Police Officers & Fire Fighters' Retirement Plan

and

Teachers' Retirement Plan

Actuarial Valuations as of October 1, 2008 for Fiscal Year 2010 Contributions

Prepared on
February 6, 2009

EFI* Actuaries • EFI Asset/Liability Management Services, Inc.
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Actuarial Certification

Required Actuarial Certification Under District of Columbia Code §1-907 for Fiscal Year 2010 ($ Millions)

Certification	Code Section	Teachers	Police	Fire	Police/Fire Combined	Total District
FY 2010 Normal Contribution Rate	1-907.03(a)(3)(A)	0.0%	28.5%	28.6%	28.5%	15.4%
Estimated FY 2010 Covered Payroll	NA	$376.2	$316.1	$125.8	$441.9	$818.4
FY 2010 District Payment before 1-907.02(c)	NA	$0.0	$90.1	$36.0	$126.1	$126.1
FY 2008 Shortfall/Overpayment	1-907.02(c)	$0.0	$4.3	$1.9	$6.2	$6.2
FY 2010 District Payment	NA	$0.0	$94.4	$37.9	$132.3	$132.3
Present Value of Future Benefits	1-907.03(a)(3)(B)	$1,599.9	$3,294.2	$1,463.2	$4,757.4	$6,357.3
Current Value of Assets	1-907.03(a)(3)(C)	$1,253.5	$1,790.7	$690.5	$2,481.2	$3,734.7
Actuarial Value of Assets	1-907.03(a)(3)(D)	$1,447.6	$2,112.9	$819.2	$2,932.1	$4,379.7

Actuarial Assumptions

The non-economic assumptions used for this valuation represent the actuary's best estimates of the future experience for the plans. Upon review of recommended economic assumptions, the Board elected to choose an inflation assumption slightly more conservative than the actuary's recommended rate.

1/16/2009

Gregory M. Stump, F.S.A., E.A. (Date)

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Introduction

Executive Summary

This actuarial valuation of the District of Columbia Police Officers and Fire Fighters' Retirement Fund and the District of Columbia Teachers' Retirement Fund (the Funds) has produced an increase in required contributions between Fiscal Year 2009 and Fiscal Year 2010.

Table 1: Summary of Contributions

Contribution Date	Teachers' Retirement Fund	Police Officers and Fire Fighters' Retirement Fund	Total District Contribution
Fiscal Year 2009	$0	$106,000,000	$106,000,000
Fiscal Year 2010	$0	$132,300,000	$132,300,000

Table 2: Summary of Funding Ratios

Contribution Date	Teachers' Retirement Fund	Police Officers and Fire Fighters' Retirement Fund	Total Fund
October 1, 2007	111.6%	101.0%	104.4%
October 1, 2008	108.2%	99.8%	102.4%

The contributions shown above reflect all required adjustments. The normal contribution rates (before adjustments under D.C. Code §1-907.02(c)) for FY 2010 are 0.0% for Teachers and 28.5% of payroll for Police Officers and Fire Fighters.

Purposes of the Report

This Report presents the results of the October 1, 2008 actuarial valuation of the D.C. Police Officers and Fire Fighters' Retirement Fund and the D.C. Teachers' Retirement Fund for the District of Columbia Retirement Board. The purposes of the actuarial valuation are:

- To determine the appropriate contribution to the Funds to be paid by the District in Fiscal Year 2010 in accordance with the Replacement Plan Act;
- To review the experience of the Funds over the past year and to discuss reasons for changes in the Funds costs;
- To identify and discuss any emerging trends in Fund costs;
- To present those items required for disclosure under Statements No. 25 and 27 of the Governmental Accounting Standards Board (GASB); and
- To determine the funded status of the Fund using the Entry Age Normal actuarial funding method.

District Contribution Rates

The total increase in contributions was the net result of several factors. Table 3 and Figures 1 through 3 below show incremental changes from fiscal year 2009 contribution rates to fiscal year 2010 rates.

Table 3: Change in District Contribution Rate from FY2009 to FY2010

	District Contribution Rate (% Payroll)		
	Teachers	Police	Fire
FY2009 Rate (before limitation)	(3.1%)	25.3%	26.6%
Change Due to:			
Demographic Experience	1.3%	(0.5%)	(0.1%)
Salary Experience	(2.3%)	(0.6%)	(2.1%)
New Entrants	0.5%	0.8%	0.7%
Investment Experience	3.0%	3.8%	2.6%
Assumption/Method Changes	(0.9%)	(0.3%)	0.9%
Total Change	1.6%	3.2%	2.0%
FY2010 Rate (before limit)	(1.5%)	28.5%	28.6%
FY2010 Rate (limited to no less than 0%)	0.0%	28.5%	28.6%

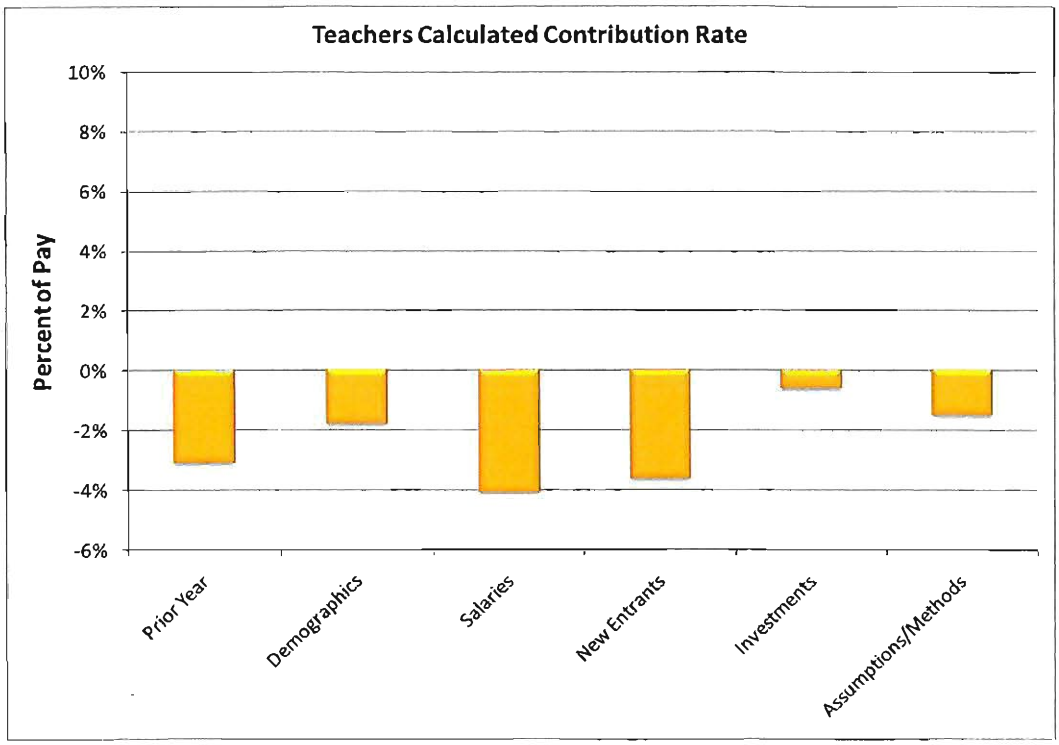

Figure 1: Teachers Contribution Rates (limited to no less than 0%)

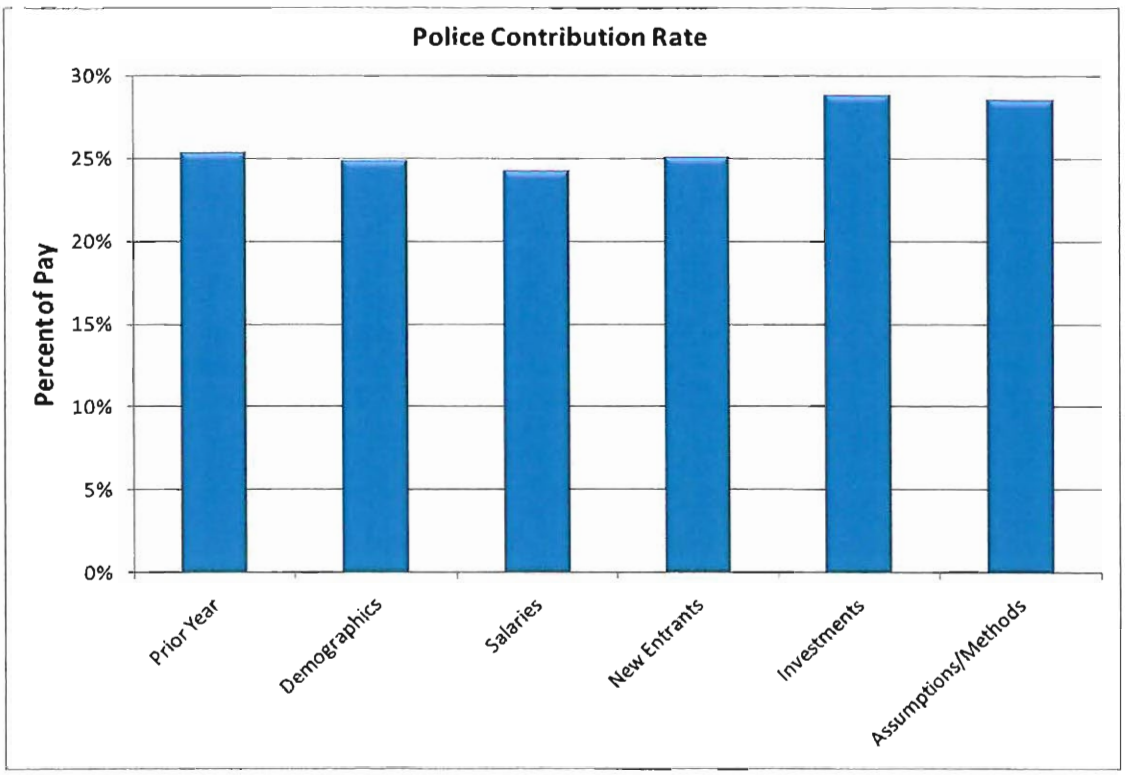

Figure 2: Police Contribution Rates

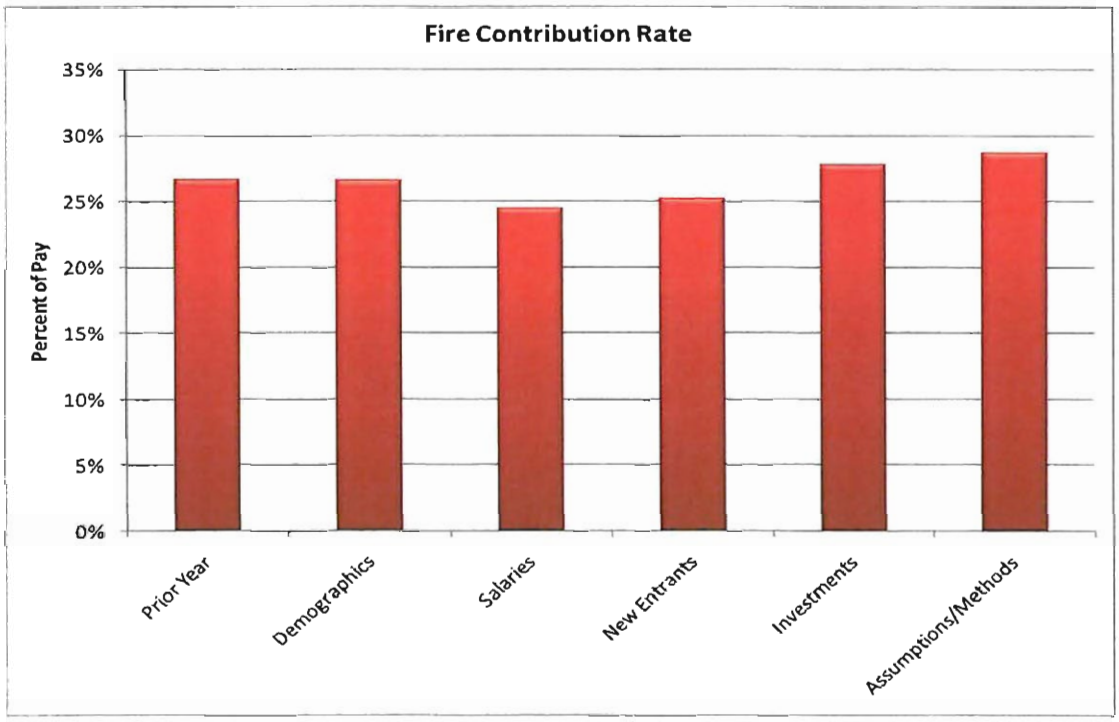

Figure 3: Fire Contribution Rates

- Overall Demographic experience produced a slight increase in contribution rates.

  Actual demographic experience (mortality, disabilities, terminations, and retirements occurring at rates other than expected) resulted in a small increase in the contribution rate.

- Salary experience produced a decrease in contribution rates.

  The total salary for continuing active participants in all plans was lower than expected, on average, based on the prior year's demographic information and salary increase assumptions, causing a decrease in contribution rates.

- New entrants to the Plans produced an increase in the contribution rate.

  New members continued to enter the Plans during the year. There were more than 500 new entrants and rehired members between the three groups. Since the District's contribution rate for new entrants is greater than the contribution rate for continuing plan members, the contribution rate increased.

- Investment returns caused an increase in contribution rates.

  The actuarially-determined rate of return on the value of Funds' assets was 4.6% during Fiscal Year 2008, the net result of lower than expected market returns and recognition of past gains. The lower than expected asset value of the Fund caused an increase in the fiscal year 2010 contribution rates. This was the most significant factor impacting the contribution rates.

- Changes in actuarial assumptions and methods resulted in an increase in the contribution rate.

  The Board elected to reduce the assumed rate of return on investments from 7.5% to 7.0% per year, and the rate of expected inflation from 5.0% to 4.25% per year. The combination of these two changes resulted in an increase in contribution rates of about 1.2% of total pay (all groups).

  The number of years of asset smoothing was increased from three to seven years, allowing for a more stable contribution pattern in the future. This change resulted in a 1.2% of total pay decrease in the contribution rate.

  The combined impact of the assumption changes and method change was a slight decrease in contributions.

History of Contributions

Figure 4 below shows a history of District contributions to the Funds since 2003.

