

**EL PASO POLICEMEN'S PENSION FUND
ACTUARIAL VALUATION
AS OF JANUARY 1, 2010**

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Summary of Principal Results

| | January 1, 2010 | January 1, 2008 |
|--------------------------------------|-----------------|-----------------|
| Membership | | |
| Active | 1,091 | 1,098 |
| Terminated with deferred benefits | 10 | 13 |
| Retired paid from fund | 785 | 734 |
| Compensation* | | |
| Total | \$ 62,537,734 | \$ 56,840,063 |
| Average | \$ 57,321 | \$ 51,767 |
| Assets | | |
| Market value | \$ 550,976,591 | \$ 550,176,546 |
| Actuarial value | \$ 588,662,976 | \$ 515,354,403 |
| Valuation Results | | |
| Unfunded actuarial accrued liability | \$ 127,052,367 | \$ 98,587,812 |
| Funding period | 71 years | never |
| 30-year funding cost (City) | 25.01 % | 25.77 % |
| Margin | (6.51)% | (7.27)% |
| GASB No. 25 | | |
| Actuarial accrued liability (AAL) | \$ 715,715,343 | \$ 613,942,215 |
| Assets (actuarial) | \$ 588,662,976 | \$ 515,354,403 |
| GASB ratio | 82.2 % | 83.9 % |
| Unfunded AAL | \$ 127,052,367 | \$ 98,587,812 |

* In 2008, compensation is rate of pay at valuation date. In 2010, compensation is expected first year compensation.

Comments on the Valuation

Overview

The current contribution rates are not sufficient to meet the 30-year funding period required under GASB No. 25, based on the current membership data, the current financial data, the current benefit provisions and the actuarial assumptions and methods used to determine liabilities and costs.

Section 14A of Article 6243b (Vernon's Annotated Texas Statute) requires that the actuary determine any additional contribution rate necessary to amortize the unfunded actuarial accrued liability, as defined in GASB No. 25, over a 40-year period. Based on this January 1, 2010 valuation, we have determined that the current contribution rates as a percentage of wages would have to be increased to satisfy the 40-year funding period of Section 14A by 1.46% and 1.10% for the City and Members, respectively.

Section 3 shows in more detail the changes to the unfunded actuarial accrued liability (UAAL), the funding cost, and the funding period based on the current contribution rates.

Funding Status

There are two significant measures of the funding status of the Fund. The first is the 30-year funding cost. This is the City contribution rate required to pay the normal cost and to amortize the UAAL over a 30-year period. As you can see, this rate is currently 25.01% compared with the City's actual contribution rate of 18.50% and the 30-year funding cost in 2008 of 25.77%. Section 3 shows a reconciliation of the changes between the 2008 and 2010 figures.

The other measure is the funding period. This is the length of time in years that will be required to amortize the current UAAL based on the current contribution rate. This period was infinite in 2008 but is 71 years based on the 2010 valuation.

The UAAL is the excess of the liability assigned to prior years (the actuarial accrued liability) over the value of assets. Section 3 shows a reconciliation of this amount between 2008 and 2010.

GASB Statement No. 25

Section 4 provides information required for reporting under GASB No. 25. The GASB funded ratio decreased from 83.9% as of January 1, 2008 to 82.2% as of January 1, 2010. The loss on the actuarial value of assets and the assumption changes, offset by the additional contributions from the City (approximately \$48,000,000) were the primary causes for this decrease.

Benefit Provisions

Schedule B summarizes all the benefit provisions of the fund. There are no significant benefits which were not taken into account in this valuation.

The provisions were changed on June 30, 2007 so that members of the Fund on or prior to June 30, 2007 are eligible for the Base Plan and members of the Fund on or after July 1, 2007 are eligible for the Second-Tier Plan.

There were no changes in the provisions since the last actuarial valuation.

Actuarial Assumptions and Methods

Schedule C describes all of the assumptions used for this valuation. An experience study was performed as of January 1, 2010. As recommended in that study, the Board adopted assumption changes to better reflect anticipated experience of the Fund.

GASB Statement No. 27

Under GASB Statement No. 27, employers must determine a pension expense based on a 30-year amortization of the UAAL. The amortization can assume payroll growth due to inflation, but no membership growth. Prior to 2006, the pension expense under GASB No. 27 was determined based on a 40-year amortization of the UAAL. If the actual contribution rate is less than the rate required by GASB No. 27, the excess must be expensed. This will result in the employer showing an accrued but unpaid liability for pension benefits on its financial statements.

The annual required contribution under GASB No. 25 is 25.01% of wages. The City must contribute 25.01% of wages plus an adjustment for any pension asset or obligation to avoid any changes in its net pension asset or obligation.

Financial Data

The financial data used in this report was supplied by the Fund's staff.

Section 5 reconciles the Fund's assets between 2008 and 2010 and shows the development of the actuarial value of assets (AVA). Rather than using the market value for cost calculations, we use an adjusted market value, which phases in gains and losses (compared to the assumed investment return rate) over five years. This method is designed to reduce the volatility of the results.

Historical returns and experience are also summarized in Section 5.

Membership Statistics

Data on active members and on retired members was supplied by the Fund's staff. The active membership decreased from 1,098 to 1,091 between 2008 and 2010, a 0.6% decrease over the two year period, while payroll grew from \$56.8 million to \$62.5 million over the same period, a 10.0% increase. Schedule A shows a summary of the membership data.

