee's benefit—*because the employee is entitled to more than this amount*.

17. In his Table 2, Dr. Bardwell totals up the numbers presented by Mr. Poulin. In this table, unlike his Table 1, the numbers reflect cash balance accruals during periods of wear-away. It accumulates the amount that each employee would have received had every dollar of cash balance accrual gone to them, on top of their already higher minimum benefit payout, during the "wear-away" period.

18. Finally, all of these calculations completely miss the obvious point that age-65 benefits are, as I showed in my first report, almost always irrelevant—these employees only rarely take benefits at age 65 or older. What *is* relevant is the benefit they actually receive, the immediate minimum benefit under the *early retirement* provisions of the El Paso Retirement Plan.

**Calculation of Economic Damages, If Any**

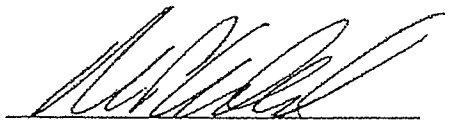
19. I developed an alternative calculation of "damages" that accumulates cash balance accruals during periods in which retirement benefits are actually fixed and higher than the cash balance benefit. Whether these numbers are actual damages or not is beyond the scope of my expertise. Following Dr. Bardwell's principle, however, that any period of time during which pension benefits are not accruing and the cash balance is, is subject to damages, I used the correct measure of benefit accruals – the immediate minimum benefit – to calculate periods of "frozen" immediate minimum benefits. As discussed above, only a small fraction of the

[8] Of 2,011 employees with usable data, only 58 (2.9%) experienced any period of time during which a "frozen" minimum benefit was not exceeded by the cash balance plan value.
[9] Actually, Dr. Bardwell only accumulates the calculations made by Mr. Poulin.

employees (2.9%) and an even smaller fraction of the employee-years (1.8%) experienced no accrual of benefits and therefore damages.

20. I computed damages as the change in the value of the cash balance account during the years an employee did not accrue any retirement benefits. Damages for employees who experienced a freeze in their retirement benefits amount to $ 1,810,074[10]. In performing these calculations, I am not opining that Dr. Bardwell's approach to damages makes any economic sense – it does not – I am only correcting his erroneous assumptions.

21. As noted previously, El Paso's continuation of the minimum benefit plan during the five year transition period was a significant advantage to older workers. When the effect of the five year transition benefit is taken into consideration, any potential disadvantage to older workers attributable to the "wear-away" is more than offset by the increased pension values.



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[10] These damages are based on 2,011 employees with pension benefits that could be reliably calculated. Damages are extrapolated for 508 additional employees. I have not computed damages for 385 ANR and Coastal Mart employees.

**Figure 1**
**Bardwell's "Wear-Away" Ignores Early Retirement Benefit Growth from Age 56-60**

| | |
|---|---|
| Employee # 370844 | |
| Original Plan | El Paso |
| Date of Birth | 6/5/1945 |
| Date of Hire | 6/5/1972 |
| Transition Start: | 1/1/1997 |
| Age @ Transition Start: | 51.6 |
| Service @ Transition Start: | 23.5 |

| Year of Benefit | Age at Year End | Immediate Minimum Benefit at Each Age | Age 65 Minimum Benefit | Cash Balance Plan Benefit at Each Age |
|---|---|---|---|---|
| 1996 | 51 | $445.51 | $1,297.53 | $405.48 |
| 1997 | 52 | $554.04 | $1,471.15 | $464.76 |
| 1998 | 53 | $658.53 | $1,592.97 | $531.36 |
| 1999 | 54 | $805.06 | $1,771.70 | $605.55 |
| 2000 | 55 | $1,815.50 | $1,991.86 | $685.93 |
| 2001 | 56 | $1,992.94 | $2,139.63 | $893.48 |
| 2002 | 57 | $2,035.71 | $2,139.63 | $893.48 |
| 2003 | 58 | $2,078.47 | $2,139.63 | $910.04 |
| 2004 | 59 | $2,121.35 | $2,139.63 | $994.82 |
| 2005 | 60 | $2,139.63 | $2,139.63 | $1,086.96 |
| 2006 | 61 | $2,139.63 | $2,139.63 | $1,191.86 |
| 2007 | 62 | $2,139.63 | $2,139.63 | $1,309.30 |

Immediate Minimum Benefit (the Red Line) Dramatically Increased During the 5 Year Transition Period, 1997-2002

While the Age 65 Benefit (Blue Line) Calculated by Bardwell Is Flat, the Early Retirement Benefit Contined to Increase from 56 - 60

After Age 60, the Minimum Benefit is No Longer Growing