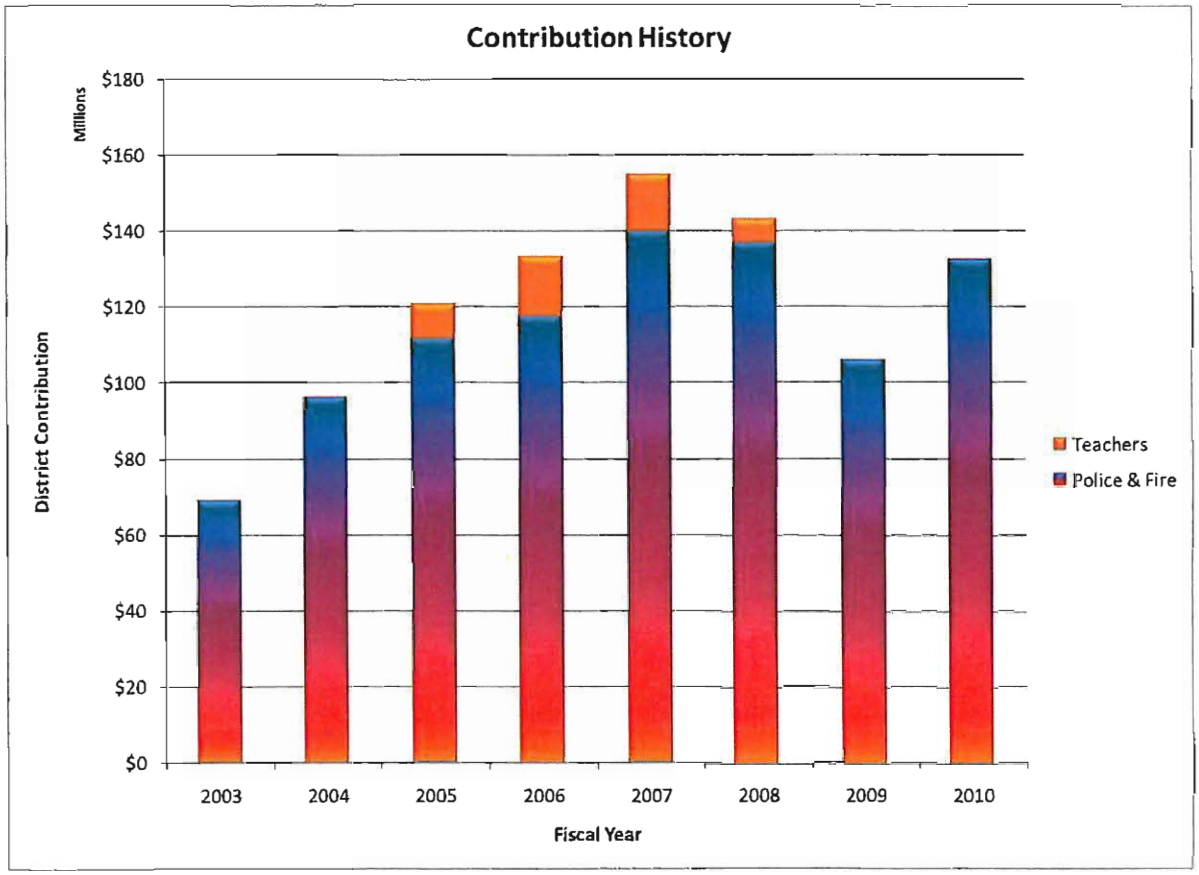

Figure 4: Historical Contribution Amounts

We can see from the graph that contributions increased steadily from 2003 through 2007 (based on valuations from 2001 through 2005). This is due partly to the normal increase expected due to the annual growth in payroll; however, this would not normally cause such a substantial increase in contributions. Payroll increased by about 15% over this time period, while contributions doubled. One of the primary drivers of this rapid increase was the poor investment returns experienced by the DC Plans as well as most other U.S. pension plans from 2000 to 2002. Asset smoothing caused the effects of these poor returns to be realized over an extended period of time. Favorable experience, including investment returns, decreased the total contributions to the Funds from 2007 to 2009; however, losses during 2008 caused an increase.

As of October 1, 2008, there were about $645 million in unrecognized investment losses, which will be recognized over the next six years. The period of asset smoothing was increased from 3 years to 7 years as of October 1, 2008, to allow for a more stable pattern of contributions.

Conclusion and Additional Information

The contribution rates developed in this valuation are not necessarily representative of future contribution rates. Rates may increase or decrease due to experience of the Plans, changes in assumptions or Plan provisions, or changes in actuarial cost methods.

Data for this study was collected as of June 30, 2008, three months before the valuation date. Demographic experience from July 1 through September 30, 2008 is therefore not reflected herein, but will be recognized during the next valuation. We have determined that this does not have a material impact on fiscal year 2010 contribution rates.

Statement Number 50 of the Governmental Accounting Standards Board (GASB) requires disclosure by governments that use the Aggregate actuarial cost method of the funded status and the presentation of a multiyear schedule of funding progress using the Entry Age Normal actuarial cost method as a surrogate. This is because the Aggregate method does not explicitly define an accrued liability. Accordingly, a determination of the funding ratios using the Entry Age Normal actuarial cost method for each plan has been included within this report. The actuarial assumptions (demographic and economic) used for these calculations are the same as were used to determine the required contributions.

The Board has also adopted the Entry Age Normal method as a funding basis, pending legislative approval. This would cause a change in the way the contribution rates are developed, resulting in a rate that is higher or lower than the rate under the Aggregate method in any given year. This is because under Entry Age Normal, the normal cost (annual benefit cost) is explicitly defined, and amortization period(s) and method would be determined based on the goals and policies of the Board. Either cost method will result in fully funding future benefit payments, so the year to year differences are expected to balance out in the long term.

This report has been prepared using generally accepted actuarial methods. If there are any questions about this report, please feel free to contact us.

Respectfully submitted,

Gregory M. Stump, FSA

Graham A. Schmidt, ASA

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Section 1:

Summary of Fund Provisions, Member Statistics, and Actuarial Assumptions

1.1: Brief Outline of Fund Provisions
District of Columbia Retirement Program for Teachers

Membership

Eligibility

Permanent, temporary, and probationary teachers for the District of Columbia public day schools become members automatically on their date of employment. Other employees covered by the Retirement of Public School Teachers Act – including librarians, principals, and counselors – also become members on their date of employment. Substitute teachers and employees of the Department of School Attendance and Work Permits are not covered. Some former D.C. teachers working at charter schools are eligible to remain in the Program.

Member Contributions

Members hired before November 1, 1996 are required to contribute 7% of annual pay. Members hired on or after November 1, 1996 contribute 8% of annual pay.

Members can also make voluntary post-tax contributions of up to 10% of annual pay towards an annuity in addition to any vested pension.

Interest is not credited to each Member's accumulated contributions.

Service

School Service

One year of school service is granted for each year of employment with the D.C. public day schools.

Credited Service

Service granted or purchased in addition to school service.

Average Pay

Average Pay is equal to the highest 36 consecutive months of pay, divided by three.

Voluntary Retirement

Eligibility

For participants hired before November 1, 1996:

- Age 62 with 5 years of school service;
- Age 60 with 20 years of total service, including 5 years of school service; or
- Age 55 with 30 years of total service, including 5 years of school service.

For participants hired on or after November 1, 1996:

- Age 62 with 5 years of school service;

- Age 60 with 20 years of total service, including 5 years of school service; or
- Any age with 30 years of total service, including 5 years of school service.

Benefit Amount

For participants hired before November 1, 1996:

- 1.5% of Average Pay times service up to 5 years, plus
- 1.75% of Average Pay times service between 5 and 10 years, plus
- 2.0% of Average Pay times service over 10 years.

For participants hired on or after November 1, 1996:

- 2.0% of Average Pay times service.

For all participants, there is a minimum benefit of 1.0% of Average Pay plus $25 for each year of service

Involuntary Retirement

Eligibility

Retired involuntarily for reasons other than misconduct or delinquency with:

- 25 years of total service, including 5 years of school service; or
- Age 50 with 20 years of total service, including 5 years of school service.

Benefit Amount

Voluntary Retirement benefit reduced 1/6% per month (2% per year) that date of retirement precedes age 55.

Disability Retirement Benefit

Eligibility

5 years of school service and a physical or mental disability that prevents the member from performing his/her job.

Benefit Amount

Voluntary Retirement benefit subject to a minimum of the lesser of 40% of Average Pay and the benefit that the member would receive projecting service to age 60.

Lump Sum Death Benefit

Eligibility

Death before completion of 18 months of school service or death without an eligible spouse, child, or parent.

Benefit Amount

Refund of Member contributions, without interest.

Installment Benefit Payable upon Death – Spouse Only

Eligibility

Death before retirement and married for at least two years or have a child by the marriage.

Benefit Amount

55% of the Voluntary Retirement benefit subject to the minimums specified in the Disability Retirement Benefit.

Installment Benefit Payable upon Death – Spouse and Dependent Children

Eligibility

For the spouse, as described above; for the children, unmarried and under 18, 22 if full-time student, or any child dependent because of a disability incurred before age 18. Death does not have to occur before retirement for the children's benefits.

Benefit Amount

Spouse benefit as described above, plus a benefit per child (payable until the children are no longer eligible) equal to the smallest of:

- 60% of Average Pay divided by the number of eligible children;
- $5,772* (if hired before January 1, 1980), $5,580* (if hired between January 1, 1980 and October 31, 1996), or $5,532* (if hired on or after November 1, 1996) per child; or
- $17,316* (if hired before January 1, 1980), $16,740* (if hired between January 1, 1980 and October 31, 1996), or $16,596* (if hired on or after November 1, 1996) divided by the number of children.

Installment Benefit Payable upon Death – Dependent Children Only

Eligibility

Same as the children's benefit above.

Benefit Amount

Per child (payable until the children are no longer eligible), the smallest of:

- 75% of Average Pay divided by the number of eligible children;
- $7,044* (if hired before January 1, 1980), $6,792* (if hired between January 1, 1980 and October 31, 1996), or $6,708* (if hired on or after November 1, 1996) per child; or
- $21,132* (if hired before January 1, 1980), $20,376* (if hired between January 1, 1980 and October 31, 1996), or $20,124* (if hired on or after November 1, 1996) divided by the number of children

Installment Benefit Payable upon Death – Surviving Parents Only

Eligibility

Death before retirement and no eligible spouse or children, and parents receive at least one-half of their total income from member.

Benefit Amount

Spouse benefit as described above.

Deferred Vested Benefit

Eligibility

5 years of school service.

Benefit Amount

Voluntary Retirement Benefit beginning at age 62.

Form of Payment Options

Normal Form of Payment

Unreduced Annuity.

Reduced Annuity with a Maximum Survivor Annuity (to Spouse)

The original benefit is reduced by 2.5% of annual pension up to $3,600, plus 10% of any amount over $3,600. Spouse will receive 55% of Unreduced Annuity.

Reduced Annuity with a Partial Survivor Annuity (to Spouse)

An annuity with a benefit payable to the spouse of between $1 up to any amount less than 55% of the Unreduced Annuity. The original benefit is reduced by dividing the amount of the survivor's annuity by 55%, then reducing the original benefit by 2.5% of this amount up to $3,600, plus 10% of any amount over $3,600.

Reduced Annuity with a Survivor Annuity to a Person with an Insurable Interest

A joint and 55% survivor annuity with the original benefit reduced 10% plus an additional 5% for each full 5 years, up to 25 years, the survivor is younger, with a total reduction of 40% for any survivor who is 25 or more years younger.

Reduced Annuity with a Life Benefit

Benefits may be reduced and the reduction is used to purchase life insurance.

Cost-of-Living Adjustments

All participants receive an increase each March based on the annual change in the Consumer Price Index (all items – U.S. City average) from December to December. The annual increase is limited to 3.0% for members hired on or after November 1, 1996.

* Survivor benefit amounts are as of March, 2007, and are subject to annual inflation adjustments.

Retirement Program for District of Columbia Police Officers and Fire Fighters

Membership

Eligibility

All police officers and firefighters of the District of Columbia automatically become members on their date of employment. Police Cadets are not eligible.

Member Contributions

Members hired before November 10, 1996 are required to contribute 7% of annual salary, including any differential for special assignment, but excluding overtime, longevity, holiday, or military pay. Members hired on or after November 10, 1996 contribute 8% of annual salary, including any differential for special assignment, but excluding overtime, holiday, or military pay.

Interest is not credited to each member's accumulated contributions.

Service

Departmental Service

Each full year and additional months of employment with either the Metropolitan Police Force or the D.C. Fire Department.

Credited Service

Service granted or purchased in addition to departmental service.

Average Pay

For those hired before February 15, 1980, basic pay for the highest 12 consecutive months. For those hired on or after February 15, 1980, basic pay for the highest 36 consecutive months divided by three.

Longevity Pay (Police Only)

Members who complete 25 years of active service prior to retirement are entitled to an additional 15% of their basic compensation. Members who complete 30 years of active service are entitled to an additional 20% of their basic pay.

Normal Retirement Benefit

Eligibility

For participants hired before November 10, 1996:

- Age 60; or
- Age 50 with 25 years of departmental service; or
- No age requirement with 20 years of service (only if hired before February 15, 1980.)

For participants hired on or after November 10, 1996:

- Age 60; or
- No age requirement with 25 years of service.

Benefit Amount

For participants hired before November 10, 1996:

- 2.5% of Average Pay times departmental service up to 25 years (20 years if hired before February 15, 1980), plus
- 3.0% of Average Pay times departmental service over 25 (or 20) years, plus
- 2.5% of Average Pay times credited service.

For participants hired on or after November 10, 1996:

- 2.5% of Average Pay times total service.

For all participants, there is a maximum benefit of 80% of Average Pay.

Service-Related Disability Retirement Benefit

Eligibility

Disabled as a result of an illness or injury in the line of duty.

Benefit Amount

For participants hired before February 15, 1980, 2.5% of Average Pay times total years of service, subject to a minimum benefit of 66-2/3% of Average Pay and subject to a maximum benefit of 70% of Average Pay.

For participants hired on or after February 15, 1980, 70% of final pay times percentage of disability, subject to a minimum benefit of 40% of final pay.

Non-Service-Related Disability Retirement Benefit

Eligibility

5 years of departmental service and a physical or mental disability that prevents the member from performing his/her job.

Benefit Amount

For participants hired before February 15, 1980, 2.0% of Average Pay times total years of service, subject to a minimum benefit of 40% of average pay and subject to a maximum benefit of 70% of average pay.

For participants hired on or after February 15, 1980, 70% of final pay times percentage of disability, subject to a minimum benefit of 30% of final pay.

Lump Sum Death Benefit

Eligibility

Death occurring in the line of duty, not resulting from willful misconduct, an intention to bring about his/her own death, or drunkenness.

Benefit Amount

$50,000.

Installment Benefit Payable upon Death – Spouse Only, Member Killed Not in Line of Duty after December 29, 1993

Eligibility

Death and, if retired, married for at least one year or have a child by the marriage.

Benefit Amount

40% of the greater of Average Pay and the salary for step 6 salary class 1 of the D.C. Police and Fireman's Salary Act in effect, adjusted for cost-of-living increases if death occurs after retirement. The benefit cannot exceed the rate of pay at death (or retirement if death occurs after retirement.)

Installment Benefit Payable upon Death – Spouse Only, Member Killed in Line of Duty after December 29, 1993

Eligibility

Death (killed in line of duty).

Benefit Amount

100% of final pay.

Installment Benefit Payable upon Death – Spouse and Dependent Children

Eligibility

For the spouse, as described above; for the children, unmarried and under 18, 22 if full-time student, or any child dependent because of a disability incurred before age 18. Death does not have to occur before retirement for the children's benefits.

Benefit Amount

Spouse benefit as described above, plus, provided death does not occur in the line of duty, a benefit per child (payable until the children are no longer eligible) equal to the smallest of:

- 60% of Average Pay divided by the number of eligible children;
- $3,396*; or
- $10,188* divided by the number of children

Installment Benefit Payable upon Death – Dependent Children Only

Eligibility

Same as the children's benefit above.

Benefit Amount

Per child, 75% of Average Pay divided by the number of eligible children, adjusted for cost-of-living increases.