Actuarial Cost, Margin and Funding Period

| | January 1, 2010 | January 1, 2008 |
|---|-----------------|-----------------|
| 1. Covered Payroll* | \$ 62,537,734 | \$ 56,840,063 |
| 2. Actuarial present value of future pay | \$ 544,064,574 | \$ 588,634,700 |
| 3. Current contribution rates | | |
| a. City | 18.50 % | 18.50 % |
| b. Member | 13.89 % | 13.89 % |
| c. Total | 32.39 % | 32.39 % |
| 4. Normal cost rate | | |
| a. Total (before adjustment for overtime) | 30.14 % | 31.86 % |
| b. Total (after adjustment for overtime) | 27.91 % | 30.42 % |
| c. Member contribution rate | 13.89 % | 13.89 % |
| d. Employer normal cost rate (4b - 4c) | 14.02 % | 16.53 % |
| 5. Actuarial present value of future benefits | \$ 879,696,406 | \$ 801,481,230 |
| 6. Actuarial present value of future normal costs (4a x 2) | \$ 163,981,063 | \$ 187,539,015 |
| 7. Actuarial accrued liability (5 - 6) | \$ 715,715,343 | \$ 613,942,215 |
| 8. Actuarial value of assets | \$ 588,662,976 | \$ 515,354,403 |
| 9. Unfunded actuarial accrued liability (UAAL) (7 - 8) | \$ 127,052,367 | \$ 98,587,812 |
| 10. 30-year funding cost for City** | | |
| a. Employer normal cost rate (4d) | 14.02 % | 16.53 % |
| b. Amortization rate | 10.99 % | 9.24 % |
| c. Total | 25.01 % | 25.77 % |
| 11. Margin over/(under) 30-year cost (3a - 10c)** | (6.51)% | (7.27)% |
| 12. Funding period to amortize UAAL** | 71 years | never |

* In 2008, covered payroll is rate of pay at valuation date. In 2010, covered payroll is expected first year compensation.

** 30-year funding cost is necessary for accounting purposes only. The actual funding period is calculated based on level contributions and reflects the provisions of the second-tier plan for Members hired after June 30, 2007.

Analysis of Change in UAAL

| | |
|---|-------------------|
| 1. UAAL as of January 1, 2008 | \$ 98,587,812 |
| 2. Changes due to: | |
| a. Expected increase (negative amortization) | \$ 13,713,013 |
| b. Actual contributions greater than expected | (47,561,213) |
| c. Liability experience | (11,655,763) |
| d. Assumption changes | 28,579,307 |
| e. Asset experience | <u>45,389,211</u> |
| Total Changes | \$ 28,464,555 |
| 3. UAAL as of January 1, 2010 | \$ 127,052,367 |

Analysis of Change in Funding Cost

| | |
|---|---------------|
| 1. 30-year funding cost as of January 1, 2008 | 25.77 % |
| 2. Changes due to: | |
| a. Actual contributions greater than expected | (4.13)% |
| b. Liability experience | (1.55)% |
| c. Assumption changes | 0.98 % |
| d. Asset experience | <u>3.94 %</u> |
| Total | (0.76) % |
| 3. 30-year funding cost as of January 1, 2010 | 25.01 % |

Analysis of Change in Funding Period

- | | |
|---|----------|
| 1. Funding period as of January 1, 2008 | never |
| 2. Changes due to: | |
| a. Passage of time | |
| b. Actual contributions greater than expected | |
| c. Liability experience | |
| d. Assumption changes | |
| e. Asset experience | |
| Total | |
| 3. Funding period as of January 1, 2010 | 71 years |

GASB #25 Disclosure Amounts as of January 1, 2010

| <u>Period Ending</u> | <u>Actuarial Value of Assets</u> | <u>Actuarial Liability (AAL)- Entry Age</u> | <u>Unfunded AAL (UAAL)</u> | <u>Funded Ratio</u> | <u>Covered Payroll</u> | <u>UAAL as a Percentage of Covered Payroll</u> |
|----------------------|----------------------------------|---|----------------------------|---------------------|------------------------|--|
| December 31, 2004 | | | | | | |
| December 31, 2005 | \$ 388.5 | \$ 547.1 | \$ 158.6 | 71.0% | \$ 53.3 | 297.6% |
| December 31, 2006 | | | | | | |
| December 31, 2007 | 515.3 | 613.9 | 98.6 | 83.9% | 56.8 | 173.4% |
| December 31, 2008 | | | | | | |
| December 31, 2009 | 588.6 | 715.7 | 127.1 | 82.2% | 62.5 | 203.2% |

**GASB #25 Schedule of Employer Contributions
 for Period Ending December 31, 2009**

| <u>Period Ending</u> | <u>Annual Required Contribution</u> | <u>Percentage Contributed</u> |
|----------------------|-------------------------------------|-------------------------------|
| December 31, 2004 | \$ 17,422,817 | 63% |
| December 31, 2005 | 18,427,235 | 60% |
| December 31, 2006 | 20,153,124 | 57% |
| December 31, 2007 | 20,800,595 | 263% |
| December 31, 2008 | 16,746,050 | 74% |
| December 31, 2009 | 17,648,266 | 312% |

Reconciliation of Fund Assets

| | Period Ending | |
|---|-------------------|-------------------|
| | December 31, 2009 | December 31, 2008 |
| 1. Value of fund at beginning of period | \$ 406,665,013 | \$ 550,176,546 |
| 2. Contributions | | |
| a. City | 55,013,045 | 12,428,593 |
| b. Member | 9,533,573 | 9,927,392 |
| c. Total | \$ 64,546,618 | \$ 22,355,985 |
| 3. Benefit payments | (28,722,037) | (26,197,467) |
| 4. Earnings | 110,663,518 | (139,084,146) |
| 5. Administrative expenses | (2,176,521) | (585,905) |
| 6. Value of assets at end of period | \$ 550,976,591 | \$ 406,665,013 |

Determination of Excess Earnings To Be Deferred

| | Period Ending | |
|---|-------------------|-------------------|
| | December 31, 2009 | December 31, 2008 |
| 1. Market value at beginning of period | \$ 406,665,013 | \$ 550,176,546 |
| 2. Net new investments | | |
| a. City contributions | \$ 55,013,045 | \$ 12,428,593 |
| b. Member contributions | 9,533,573 | 9,927,392 |
| c. Benefit payments | (28,722,037) | (26,197,467) |
| d. Total | \$ 35,824,581 | \$ (3,841,482) |
| 3. Weighted new investments (2d x 50%) | \$ 17,912,291 | \$ (1,920,741) |
| 4. Assets available (1 + 3) | \$ 424,577,304 | \$ 548,255,805 |
| 5. Assumed investment return rate | 8.00% | 8.00% |
| 6. Expected net return (4 x 5) | \$ 33,966,184 | \$ 43,860,464 |
| 7. Actual net return | | |
| a. Total investment return | \$ 110,663,518 | \$ 139,084,146 |
| b. Administrative expenses | (2,176,521) | (585,905) |
| c. Net return | \$ 108,486,997 | \$ (139,670,051) |
| 8. Gains/(losses) subject to deferral (7c - 6) | \$ 74,520,813 | \$ (183,530,515) |

Calculation of Actuarial Value of Assets

1. Market value of assets as of December 31, 2009 \$ 550,976,591

2. Deferral amounts

| | <u>Year</u> | <u>Total Gain/(Loss)</u> | <u>Percent Deferred</u> | <u>Deferral Amount</u> |
|----|-------------|--------------------------|-------------------------|------------------------|
| a. | 2009 | \$ 74,520,813 | 80% | \$ 59,616,650 |
| b. | 2008 | (183,530,515) | 60% | (110,118,309) |
| c. | 2007 | 17,024,726 | 40% | 6,809,890 |
| d. | 2006 | 30,026,919 | 20% | 6,005,384 |
| e. | Total | | | \$ (37,686,385) |