Refund of Contributions

Eligibility

Death before retirement and no eligible spouse or children.

Benefit Amount

All Member contributions will be refunded to a named, or statutorily-designated if none named, beneficiary.

Deferred Vested Benefit

Eligibility

5 years of departmental service.

Benefit Amount

Normal Retirement Benefit beginning at age 55.

Form of Payment Options

Normal Form of Payment

Single Life Annuity.

Additional Survivor Benefit

The original benefit is reduced 10%. This 10% amount is reduced by 5% for each full 5 years the survivor is younger (but not more than 40%) and is added to the survivor's benefit.

Cost-of-Living Adjustments

Employees (not beneficiaries) who retired prior to February 15, 1980, receive equalization pay, which is defined as the percentage increase as active employees' salary increases.

All other retired participants and their survivors receive an increase each March based on the annual change in the Consumer Price Index (All Urban Consumers) from December to December. The annual increase is limited to a maximum of 3% for members hired on or after November 10, 1996.

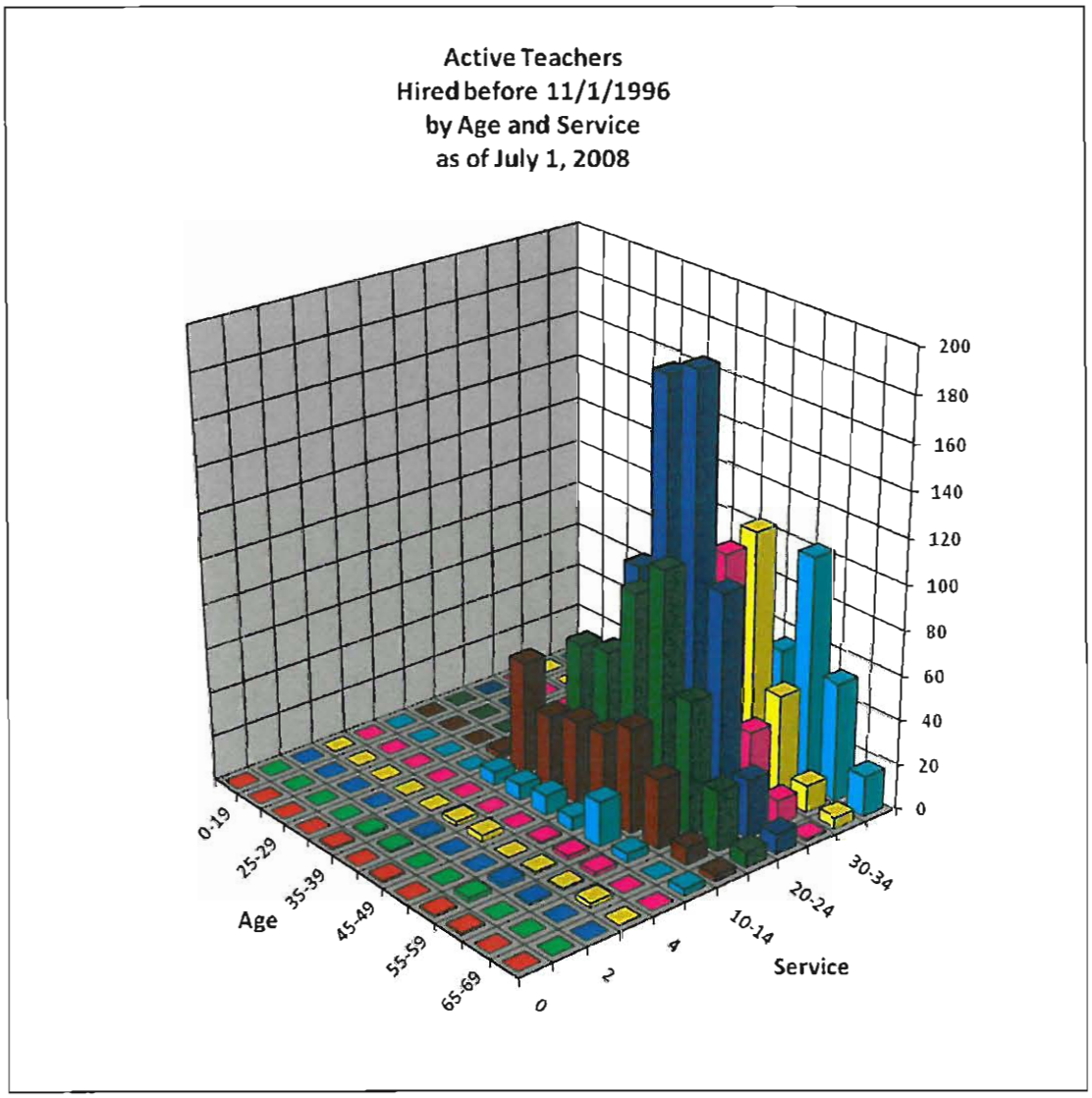
* Survivor benefit amounts are as of March, 2007, and are subject to annual inflation adjustments.

1.2: Participant Data as of July 1, 2008

Active Participants	Teachers	Police Officers	Fire Fighters
Number	4,821	3,928	1,733
Average Age	46.9	39.6	37.5
Average Service	12.6	13.1	11.5
Average Pay	$70,227	$71,311	$64,602

Inactive Participants	Teachers		Police Officers		Fire Fighters	
Service Retired	District	Total*	District	Total*	District	Total*
Number	2,216	4,912	636	3,144	251	989
Average Age	65.5	72.5	57.2	63.9	57.2	66.2
Average Benefit	$10,489	$41,089	$13,869	$51,462	$19,221	$60,991
Beneficiaries						
Number	76	431	142	1,150	40	437
Average Age	50.4	70.4	29.2	67.2	27.6	71.9
Average Benefit	$4,299	$18,554	$6,055	$25,885	$9,429	$27,718
Disabled						
Number	99	428	241	1,229	54	474
Average Age	59.3	71.6	46.6	64.5	51.4	69.7
Average Benefit	$12,383	$28,118	$18,176	$41,509	$13,981	$47,552
Terminated Vested						
Number	538	876	51	61	16	17
Average Age	48.1	54.9	43.7	47.1	44.6	45.1
Average Benefit	$5,447	$8,429	$10,822	$19,881	$7,899	$16,858

* Federal and District payments combined.



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	3	0	0	0	0	0	30
35-39	1	1	0	0	0	6	51	14	0	0	0	0	177
40-44	0	1	1	2	0	7	33	60	32	0	0	0	218
45-49	1	0	0	3	0	9	37	63	96	8	0	0	241
50-54	0	0	0	0	1	6	38	95	184	87	12	0	139
55-59	1	2	2	1	2	20	47	111	191	108	113	55	21
60-64	1	0	1	1	2	4	31	60	102	35	46	103	2
65-69	0	0	0	2	0	0	8	27	26	11	12	53	0
70+	0	0	0	0	0	3	3	7	9	1	5	18	0
Total	4	4	4	9	5	55	251	437	640	250	188	229	2,076

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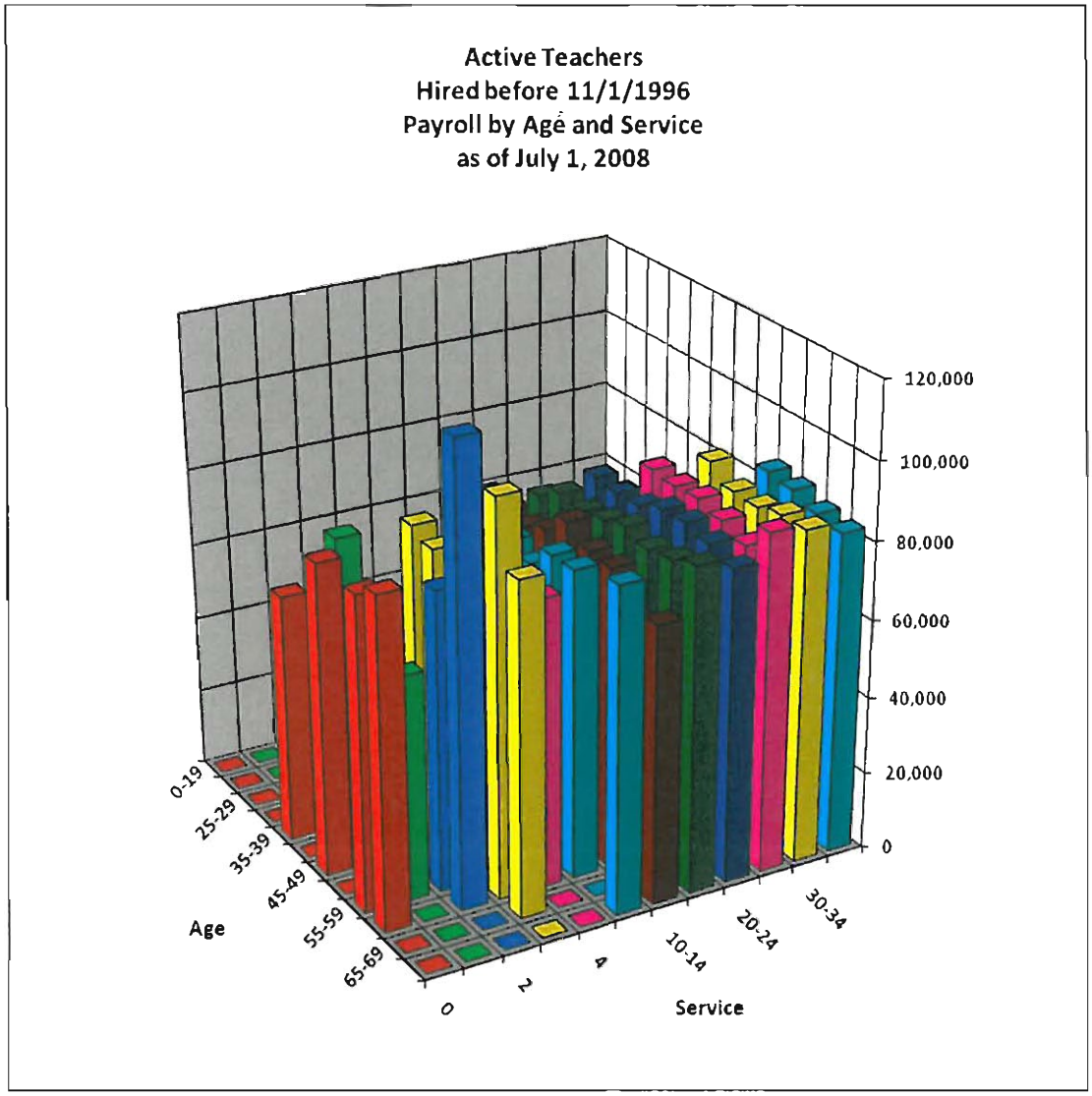

Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	73,968	0	0	0	0	0	73,968
35-39	64,347	64,347	0	0	0	79,454	73,926	74,941	0	0	0	0	74,313
40-44	0	80,798	64,347	79,861	0	72,152	72,957	79,337	81,662	0	0	0	77,874
45-49	80,798	0	0	77,549	0	75,385	75,935	78,519	81,128	85,170	0	0	79,345
50-54	0	0	0	0	52,293	73,300	81,758	79,878	81,472	84,476	88,764	0	81,780
55-59	80,981	58,199	77,386	82,898	67,207	79,288	78,095	82,082	84,257	84,924	84,565	87,570	83,574
60-64	84,960	0	117,610	101,725	74,427	79,533	77,744	80,159	84,679	83,064	84,137	86,609	83,747
65-69	0	0	0	85,600	0	0	68,294	81,209	83,209	80,568	85,957	84,215	82,408
70+	0	0	0	0	0	83,707	71,650	83,807	80,844	87,583	86,121	83,081	82,477
Total	77,772	65,386	84,182	83,132	67,112	77,365	76,326	80,193	82,834	84,335	84,859	86,008	81,983

Average Age: 55.7 Average Service: 22.8

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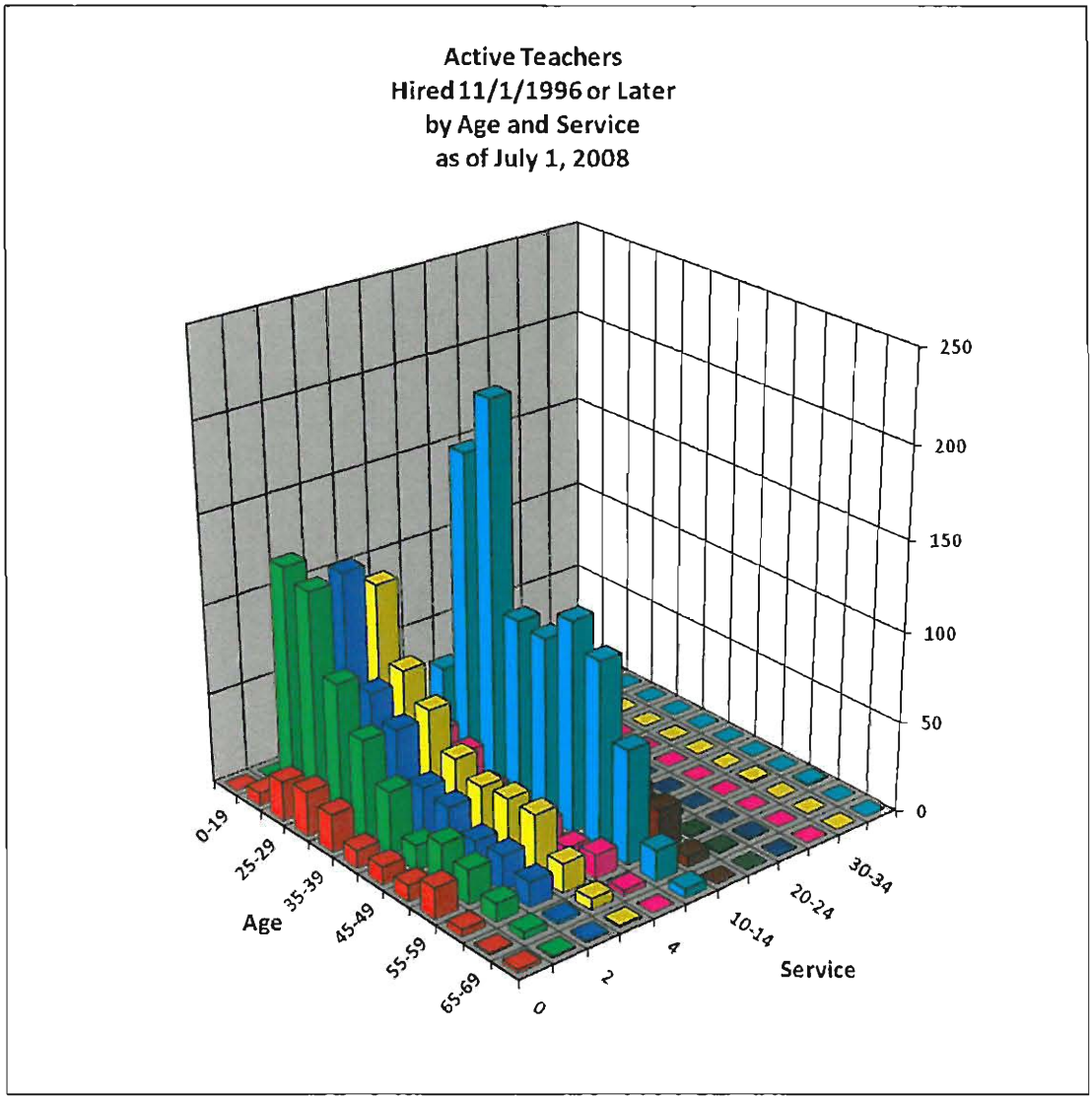

Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	7	127	73	1	0	0	0	0	0	0	0	0	208
25-29	22	121	125	112	11	52	0	0	0	0	0	0	443
30-34	25	78	66	72	31	179	13	0	0	0	0	0	464
35-39	21	55	54	58	27	214	46	1	0	0	0	0	476
40-44	10	35	30	39	15	102	21	0	0	0	0	0	252
45-49	10	14	28	32	11	100	25	4	0	0	0	0	224
50-54	9	24	18	34	13	117	37	2	0	0	0	0	254
55-59	17	19	19	34	8	103	25	2	0	0	1	0	228
60-64	4	10	14	16	13	63	23	1	0	0	0	1	145
65-69	1	4	2	6	3	17	6	1	1	0	0	0	41
70+	2	1	1	1	0	5	0	0	0	0	0	0	10
Total	128	488	430	405	132	952	196	11	1	0	1	1	2,745

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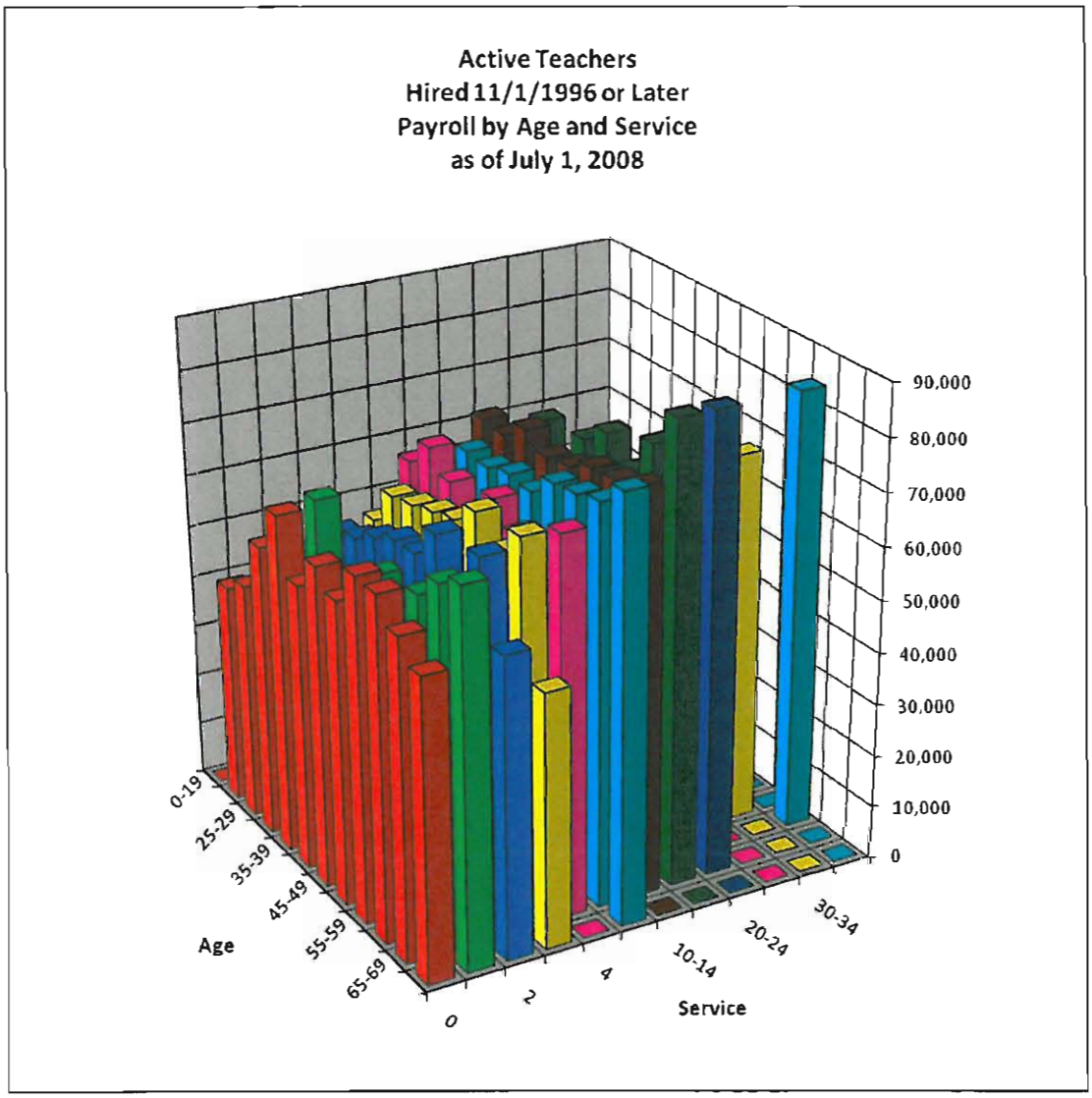
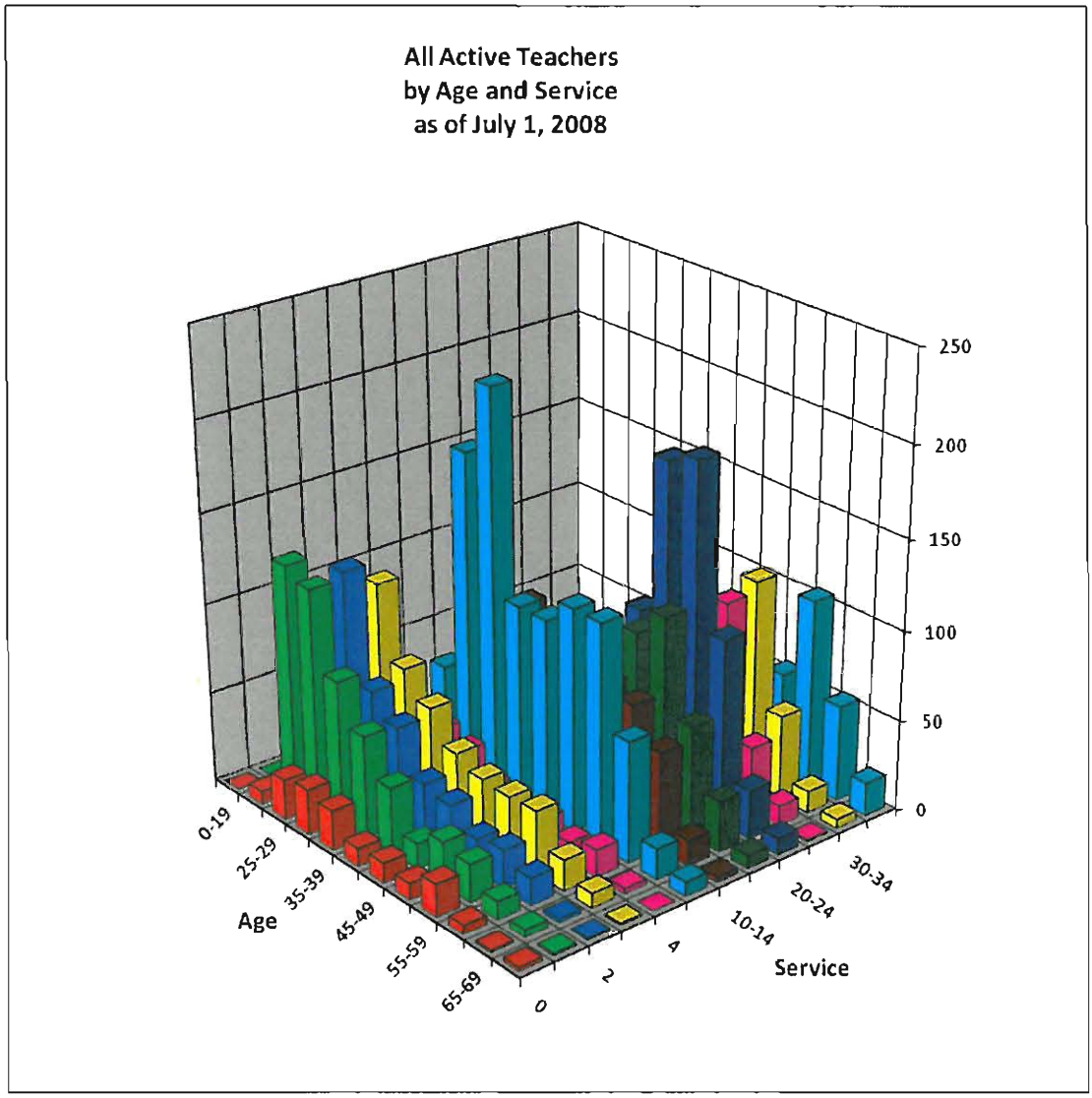
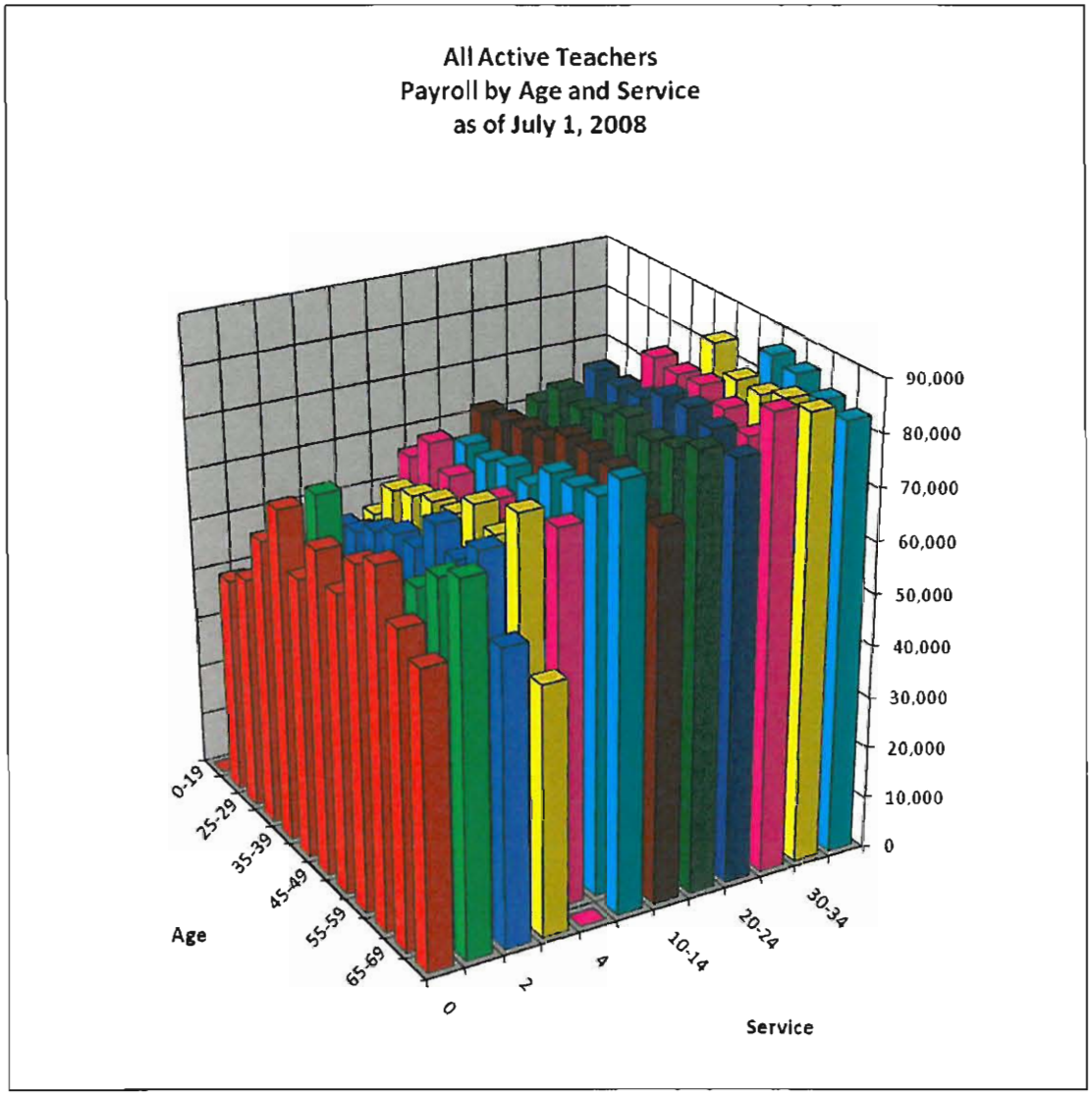


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	42,391	42,444	43,746	43,386	0	0	0	0	0	0	0	0	42,904
25-29	45,657	45,947	47,343	47,777	49,939	54,246	0	0	0	0	0	0	47,862
30-34	56,097	53,673	55,640	56,480	66,150	62,680	71,181	0	0	0	0	0	59,318
35-39	64,956	66,205	57,429	63,695	71,372	69,121	70,700	71,874	0	0	0	0	66,899
40-44	54,678	54,512	60,288	64,708	67,611	68,674	74,368	0	0	0	0	0	64,951
45-49	61,300	51,089	62,709	66,208	61,603	70,120	71,744	73,490	0	0	0	0	66,875
50-54	57,914	60,943	63,116	67,623	69,927	69,541	72,565	77,267	0	0	0	0	68,126
55-59	65,401	58,367	69,436	71,863	66,042	73,715	74,938	72,884	0	0	71,203	0	71,030
60-64	65,147	63,270	62,939	67,377	63,990	74,497	75,428	80,460	0	0	0	84,226	70,877
65-69	60,780	68,165	71,145	73,014	71,967	75,887	77,146	87,583	87,583	0	0	0	74,581
70+	56,889	70,893	56,832	48,255	0	80,448	0	0	0	0	0	0	69,200
Total	56,997	51,125	53,453	59,517	65,939	68,239	72,903	75,834	87,583	0	71,203	84,226	61,336