3. Actuarial value of assets (1 - 2e) \$ 588,662,976

Summary of Asset Experience and Yield on Market Value of Assets

| <u>Plan Year</u> | | | <u>Beginning of Year Market Value</u> | <u>Employer Plus Employee Contributions to Fund</u> | <u>Benefit Disbursements from Fund (Including Refund of Contributions)</u> | <u>Net Earnings on Fund (6)-(2)+(4)-(3)</u> | <u>End of Year Market Value</u> | <u>Annualized Yield Based on Market Value</u> |
|------------------|-----------------|-------------|---------------------------------------|---|--|---|---------------------------------|---|
| (1) | | (2) | (3) | (4) | (5) | (6) | (7) | |
| 3/1/1967 | thru 2/29/1968 | 1,346,308 | 361,179 | 184,683 | 82,912 | 1,605,716 | 5.78% | |
| 3/1/1968 | thru 2/28/1969 | 1,605,716 | 584,433 | 190,730 | 84,165 | 2,083,584 | 4.67 | |
| 3/1/1969 | thru 8/31/1969 | 2,083,584 | 264,252 | 93,583 | 8,238 | 2,262,491 | 0.76 | |
| 9/1/1969 | thru 8/31/1970 | 2,262,491 | 725,550 | 200,351 | (7,139) | 2,780,551 | (0.28) | |
| 9/1/1970 | thru 8/31/1971 | 2,780,551 | 767,739 | 235,791 | 212,068 | 3,524,567 | 6.96 | |
| 9/1/1971 | thru 8/31/1972 | 3,524,567 | 932,173 | 248,250 | 187,550 | 4,396,040 | 4.85 | |
| 9/1/1972 | thru 8/31/1973 | 4,396,040 | 1,142,196 | 261,876 | (344,068) | 4,932,292 | (7.11) | |
| 9/1/1973 | thru 8/31/1974 | 4,932,292 | 1,303,600 | 279,016 | (1,094,322) | 4,862,554 | (20.10) | |
| 9/1/1974 | thru 8/31/1975 | 4,862,554 | 1,483,345 | 348,368 | 1,095,170 | 7,092,701 | 20.17 | |
| 9/1/1975 | thru 8/31/1976 | 7,092,701 | 1,696,914 | 498,619 | 951,450 | 9,242,446 | 12.37 | |
| 9/1/1976 | thru 8/31/1977 | 9,242,446 | 2,014,477 | 724,487 | 377,047 | 10,909,483 | 3.81 | |
| 9/1/1977 | thru 8/31/1978 | 10,909,483 | 2,308,059 | 846,390 | 289,873 | 12,661,025 | 2.49 | |
| 9/1/1978 | thru 8/31/1979 | 12,661,025 | 2,636,869 | 903,826 | 1,214,002 | 15,608,070 | 8.97 | |
| 9/1/1979 | thru 8/31/1980 | 15,608,070 | 2,786,580 | 1,034,999 | 1,214,765 | 18,574,416 | 7.37 | |
| 9/1/1980 | thru 8/31/1981 | 18,574,416 | 3,116,323 | 1,334,277 | 1,362,208 | 21,718,670 | 7.00 | |
| 9/1/1981 | thru 8/31/1982 | 21,718,670 | 3,456,323 | 1,549,185 | 2,078,992 | 25,704,800 | 9.17 | |
| 9/1/1982 | thru 8/31/1983 | 25,704,800 | 3,784,730 | 1,724,450 | 3,593,153 | 31,358,233 | 13.44 | |
| 9/1/1983 | thru 8/31/1984 | 31,358,233 | 4,222,805 | 1,978,230 | 3,734,256 | 37,337,064 | 11.50 | |
| 9/1/1984 | thru 12/31/1984 | 37,337,064 | 1,142,330 | 701,113 | 2,147,922 | 39,926,203 | 18.16 | |
| 1/1/1985 | thru 12/31/1985 | 39,926,203 | 26,060,116 | 23,848,881 | 8,500,222 | 50,637,660 | 20.72 | |
| 1/1/1986 | thru 12/31/1986 | 50,637,660 | 7,604,348 | 6,404,922 | 10,269,082 | 62,106,168 | 20.04 | |
| 1/1/1987 | thru 12/31/1987 | 62,106,168 | 5,456,948 | 2,797,401 | 1,602,798 | 66,368,513 | 2.53 | |
| 1/1/1988 | thru 12/31/1988 | 66,368,513 | 5,644,747 | 3,312,657 | 5,796,220 | 74,496,823 | 8.58 | |
| 1/1/1989 | thru 12/31/1989 | 74,496,823 | 6,366,251 | 3,852,933 | 12,043,779 | 89,053,920 | 15.90 | |
| 1/1/1990 | thru 12/31/1990 | 89,053,920 | 6,849,721 | 4,274,644 | 5,387,009 | 97,016,006 | 5.96 | |
| 1/1/1991 | thru 12/31/1991 | 97,016,006 | 7,416,200 | 4,774,154 | 19,217,400 | 118,875,452 | 19.54 | |
| 1/1/1992 | thru 8/31/1992 | 118,875,452 | 5,424,574 | 3,347,654 | 3,740,983 | 124,693,355 | 4.72 | |
| 9/1/1992 | thru 8/31/1993 | 124,693,355 | 8,781,639 | 5,537,340 | 16,598,618 | 144,536,272 | 13.14 | |
| 9/1/1993 | thru 8/31/1994 | 144,536,272 | 9,788,426 | 6,265,077 | 7,350,992 | 155,410,613 | 5.02 | |
| 9/1/1994 | thru 8/31/1995 | 155,410,613 | 10,470,384 | 7,192,593 | 18,598,570 | 177,286,974 | 11.84 | |
| 9/1/1995 | thru 8/31/1996 | 177,286,974 | 11,299,119 | 7,783,184 | 13,948,214 | 194,751,123 | 7.79 | |
| 9/1/1996 | thru 8/31/1997 | 194,751,123 | 11,925,975 | 9,160,521 | 40,965,530 | 238,482,107 | 20.89 | |
| 9/1/1997 | thru 8/31/1998 | 238,482,107 | 12,223,261 | 10,233,758 | (5,940,105) | 234,531,505 | (2.48) | |
| 9/1/1998 | thru 6/30/1999 | 234,531,505 | 11,054,605 | 9,504,209 | 47,918,974 | 284,000,875 | 24.90 | |
| 7/1/1999 | thru 6/30/2000 | 284,000,875 | 13,665,223 | 12,748,916 | 12,831,468 | 297,748,650 | 4.51 | |
| 7/1/2000 | thru 6/30/2001 | 297,748,650 | 14,658,218 | 14,103,823 | 1,347,827 | 299,650,872 | 0.45 | |
| 7/1/2001 | thru 6/30/2002 | 299,650,872 | 15,353,592 | 15,436,546 | (5,878,531) | 293,689,387 | (1.96) | |
| 7/1/2002 | thru 6/30/2003 | 293,689,387 | 16,814,226 | 16,570,261 | 5,500,957 | 299,434,309 | 1.87 | |
| 7/1/2003 | thru 12/31/2003 | 299,434,309 | 8,416,586 | 8,833,981 | 32,831,843 | 331,848,757 | 23.15 | |
| 1/1/2004 | thru 12/31/2004 | 331,848,757 | 18,092,242 | 19,159,910 | 41,407,492 | 372,188,581 | 12.50 | |
| 1/1/2005 | thru 12/31/2005 | 372,188,581 | 18,073,981 | 20,738,555 | 30,182,882 | 399,706,889 | 8.14 | |

Summary of Asset Experience and Yield on Market Value of Assets (continued)

| | | <u>Plan Year</u> | <u>Beginning of Year Market Value</u> | <u>Employer Plus Employee Contributions to Fund</u> | <u>Benefit Disbursements from Fund (Including Refund of Contributions)</u> | <u>Net Earnings on Fund (6)-(2) + (4)-(3)</u> | <u>End of Year Market Value</u> | <u>Annualized Yield Based on Market Value</u> |
|----------|------|------------------|---------------------------------------|---|--|---|---------------------------------|---|
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1/1/2006 | thru | 12/31/2006 | 399,706,889 | 19,053,835 | 23,008,976 | 61,845,264 | 457,597,012 | 15.55% |
| 1/1/2007 | thru | 12/31/2007 | 457,597,012 | 62,506,379 | 25,057,295 | 55,130,450 | 550,176,546 | 11.57 |
| 1/1/2008 | thru | 12/31/2008 | 550,176,546 | 22,355,985 | 26,197,467 | (139,670,051) | 406,665,013 | (25.48) |
| 1/1/2009 | thru | 12/31/2009 | 406,665,013 | 64,546,618 | 28,722,037 | 108,486,997 | 550,976,591 | 25.55 |

Membership Data

| | <u>January 1, 2010</u> | <u>January 1, 2008</u> |
|---|------------------------|------------------------|
| 1. Active members | | |
| a. Number of males | 964 | 971 |
| b. Number of females | <u>127</u> | <u>127</u> |
| c. Total | 1,091 | 1,098 |
| d. Total payroll | \$ 62,537,734 | \$ 56,840,063 |
| e. Average annual pay | 57,321 | 51,767 |
| f. Average age | 38.8 | 37.8 |
| g. Average service (years) | 11.2 | 10.4 |
| h. Total accumulated member contributions | 68,254,583 | 57,119,268 |
| i. Average member contributions | 62,561 | 52,021 |
| 2. Inactive members | | |
| a. Number currently being paid from fund | 785 | 734 |
| b. Number entitled to deferred benefits | <u>10</u> | <u>13</u> |
| c. Total number of inactive members | 795 | 747 |
| d. Total current annual benefit | \$ 28,448,049 | \$ 25,292,620 |
| e. Average current annual benefit | 35,784 | 33,859 |
| f. Average age | 60.6 | 60.8 |

* In 2008, total payroll is rate of pay at valuation date. In 2010, total payroll is expected first year compensation.

El Paso Policemen's Pension Fund
 Actuarial Valuation - January 1, 2010

Schedule A
 (continued)

| AGE | Under 1 | YEARS OF SERVICE | | | | | | | | | | Total | | |
|----------|---------|------------------|--------|----------|----------|----------|----------|----------|----------|---------|---|-------|--------|-------|
| | | 1 to 4 | 5 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 & Up | | | | |
| Under 25 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| | 0 | 37,974 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 to 29 | 0 | 116 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 |
| | 0 | 39,952 | 48,123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 to 34 | 1 | 78 | 103 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 205 |
| | 49,062 | 41,155 | 52,079 | 58,322 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35 to 39 | 0 | 37 | 70 | 95 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 249 |
| | 0 | 44,725 | 53,933 | 60,898 | 63,551 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 to 44 | 1 | 19 | 30 | 42 | 133 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 267 |
| | 46,152 | 45,559 | 54,408 | 60,308 | 62,875 | 69,536 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 45 to 49 | 0 | 10 | 21 | 22 | 32 | 51 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 144 |
| | 0 | 47,390 | 52,962 | 61,014 | 63,526 | 68,316 | 67,814 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 50 to 54 | 0 | 5 | 5 | 12 | 0 | 12 | 20 | 1 | 0 | 0 | 0 | 0 | 0 | 55 |
| | 0 | 48,609 | 52,740 | 59,984 | 67,994 | 74,876 | 122,091 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 55 to 59 | 0 | 2 | 2 | 4 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 14 |
| | 0 | 58,494 | 51,046 | 59,202 | 62,271 | 81,505 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 to 64 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 5 |
| | 0 | 0 | 0 | 56,256 | 0 | 0 | 0 | 62,391 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 to 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80,912 | 0 |
| 70 & Up | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2 | 286 | 247 | 199 | 212 | 105 | 29 | 10 | 1 | 1,091 | 0 | 0 | 0 | 1,091 |

THE NUMBER AND ANNUAL RETIREMENT
 ALLOWANCES OF RETIRED MEMBERS,
 DISABLED MEMBERS AND BENEFICIARIES
 BY AGE AS OF JANUARY 1, 2010

| AGE | NUMBER | BENEFIT | AVERAGE BENEFIT |
|-----|--------|-----------|--------------------|
| 15 | 4 | \$ 23,039 | \$ 5,760 |
| 17 | 6 | 69,258 | 11,543 |
| 18 | 2 | 17,185 | 8,593 |
| 21 | 1 | 20,195 | 20,195 |
| 26 | 1 | 12,839 | 12,839 |
| 29 | 1 | 11,373 | 11,373 |
| 30 | 1 | 17,717 | 17,717 |
| 32 | 1 | 18,544 | 18,544 |
| 36 | 1 | 19,000 | 19,000 |
| 38 | 1 | 19,956 | 19,956 |
| 39 | 2 | 19,000 | 9,500 |
| 41 | 2 | 61,865 | 30,933 |
| 42 | 5 | 141,502 | 28,300 |
| 43 | 6 | 166,584 | 27,764 |
| 44 | 8 | 224,780 | 28,098 |
| 45 | 13 | 491,640 | 37,818 |
| 46 | 11 | 374,204 | 34,019 |
| 47 | 16 | 597,638 | 37,352 |
| 48 | 25 | 1,035,331 | 41,413 |
| 49 | 32 | 1,286,763 | 40,211 |
| 50 | 12 | 430,961 | 35,913 |
| 51 | 18 | 696,432 | 38,691 |
| 52 | 17 | 740,880 | 43,581 |
| 53 | 26 | 1,132,906 | 43,573 |
| 54 | 22 | 874,714 | 39,760 |
| 55 | 25 | 994,913 | 39,797 |
| 56 | 34 | 1,500,251 | 44,125 |
| 57 | 29 | 1,146,696 | 39,541 |
| 58 | 33 | 1,563,927 | 47,392 |
| 59 | 31 | 1,281,398 | 41,335 |
| 60 | 43 | 1,773,404 | 41,242 |
| 61 | 31 | 1,339,514 | 43,210 |
| 62 | 32 | 1,322,675 | 41,334 |