Average Age: 40.2 Average Service: 4.9

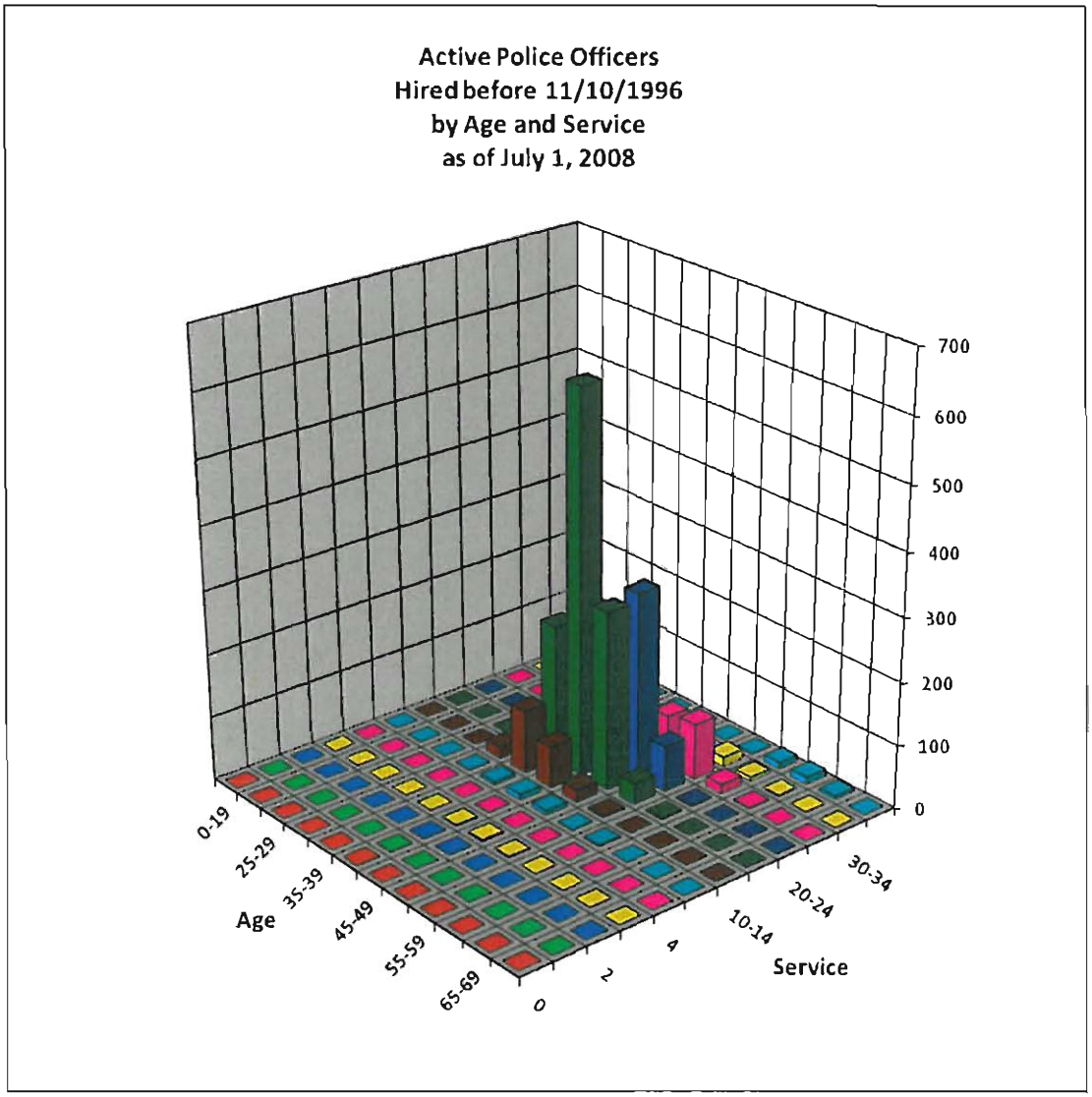


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	7	127	73	1	0	0	0	0	0	0	0	0	208
25-29	22	121	125	112	11	52	0	0	0	0	0	0	443
30-34	25	78	66	72	31	179	16	0	0	0	0	0	467
35-39	22	56	54	58	27	220	97	15	0	0	0	0	549
40-44	10	36	31	41	15	109	54	60	32	0	0	0	388
45-49	11	14	28	35	11	109	62	67	96	8	0	0	441
50-54	9	24	18	34	14	123	75	97	184	87	12	0	677
55-59	18	21	21	35	10	123	72	113	191	108	114	55	881
60-64	5	10	15	17	15	67	54	61	102	35	46	104	531
65-69	1	4	2	8	3	17	14	28	27	11	12	53	180
70+	2	1	1	1	0	8	3	7	9	1	5	18	56
Total	132	492	434	414	137	1,007	447	448	641	250	189	230	4,821



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	42,391	42,444	43,746	43,386	0	0	0	0	0	0	0	0	42,904
25-29	45,657	45,947	47,343	47,777	49,939	54,246	0	0	0	0	0	0	47,862
30-34	56,097	53,673	55,640	56,480	66,150	62,680	71,704	0	0	0	0	0	59,412
35-39	64,928	66,172	57,429	63,695	71,372	69,403	72,396	74,737	0	0	0	0	67,885
40-44	54,678	55,242	60,419	65,447	67,611	68,897	73,506	79,337	81,662	0	0	0	69,481
45-49	63,073	51,089	62,709	67,180	61,603	70,555	74,245	78,219	81,128	85,170	0	0	73,011
50-54	57,914	60,943	63,116	67,623	68,667	69,724	77,223	79,824	81,472	84,476	88,764	0	76,657
55-59	66,267	58,351	70,193	72,178	66,275	74,621	76,999	81,919	84,257	84,924	84,448	87,570	80,328
60-64	69,110	63,270	66,584	69,397	65,382	74,798	76,758	80,164	84,679	83,064	84,137	86,586	80,233
65-69	60,780	68,165	71,145	76,161	71,967	75,887	72,088	81,437	83,371	80,568	85,957	84,215	80,626
70+	56,889	70,893	56,832	48,255	0	81,670	71,650	83,807	80,844	87,583	86,121	83,081	80,106
Total	57,627	51,240	53,736	60,031	65,982	68,738	74,825	80,086	82,841	84,335	84,786	86,001	70,227

Average Age: 46.9 Average Service: 12.6



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	1	18	0	0	0	0	0	30
35-39	0	0	0	0	0	5	100	217	0	0	0	0	177
40-44	1	1	1	1	1	9	66	605	126	0	0	0	218
45-49	0	0	1	2	0	7	20	282	293	78	0	0	241
50-54	0	0	0	1	0	1	3	33	72	88	15	1	139
55-59	0	0	0	0	0	2	0	2	2	15	6	10	21
60-64	0	0	0	0	0	0	0	0	0	2	1	11	2
65-69	0	0	0	0	0	0	0	0	0	0	0	5	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	2	4	1	25	207	1,139	493	183	22	27	2,105

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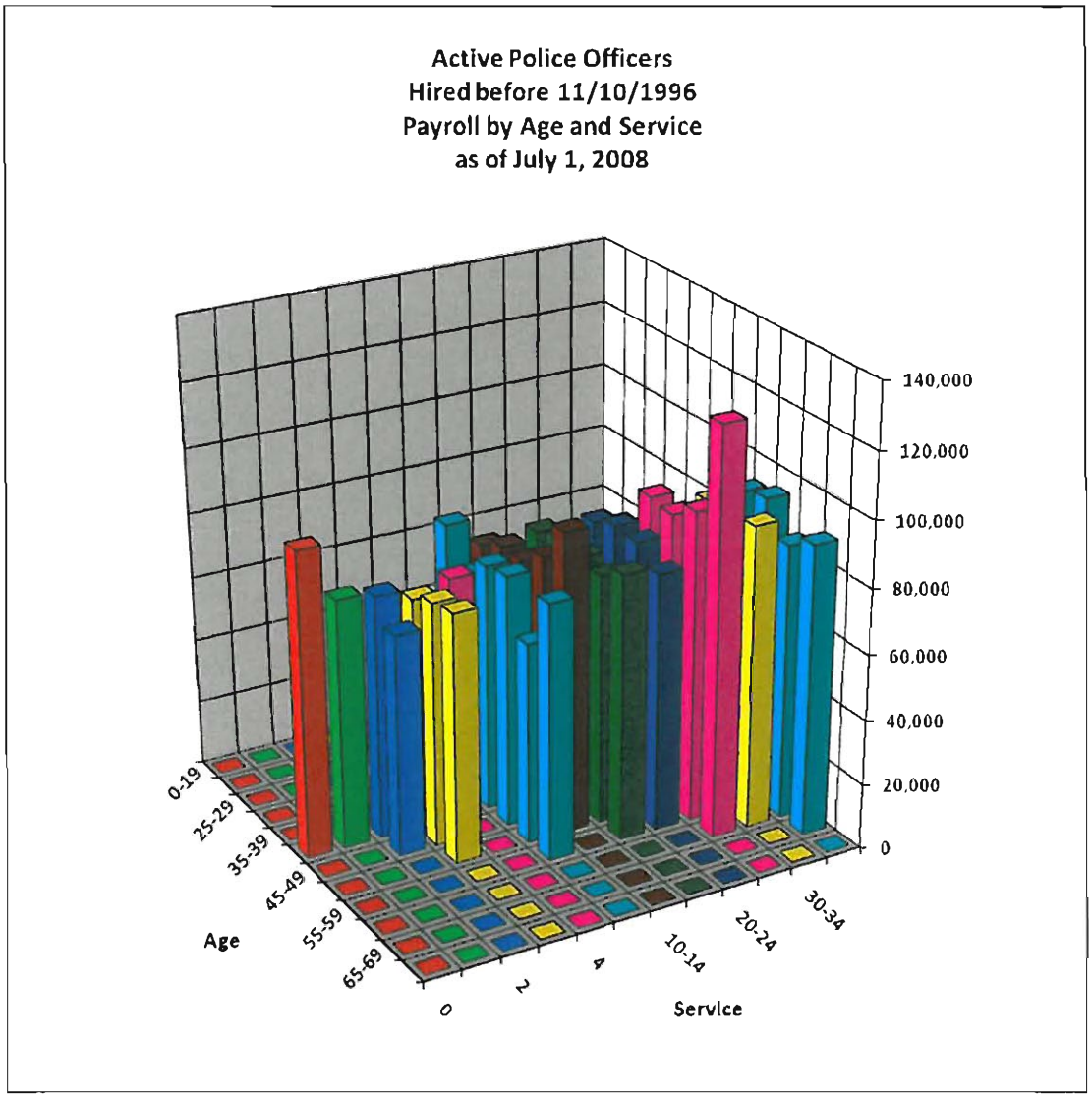
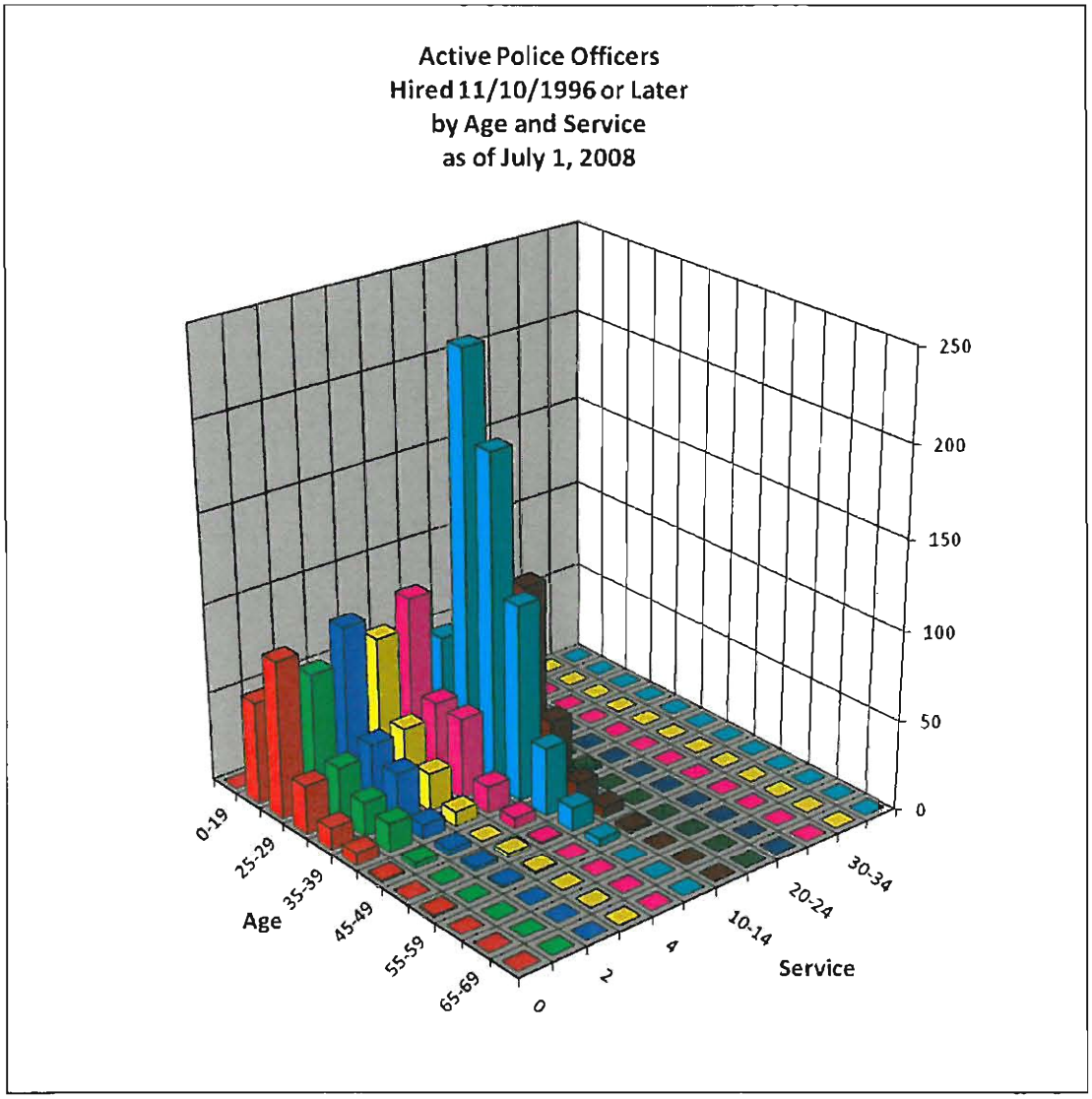


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	79,810	70,993	0	0	0	0	0	71,457
35-39	0	0	0	0	0	68,781	75,029	77,039	0	0	0	0	76,287
40-44	93,759	76,494	74,994	71,424	74,994	76,000	75,168	79,396	81,931	0	0	0	79,402
45-49	0	0	68,023	74,994	0	77,539	80,772	78,010	85,240	91,497	0	0	82,704
50-54	0	0	0	76,495	0	61,698	92,708	76,906	84,713	90,440	91,985	92,387	86,376
55-59	0	0	0	0	0	78,743	0	81,889	79,493	95,588	83,791	94,346	90,818
60-64	0	0	0	0	0	0	0	0	0	125,269	92,982	84,647	91,046
65-69	0	0	0	0	0	0	0	0	0	0	0	89,338	89,338
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	93,759	76,494	71,509	74,477	74,994	74,787	75,533	78,536	84,294	91,693	89,796	89,395	80,936

Average Age: 44.8 Average Service: 19.7



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	57	38	17	6	0	1	0	0	0	0	0	0	119
25-29	88	74	94	81	98	69	0	0	0	0	0	0	504
30-34	27	30	36	38	46	234	71	0	0	0	0	0	482
35-39	12	19	28	21	45	186	107	1	0	0	0	0	419
40-44	7	16	8	8	15	110	38	2	0	0	0	0	204
45-49	1	3	3	0	6	38	11	0	0	0	0	0	62
50-54	0	0	2	2	1	13	6	0	0	0	0	0	24
55-59	1	0	1	1	0	4	2	0	0	0	0	0	9
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	193	180	189	157	211	655	235	3	0	0	0	0	1,823