THE NUMBER AND ANNUAL RETIREMENT
 ALLOWANCES OF RETIRED MEMBERS,
 DISABLED MEMBERS AND BENEFICIARIES
 BY AGE AS OF JANUARY 1, 2010

| AGE | NUMBER | BENEFIT | AVERAGE BENEFIT |
|-------|--------|--------------|--------------------|
| 63 | 20 | \$ 787,093 | \$ 39,355 |
| 64 | 18 | 666,180 | 37,010 |
| 65 | 19 | 825,846 | 43,466 |
| 66 | 18 | 670,484 | 37,249 |
| 67 | 14 | 560,890 | 40,064 |
| 68 | 12 | 532,702 | 44,392 |
| 69 | 6 | 204,298 | 34,050 |
| 70 | 14 | 521,950 | 37,282 |
| 71 | 15 | 383,409 | 25,561 |
| 72 | 15 | 517,341 | 34,489 |
| 73 | 13 | 377,047 | 29,004 |
| 74 | 14 | 446,741 | 31,910 |
| 75 | 15 | 439,714 | 29,314 |
| 76 | 15 | 379,016 | 25,268 |
| 77 | 13 | 415,376 | 31,952 |
| 78 | 8 | 142,141 | 17,768 |
| 79 | 11 | 190,780 | 17,344 |
| 80 | 5 | 131,523 | 26,305 |
| 81 | 12 | 263,659 | 21,972 |
| 82 | 4 | 43,091 | 10,773 |
| 83 | 9 | 103,030 | 11,448 |
| 84 | 9 | 81,871 | 9,097 |
| 85 | 6 | 102,026 | 17,004 |
| 87 | 2 | 12,000 | 6,000 |
| 88 | 2 | 17,611 | 8,806 |
| 90 | 2 | 12,000 | 6,000 |
| 91 | 2 | 12,000 | 6,000 |
| TOTAL | 785 | \$28,266,903 | \$ 36,009 |

THE NUMBER AND FUTURE ANNUAL
ALLOWANCES OF TERMINATED MEMBERS,
ENTITLED TO A FUTURE BENEFIT
BY AGE AS OF JANUARY 1, 2010

| AGE | NUMBER | BENEFIT | AVERAGE BENEFIT |
|-------|--------|------------|--------------------|
| 44 | 1 | \$ 19,593 | \$ 19,593 |
| 43 | 1 | 17,524 | 17,524 |
| 42 | 1 | 14,730 | 14,730 |
| 40 | 2 | 45,987 | 22,994 |
| 38 | 3 | 52,529 | 17,510 |
| 37 | 2 | 30,783 | 15,392 |
| TOTAL | 10 | \$ 181,146 | \$ 18,115 |

**Summary of Benefit Provisions
As of January 1, 2010**

The Base Plan

1. Wages: Base pay, plus longevity pay, incentive pay and overtime.
2. Final Wages: The average of the monthly wages, excluding overtime pay, on which a Member made contributions to the Pension Fund during the 36-month period preceding retirement, but not less than the 12-month monthly wages preceding June 30, 2007.
3. Member: Any person who has been or becomes enrolled as a police officer in the Police Department of the City of El Paso on or prior to June 30, 2007.
4. Credited Service: The time for which a Member contributes to the Pension Fund.
5. Pension Fund: The El Paso Policemen's Pension Fund.
6. Qualified Spouse: The widow (widower) of a deceased Member.
7. Qualified Child or Children: The surviving, dependent children under 19 years of age (23 if a full-time student).
8. Contribution Rates: The active Member contributes 13.89% of their pre-tax wages per year. The City contributes 18.50% of the Member's wages per year (18.00% base contribution plus 0.50% contribution for Members hired after age 29).
9. Service Retirement Benefits:
 - a. Normal Retirement Benefit

| | |
|-------------|---|
| Eligibility | Age 45 with 20 years of Credited Service. |
| Benefit | 2.75% of Final Wages times years of Credited Service, not to exceed 77% of Final Wages. |
 - b. Early Retirement Benefit

| | |
|-------------|-------------------------------|
| Eligibility | 20 years of Credited Service. |
|-------------|-------------------------------|

Benefit 2.75% of Final Wages times years of credited service, not to exceed 28 years, multiplied by the appropriate actuarial reduction factor. The actuarial factors are as follows:

| <u>Age</u> | <u>Factor</u> |
|------------|---------------|
| 44 | .95 |
| 43 | .90 |
| 42 | .84 |
| 41 | .78 |
| 40 | .71 |
| 39 | .63 |
| 38 | .55 |

Other factors may be obtained by interpolation.

c. Deferred Retirement Benefit

Eligibility At least 10 years of Credited Service.

Benefit 2.75% of Final Wages for each year of credited service not to exceed 28 years. This benefit is payable commencing at age 50, or immediately upon termination of service if at least age 50 at termination.

d. Withdrawal (Refund) of Contributions

Eligibility 5 years of Credited Service.

Benefit Total employee contributions without interest. No other benefits are payable under the Plan once the contributions are withdrawn.

10. Survivor Benefits:

a. Qualified Surviving Spouse Benefit

Eligibility Death of a Member who was active, retired, or eligible for a deferred retirement benefit.

- | | |
|---------|---|
| Benefit | 100% of Member's earned benefit at date of death, but not less than 50% of Final Wages. If there are qualified surviving children or Member was eligible for a deferred retirement benefit, the surviving spouse's benefit is reduced to 66-2/3%. |
|---------|---|
- b. Qualified Surviving Children Benefit
- | | |
|-------------|---|
| Eligibility | Death of a Member who was active, retired, or eligible for a deferred retirement benefit. |
| Benefit | Two-thirds of the Member's earned benefit at date of death if there is no surviving spouse. If a surviving spouse is receiving a benefit, the above fraction is reduced to one-third. |
11. Disability Retirement Benefits:
- | | |
|-------------|--|
| Eligibility | Total and permanent disability from an injury in the line of duty or any injury not due to the Member's own fault. |
| Benefit | 2.75% of Final Wages times Credited Service, not to exceed 28 years, with a minimum benefit of 50% of Final Wages. |
12. Minimum Benefits: Minimum pension benefit for any retiree or qualified spouse is \$500 per month.
13. Cost of Living Adjustment: Cost of living adjustments are applicable to those retiring after March 23, 1980. If the Member retires at age 60 or later, the retirement income will be increased by 3% per year beginning on the date of retirement and then on each January 1 thereafter. If the retirement age is 58 through 59, the 3% annual increase will begin when the Member reaches age 60. A 3% increase will also be given on each subsequent January 1. If the retirement age is prior to 58, the 3% annual increase will begin two years after the retirement date. The first increase begins on the anniversary date of the Member's retirement; thereafter increases will occur on each January 1. Cost-of-living increases are not granted for deferred retirements. For beneficiaries of an active member who dies in service, the initial increase will occur two years after the Member's death. Increases will occur on each January 1 thereafter.

**Summary of Benefit Provisions
As of January 1, 2010**

The Second-Tier Plan

1. Wages: Base pay, plus longevity pay, incentive pay and overtime.
2. Final Wages: The average of the monthly wages, excluding overtime pay, on which a Member made contributions to the Pension Fund during the 36-month period preceding retirement.
3. Member: Any person who has been or becomes enrolled as a police officer in the Police Department of the City of El Paso on or after July 1, 2007.
4. Credited Service: The time for which a Member contributes to the Pension Fund.
5. Pension Fund: The El Paso Policemen's Pension Fund.
6. Qualified Spouse: The widow (widower) of a deceased Member.
7. Qualified Child or Children: The surviving, dependent children under 19 years of age (23 if a full-time student).
8. Contribution Rates: The active Member contributes 13.89% of their pre-tax wages per year. The City contributes 18.50% of the Member's wages per year (18.00% base contribution plus 0.50% contribution for Members hired after age 29).
9. Service Retirement Benefits:

a. Normal Retirement Benefit

| | |
|-------------|---|
| Eligibility | Age 50 with 25 years of Credited Service. |
| Benefit | 2.50% of Final Wages times years of Credited Service. |

b. Deferred Retirement Benefit

| | |
|-------------|---|
| Eligibility | At least 10 years of Credited Service. |
| Benefit | 2.50% of Final Wages for each year of Credited Service. This benefit is payable commencing at age 50, or immediately upon termination of service if at least age 50 at termination. |

c. Withdrawal (Refund) of Contributions

| | |
|-------------|---|
| Eligibility | 5 years of Credited Service. |
| Benefit | Total employee contributions without interest. No other benefits are payable under the Plan once the contributions are withdrawn. |

10. Survivor Benefits:

a. Qualified Surviving Spouse Benefit

| | |
|-------------|---|
| Eligibility | Death of a Member who was active, retired, or eligible for a deferred retirement benefit. |
| Benefit | 75% of Member's earned benefit at date of death but not less than 50% of Final Wages. If there are qualified surviving children or Member was eligible for a deferred retirement benefit, the surviving spouse's benefit is reduced to 50%. |

b. Qualified Surviving Children Benefit

| | |
|-------------|--|
| Eligibility | Death of a Member who was active, retired, or eligible for a deferred retirement benefit. |
| Benefit | 50% of the Member's earned benefit at date of death if there is no surviving spouse. If a surviving spouse is receiving a benefit, the surviving children's benefit is reduced to 25%. |

11. Disability Retirement Benefits:

| | |
|-------------|--|
| Eligibility | Total and permanent disability from an injury in the line of duty or any injury not due to the Member's own fault. |
| Benefit | 2.50% of Final Wages times Credited Service with a minimum benefit of 50% of Final Wages. |

12. Minimum Benefits: Minimum pension benefit for any retiree or qualified spouse is \$500 per month.

13. Cost of Living Adjustment: None.

14. Normal Form of Retirement Benefit:

- | | |
|-------------------|---------------------------------|
| a. Single Member | Life Annuity. |
| b. Married Member | 75% joint-and-survivor annuity. |

15. Back Deferred Retirement Option Program (Back DROP):

Members who are 50 and one half years old and have over 25 and one half years of service can elect the Back DROP. The Back DROP benefit is a lump sum and a reduced monthly benefit. The reduced monthly benefit equals the benefit calculated at the beginning of the Back DROP period. The lump sum equals the number of months in the Back DROP period multiplied by the monthly benefit. The Back DROP period must be at least six months and not more than 36 months. After deducting the period of the Back DROP the member must still have 25 years of Credited Service for the calculation of their benefit.

**Summary of Actuarial Methods and Assumptions
 (Effective as of January 1, 2010)**

INVESTMENT RETURN: 7.75% per annum, compounded annually, net all expenses including administrative expenses. This rate reflects an underlying inflation rate of 3.50% and a real rate of return of 4.25%. Prior assumptions for 2008 were 8.00% per annum with inflation rate of 4.00% and real rate of return of 4.00%.