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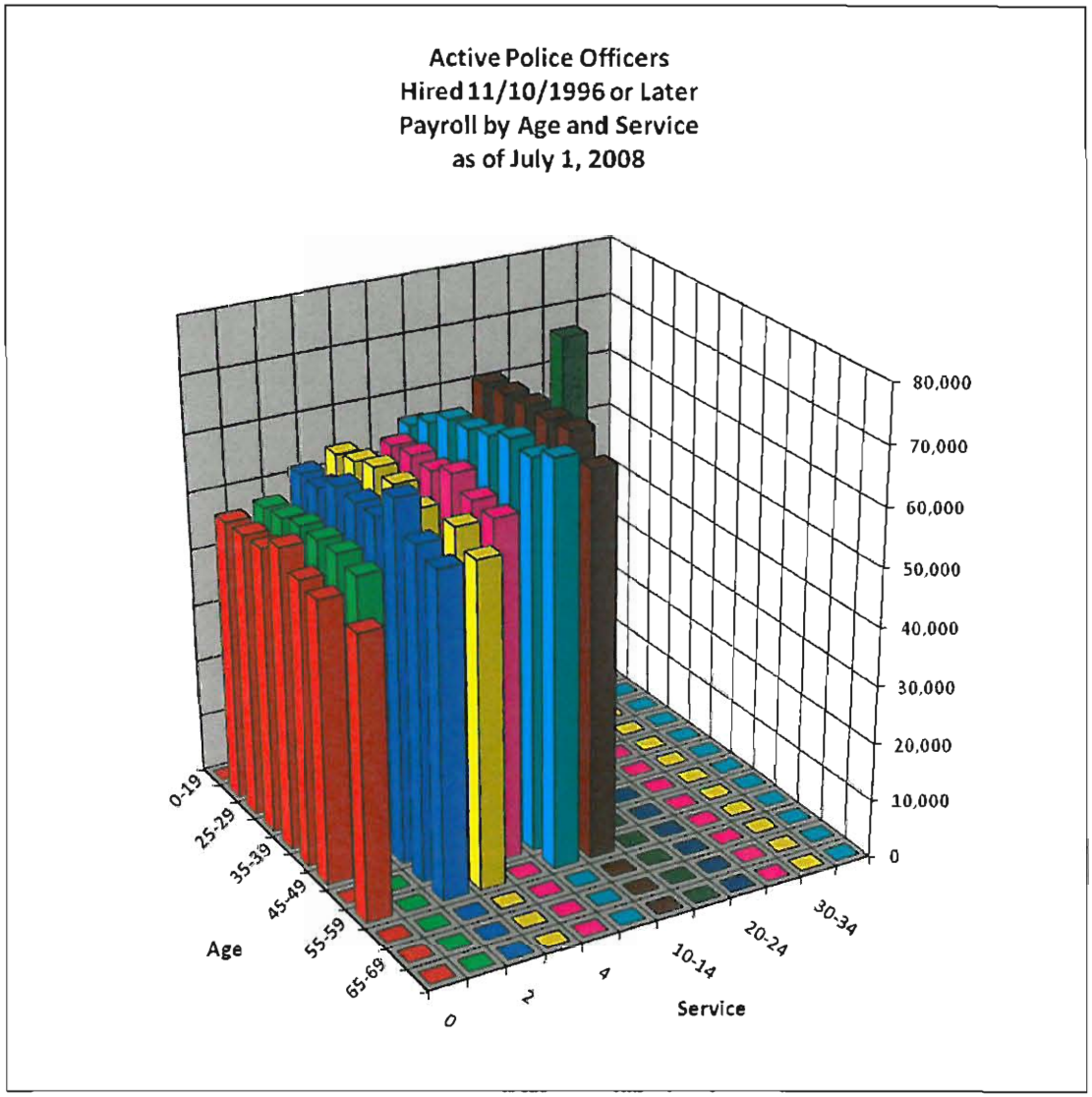
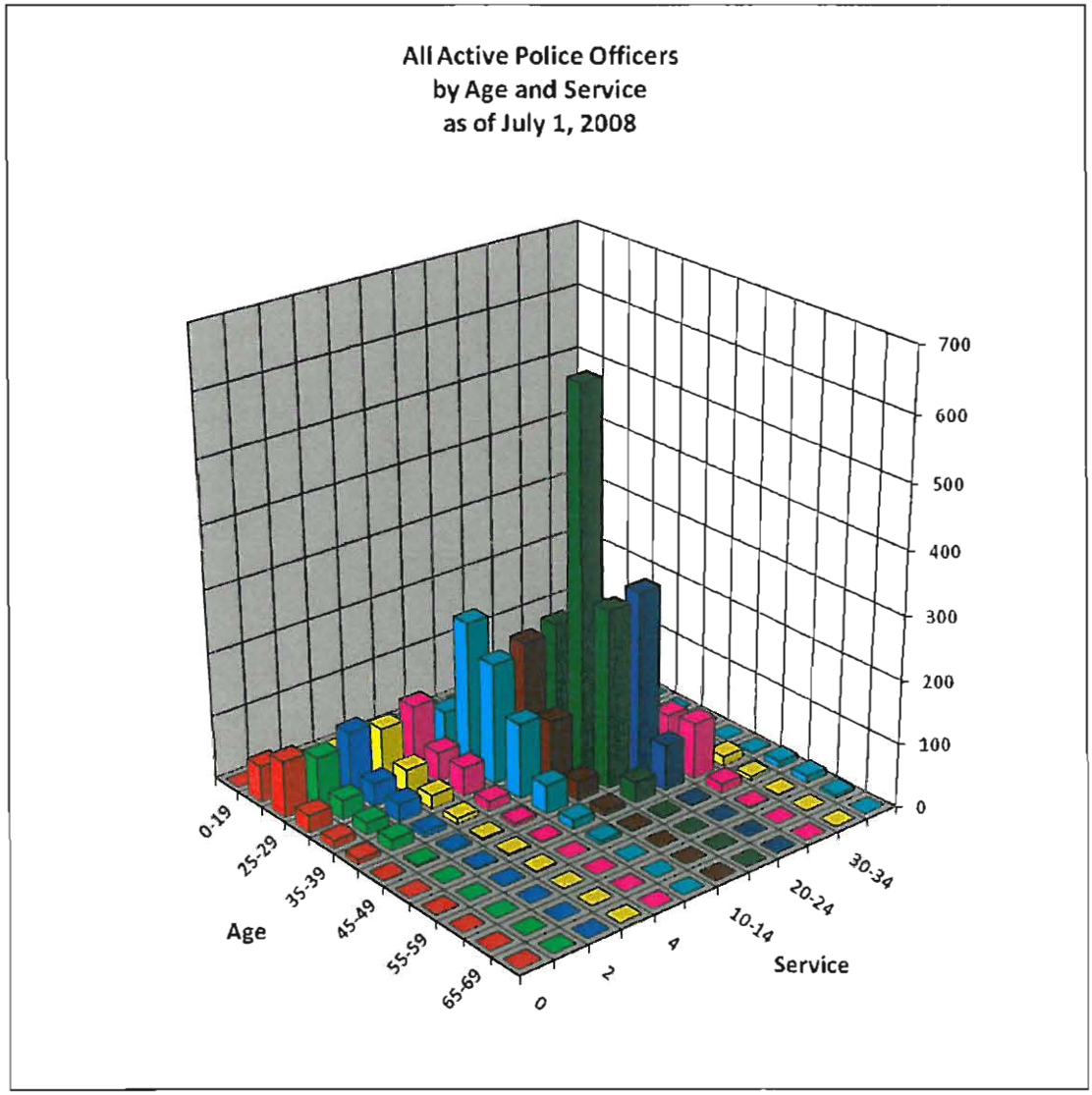


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	48,937	49,993	54,397	56,429	0	58,759	0	0	0	0	0	0	50,514
25-29	49,263	50,687	54,434	57,556	58,880	61,415	0	0	0	0	0	0	55,303
30-34	49,552	51,771	56,987	58,883	59,601	64,224	69,040	0	0	0	0	0	61,934
35-39	52,261	51,951	56,798	58,406	59,290	64,868	69,464	64,772	0	0	0	0	63,632
40-44	49,370	52,212	56,856	56,662	61,270	66,123	69,757	79,623	0	0	0	0	64,175
45-49	48,715	51,151	62,395	0	59,249	67,942	69,716	0	0	0	0	0	66,025
50-54	0	0	57,361	58,759	58,759	67,211	70,238	0	0	0	0	0	66,090
55-59	48,715	0	55,963	55,963	0	69,453	66,398	0	0	0	0	0	63,472
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	49,392	50,998	55,535	57,907	59,304	64,728	69,389	74,673	0	0	0	0	60,198

Average Age: 33.6 Average Service: 5.4



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	57	38	17	6	0	1	0	0	0	0	0	0	119
25-29	88	74	94	81	98	69	0	0	0	0	0	0	504
30-34	27	30	36	38	46	235	89	0	0	0	0	0	501
35-39	12	19	28	21	45	191	207	218	0	0	0	0	741
40-44	8	17	9	9	16	119	104	607	126	0	0	0	1,015
45-49	1	3	4	2	6	45	31	282	293	78	0	0	745
50-54	0	0	2	3	1	14	9	33	72	88	15	1	238
55-59	1	0	1	1	0	6	2	2	2	15	6	10	46
60-64	0	0	0	0	0	0	0	0	0	2	1	11	14
65-69	0	0	0	0	0	0	0	0	0	0	0	5	5
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	194	181	191	161	212	680	442	1,142	493	183	22	27	3,928

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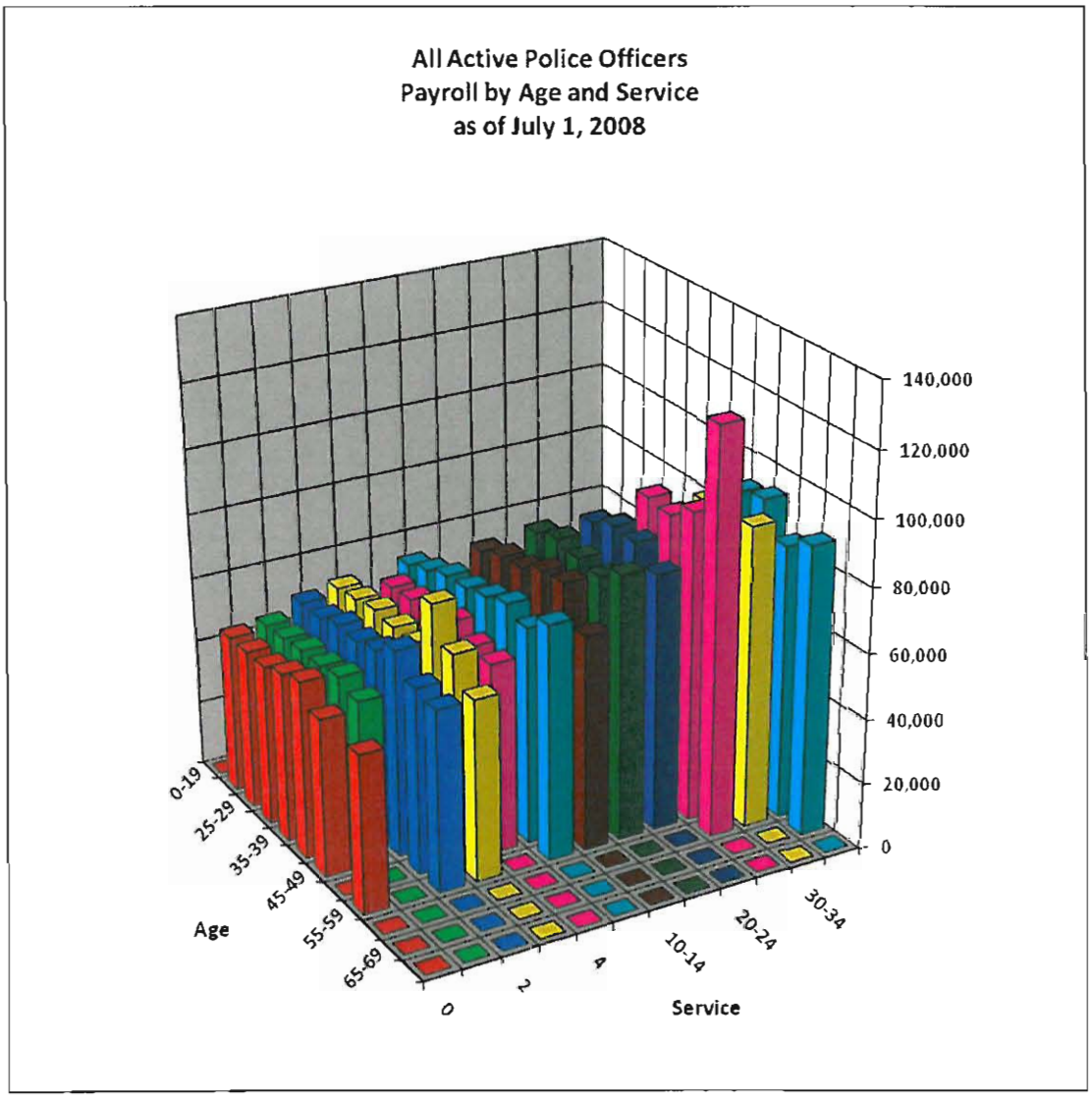
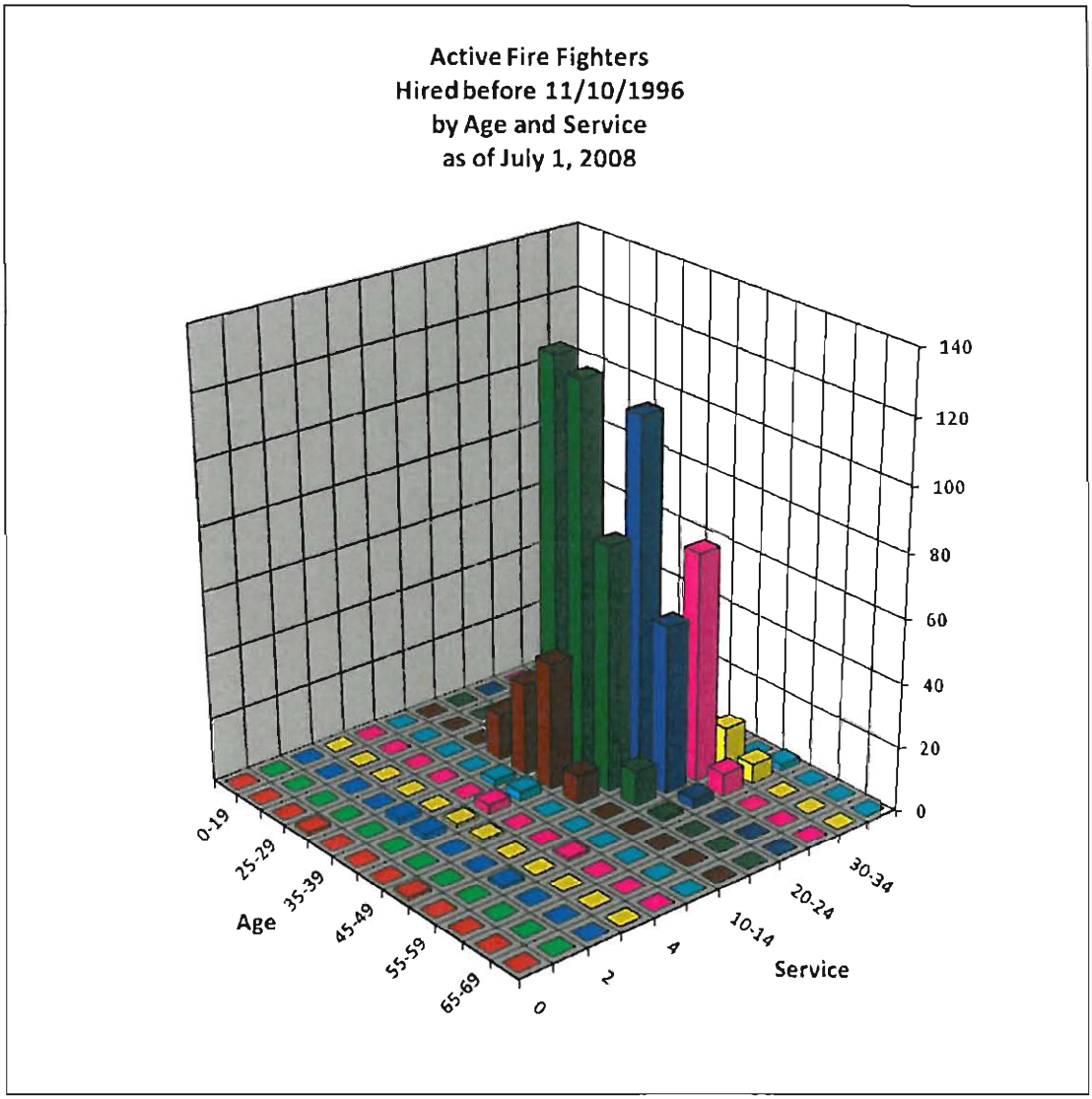
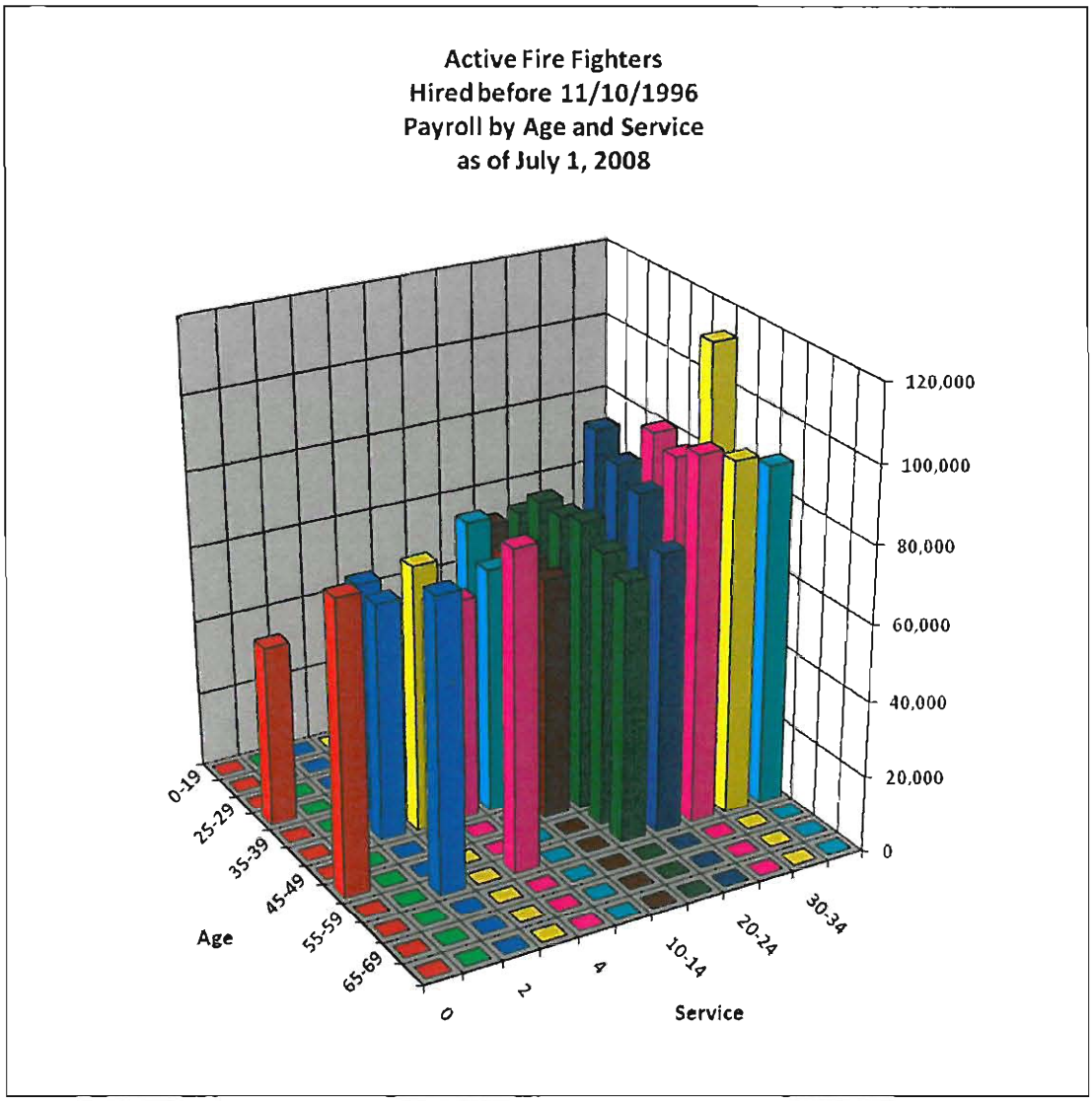


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	48,937	49,993	54,397	56,429	0	58,759	0	0	0	0	0	0	50,514
25-29	49,263	50,687	54,434	57,556	58,880	61,415	0	0	0	0	0	0	55,303
30-34	49,552	51,771	56,987	58,883	59,601	64,290	69,435	0	0	0	0	0	62,295
35-39	52,261	51,951	56,798	58,406	59,290	64,970	72,152	76,983	0	0	0	0	69,131
40-44	54,919	53,640	58,871	58,302	62,128	66,870	73,191	79,397	81,931	0	0	0	76,341
45-49	48,715	51,151	63,802	74,994	59,249	69,435	76,849	78,010	85,240	91,497	0	0	81,316
50-54	0	0	57,361	64,671	58,759	66,817	77,728	76,906	84,713	90,440	91,985	92,387	84,330
55-59	48,715	0	55,963	55,963	0	72,550	66,398	81,889	79,493	95,588	83,791	94,346	85,468
60-64	0	0	0	0	0	0	0	0	0	125,269	92,982	84,647	91,046
65-69	0	0	0	0	0	0	0	0	0	0	0	89,338	89,338
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	49,620	51,139	55,702	58,319	59,378	65,098	72,266	78,526	84,294	91,693	89,796	89,395	71,311

Average Age: 39.6 Average Service: 13.1

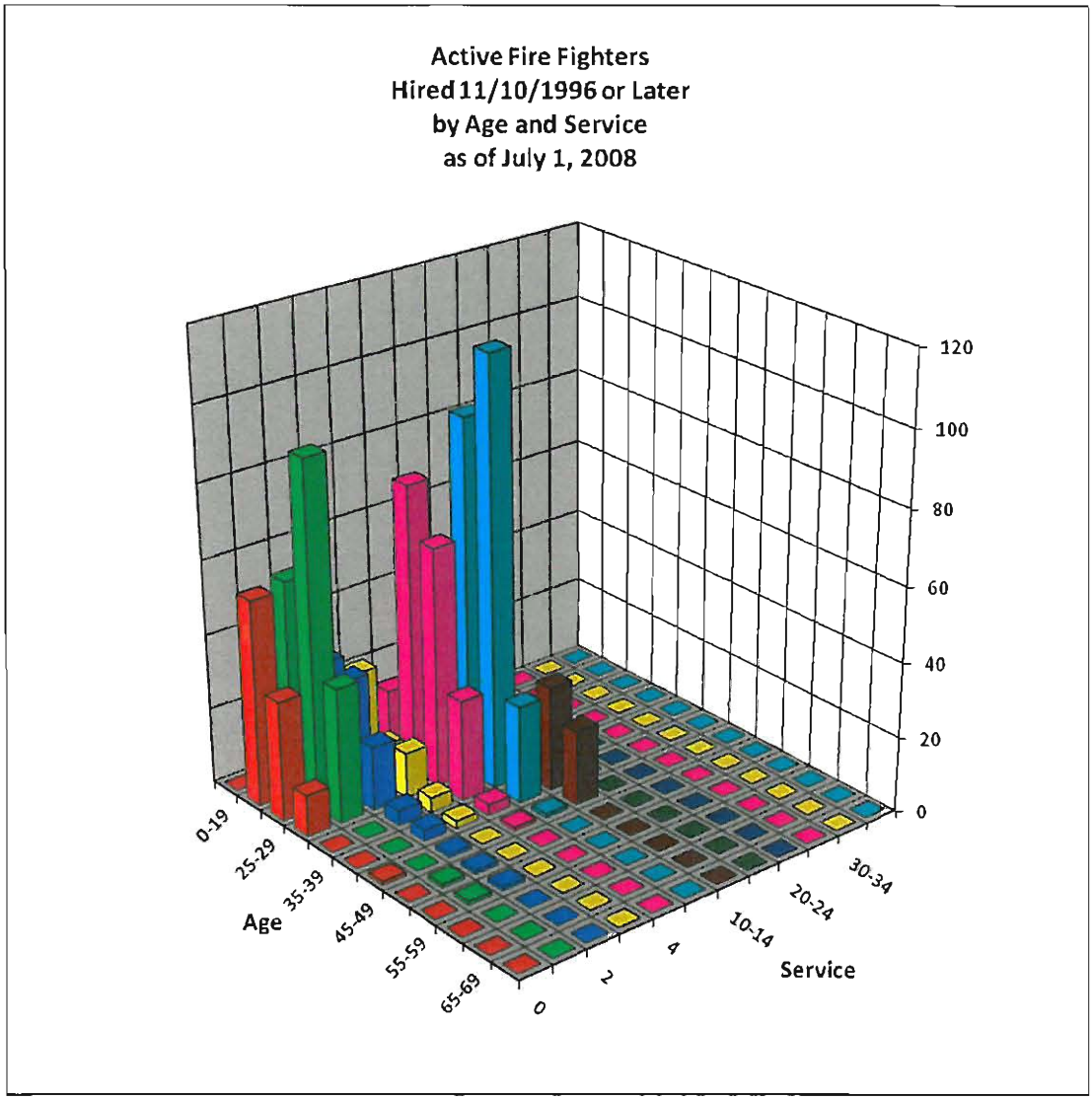


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	1	0	0	0	0	0	15	2	0	0	0	0	30
35-39	0	0	2	0	0	2	29	127	0	0	0	0	177
40-44	0	0	2	1	3	3	40	123	30	0	0	0	218
45-49	0	0	0	1	0	0	9	77	113	42	0	0	241
50-54	1	0	0	0	0	0	0	11	53	72	13	0	139
55-59	0	0	1	0	1	0	0	1	3	7	6	2	21
60-64	0	0	0	0	0	0	0	0	0	0	0	0	2
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	5	2	4	5	93	341	199	121	19	2	793

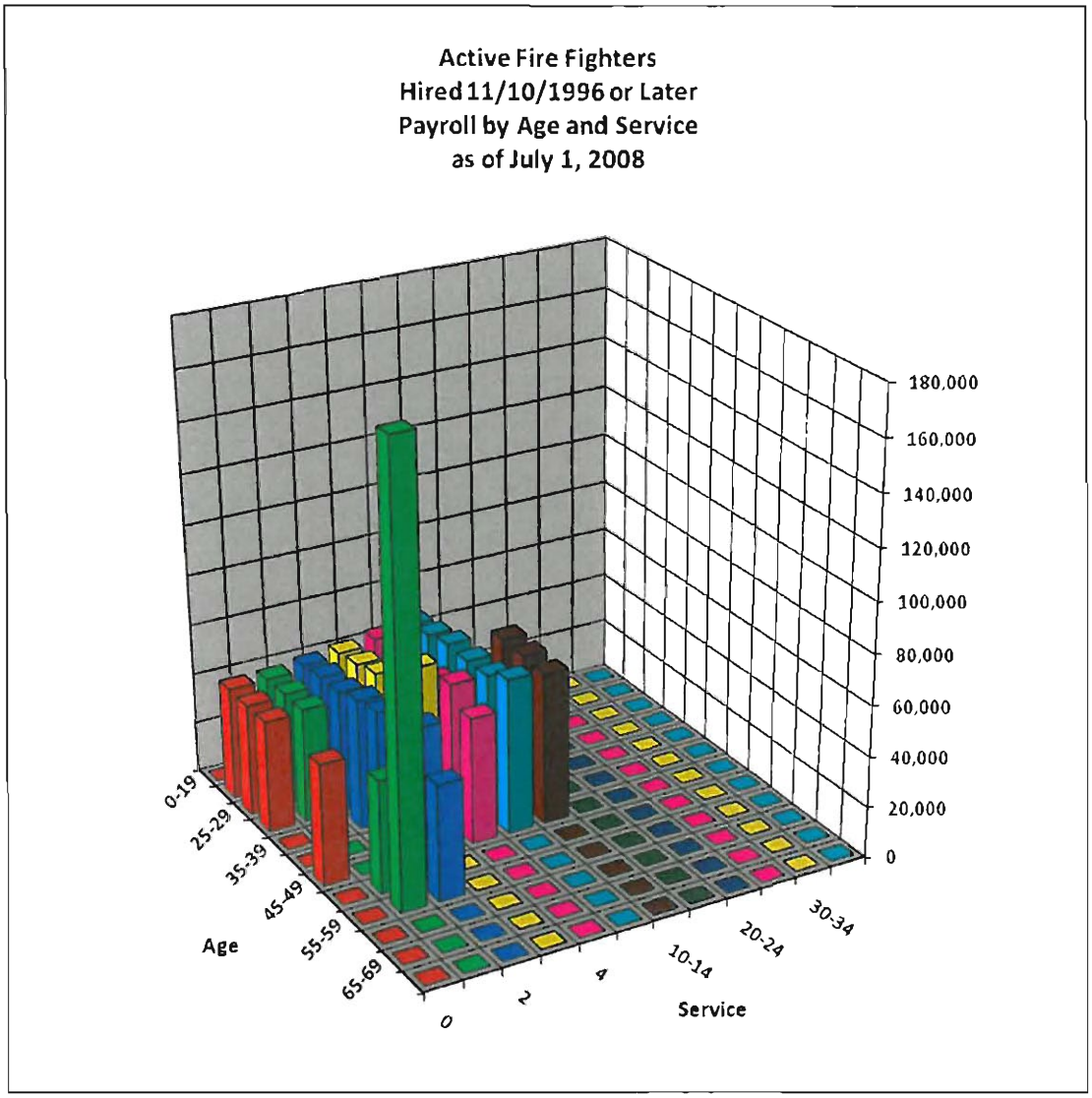


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	47,844	0	0	0	0	0	66,567	67,619	0	0	0	0	65,644
35-39	0	0	63,729	0	0	73,135	63,111	74,261	0	0	0	0	72,094
40-44	0	0	62,732	70,240	58,656	64,655	64,388	74,167	94,461	0	0	0	74,740
45-49	0	0	0	63,796	0	0	63,752	76,349	89,069	95,180	0	0	85,036
50-54	76,998	0	0	0	0	0	0	72,264	85,269	92,505	119,324	0	90,685
55-59	0	0	76,998	0	83,998	0	0	68,846	73,749	96,540	92,933	89,622	88,748
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	62,421	0	65,984	67,018	64,992	68,047	64,280	74,579	88,639	93,667	110,990	89,622	80,529