DEMOGRAPHIC ASSUMPTIONS: Representative values of the assumed annual rates of withdrawal, death, and disability are as follows:

| Age | Withdrawal* | Annual Rate per 1,000 Members | | | | Disability |
|-----|-------------|-------------------------------|--------|-------------------|--------|------------|
| | | Mortality - Disableds | | Mortality - Other | | |
| | | Male | Female | Male | Female | |
| 20 | 30.0 | 48.30 | 26.30 | 0.46 | 0.28 | 1.30 |
| 25 | 30.0 | 48.30 | 26.30 | 0.59 | 0.29 | 1.50 |
| 30 | 30.0 | 36.20 | 23.70 | 0.75 | 0.35 | 2.00 |
| 35 | 15.0 | 27.80 | 21.40 | 0.85 | 0.48 | 2.70 |
| 40 | 15.0 | 28.20 | 20.90 | 0.94 | 0.71 | 3.80 |
| 45 | 10.0 | 32.20 | 22.40 | 1.35 | 0.97 | 5.80 |
| 50 | 0.0 | 38.30 | 25.70 | 2.10 | 1.43 | 9.80 |
| 60 | 0.0 | 60.30 | 33.10 | 6.30 | 4.44 | 0.00 |
| 70 | N/A | 73.90 | 41.10 | 19.86 | 13.73 | N/A |
| 80 | N/A | 112.80 | 74.60 | 50.21 | 39.40 | N/A |

*During each of the first three years of employment, these rates are increased an additional 2%.

The withdrawal and male mortality rates have been revised since the previous valuation.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increase attributable to longevity and promotion are as follows:

| Years of Service | Annual Rate of Salary Increase |
|------------------|--------------------------------|
| 1 | 10.75% |
| 11 | 5.60 |
| 21 | 4.50 |
| 31 | 4.50 |
| 41 | 4.50 |

The salary increases have changed since the prior valuation.

Total payroll is assumed to increase 3.50% per year. This is a change from the previous assumption of 4.00%. New hires are assumed to replace terminations.

Overtime is assumed to be 8.00% of base, incentive, and longevity pay. The City and Members contribute on total pay including overtime. This assumption has changed from the previous assumption of 4.75% to be more consistent with past experience.

RETIREMENT RATES: To determine the value of future normal cost, the percentage of population assumed to retire at various ages is as follows:

The Base Plan

| <u>Age</u> | <u>Rate</u> | <u>Age</u> | <u>Rate</u> | <u>Age</u> | <u>Rate</u> |
|------------|-------------|------------|-------------|------------|-------------|
| 42 | 5.0% | 48 | 25.0% | 54 | 20.0% |
| 43 | 10.0 | 49 | 25.0 | 55 | 30.0 |
| 44 | 10.0 | 50 | 25.0 | 56 | 40.0 |
| 45 | 25.0 | 51 | 15.0 | 57 | 40.0 |
| 46 | 25.0 | 52 | 15.0 | 58 | 40.0 |
| 47 | 25.0 | 53 | 20.0 | 59 | 40.0 |
| | | | | 60 | 100.0 |

The above rates for the Base Plan were changed since the previous valuation.

The Second Tier Plan

| <u>Age</u> | <u>Rate</u> | <u>Age</u> | <u>Rate</u> |
|------------|-------------|------------|-------------|
| 50 | 60.0% | 56 | 40.0% |
| 51 | 20.0 | 57 | 40.0 |
| 52 | 20.0 | 58 | 40.0 |
| 53 | 20.0 | 59 | 40.0 |
| 54 | 20.0 | 60 | 100.0 |
| 55 | 30.0 | | |

SPOUSES: 100% of active members are assumed to be married with the male three years older than the female. No children's benefits were valued because of the assumption that 100% of members are married.

POST RETIREMENT COST OF LIVING: 3% of pension annually for Members in the Base Plan, as defined in the Summary of Plan Provisions.

FUTURE EXPENSES: All expenses, investment and administration, are paid from the Fund. The 7.75% assumed rate of return is net of these expenses.

VALUATION METHOD: The method used to determine Normal Cost and Accrued Actuarial Liability is the Entry Age Normal Cost Method. Under the Entry Age Normal Cost Method, an annual Normal Cost is determined for each covered active Member which is the contribution required to provide all the projected pension benefits assuming this contribution is payable over a period ending on the date of retirement (separation from active service) and expressed as a level percentage of compensation. The Actuarial Accrued Liability is determined as the excess of the total present value of all pension benefits over the total present value of future Normal Costs. The Unfunded Actuarial Accrued Liability as of the valuation date is determined as the excess of the Actuarial Accrued Liability over the assets of the Fund.

The Normal Cost and Accrued Actuarial Liability are derived by making certain assumptions as to the rates of interest, mortality, turnover, etc., which are assumed to reflect experience for many years into the future. Since actual experience will differ from the assumptions, the costs determined must be regarded as estimates of the true costs of the Plan. The effects of any actuarial gains or losses are immediately reflected in the Unfunded Actuarial Accrued Liability and the Normal Cost.

ACTUARIAL VALUE OF ASSETS: The actuarial value of assets is calculated based on the following formula:

$$\begin{aligned} MV - (8/10) \times G/(L)_1 - (6/10) \times G/(L)_2 \\ - (4/10) \times G/(L)_3 - (2/10) \times G/(L)_4 \end{aligned}$$

where:

MV = the market value of assets as of the valuation date

$G/(L)_i$ = the asset gain or (loss) (i.e., actual return on assets less expected return on assets) for the i-th year preceding the valuation date.