Average Age: 45.1 Average Service: 19.8

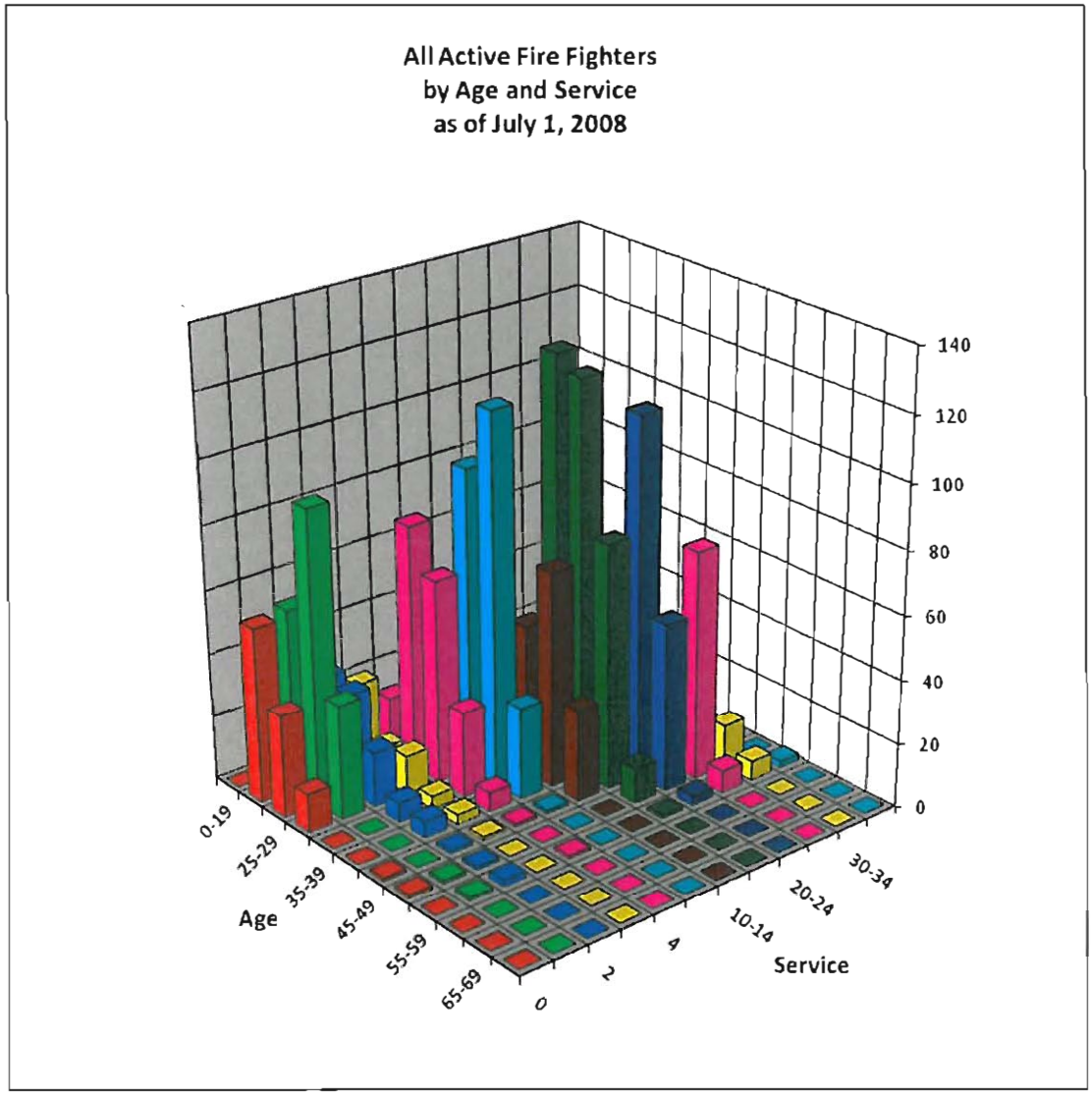


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	55	57	32	26	18	5	0	0	0	0	0	0	193
25-29	32	92	31	10	77	13	0	0	0	0	0	0	255
30-34	11	36	17	12	64	95	0	0	0	0	0	0	235
35-39	0	0	4	4	27	114	18	0	0	0	0	0	167
40-44	0	0	3	2	3	26	28	0	0	0	0	0	62
45-49	1	0	1	0	1	1	20	0	0	0	0	0	24
50-54	0	1	1	0	0	0	0	0	0	0	0	0	2
55-59	0	1	1	0	0	0	0	0	0	0	0	0	2
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	99	187	90	54	190	254	66	0	0	0	0	0	940

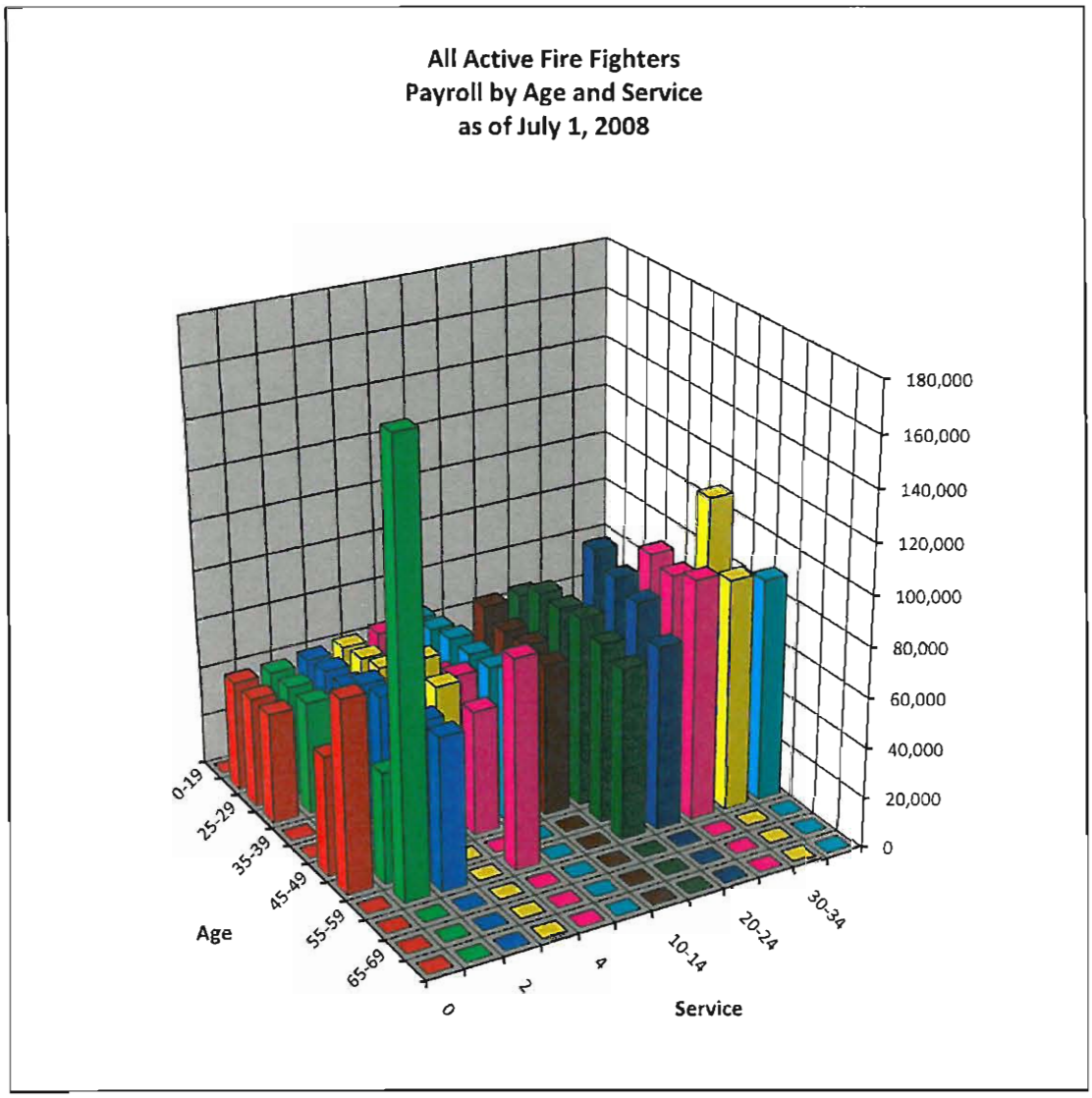


Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	44,462	44,845	46,462	47,929	50,306	52,542	0	0	0	0	0	0	46,128
25-29	44,301	45,159	48,189	49,617	50,975	54,457	0	0	0	0	0	0	47,825
30-34	44,301	45,212	48,523	52,196	50,988	56,789	0	0	0	0	0	0	52,019
35-39	0	0	51,611	54,713	51,898	56,404	61,539	0	0	0	0	0	56,074
40-44	0	0	53,605	67,096	57,149	56,769	61,160	0	0	0	0	0	58,950
45-49	47,844	0	63,796	0	50,060	61,579	60,193	0	0	0	0	0	59,464
50-54	0	44,301	60,694	0	0	0	0	0	0	0	0	0	52,498
55-59	0	176,550	45,631	0	0	0	0	0	0	0	0	0	111,091
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	44,426	45,772	48,255	50,402	51,140	56,430	60,970	0	0	0	0	0	51,166

Average Age: 31.1 Average Service: 4.5



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	55	57	32	26	18	5	0	0	0	0	0	0	193
25-29	32	92	31	10	77	13	0	0	0	0	0	0	255
30-34	12	36	17	12	64	95	15	2	0	0	0	0	253
35-39	0	0	6	4	27	116	47	127	0	0	0	0	327
40-44	0	0	5	3	6	29	68	123	30	0	0	0	264
45-49	1	0	1	1	1	1	29	77	113	42	0	0	266
50-54	1	1	1	0	0	0	0	11	53	72	13	0	152
55-59	0	1	2	0	1	0	0	1	3	7	6	2	23
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	101	187	95	56	194	259	159	341	199	121	19	2	1,733



Service / Age	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
0-19	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	44,462	44,845	46,462	47,929	50,306	52,542	0	0	0	0	0	0	46,128
25-29	44,301	45,159	48,189	49,617	50,975	54,457	0	0	0	0	0	0	47,825
30-34	44,596	45,212	48,523	52,196	50,988	56,789	66,567	67,619	0	0	0	0	52,988
35-39	0	0	55,650	54,713	51,898	56,692	62,509	74,261	0	0	0	0	63,913
40-44	0	0	57,256	68,144	57,903	57,585	63,059	74,167	94,461	0	0	0	71,032
45-49	47,844	0	63,796	63,796	50,060	61,579	61,298	76,349	89,069	95,180	0	0	82,729
50-54	76,998	44,301	60,694	0	0	0	0	72,264	85,269	92,505	119,324	0	90,182
55-59	0	176,550	61,315	0	83,998	0	0	68,846	73,749	96,540	92,933	89,622	90,691
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	44,783	45,772	49,188	50,996	51,425	56,654	62,906	74,579	88,639	93,667	110,990	89,622	64,602

Average Age: 37.5 Average Service: 11.5

Inactive Teachers

Retirees	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	0	$0	0	$0
35-39	0	$0	0	$0
40-44	0	$0	1	$52,212
45-49	0	$0	0	$0
50-54	1	$8,698	1	$33,396
55-59	200	$15,152	202	$47,236
60-64	913	$11,343	985	$43,757
65-69	734	$9,197	1,043	$40,778
70-74	273	$8,256	895	$41,062
75-79	79	$8,998	760	$39,412
80-84	13	$6,936	485	$37,721
85-89	3	$14,338	315	$38,368
90-94	0	$0	141	$40,848
95-99	0	$0	67	$44,413
100 and over	0	$0	17	$44,031
Total	2,216	$10,489	4,912	$41,089

Beneficiaries	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	18	$3,852	33	$6,077
35-39	0	0	2	6,024
40-44	1	10,227	3	7,956
45-49	2	5,552	5	12,835
50-54	10	4,617	14	16,618
55-59	11	4,988	18	15,527
60-64	19	3,587	46	16,288
65-69	8	4,583	50	17,247
70-74	6	3,899	52	19,675
75-79	1	6,809	65	20,261
80-84	0	0	64	20,402
85-89	0	0	37	22,730
90-94	0	0	31	25,357
95-99	0	0	8	30,969
100 and over	0	0	3	17,325
Total	76	$4,299	431	$18,554

Disabled	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	0	$0	0	$0
35-39	1	17,124	1	20,184
40-44	2	18,450	2	21,924
45-49	3	20,848	8	23,064
50-54	11	16,552	14	26,610
55-59	32	13,292	39	26,877
60-64	40	11,209	85	26,544
65-69	8	5,515	52	24,459
70-74	2	4,740	60	27,497
75-79	0	0	51	26,545
80-84	0	0	49	30,697
85-89	0	0	44	35,847
90-94	0	0	21	33,635
95-99	0	0	2	22,788
100 and over	0	0	0	0
Total	99	$12,383	428	$28,118

Terminated Vested	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	63	$5,273	65	$5,469
35-39	96	4,870	96	5,672
40-44	61	5,161	72	6,188
45-49	83	5,171	99	7,325
50-54	70	6,024	131	10,705
55-59	91	5,770	134	9,697
60-64	54	6,219	128	9,376
65-69	14	5,022	38	10,458
70-74	3	7,793	23	10,325
75-79	3	3,589	20	8,682
80-84	0	0	19	6,754
85-89	0	0	22	11,680
90-94	0	0	16	6,967
95-99	0	0	11	9,096
100 and over	0	0	2	3,359
Total	538	$5,447	876	$8,429

Inactive Police Officers

Retirees	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	0	$0	0	$0
35-39	0	0	0	0
40-44	0	0	0	0
45-49	0	0	0	0
50-54	203	18,232	242	58,436
55-59	284	13,724	729	50,836
60-64	128	8,104	1,039	48,713
65-69	20	9,033	560	49,681
70-74	0	0	336	49,714
75-79	1	3,973	122	58,159
80-84	0	0	80	71,395
85-89	0	0	20	73,424
90-94	0	0	14	77,779
95-99	0	0	2	46,260
100 and over	0	0	0	0
Total	636	$13,869	3,144	$51,462

Beneficiaries	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	85	$3,904	96	$7,359
35-39	12	11,399	14	20,692
40-44	11	12,626	14	26,501
45-49	11	11,170	19	28,252
50-54	8	7,985	48	26,807
55-59	7	5,048	95	26,960
60-64	6	4,244	140	27,816
65-69	1	4,257	133	26,588
70-74	0	0	157	28,219
75-79	0	0	121	28,060
80-84	1	550	122	27,064
85-89	0	0	105	27,726
90-94	0	0	71	29,211
95-99	0	0	14	30,166
100 and over	0	0	1	50,244
Total	142	$6,055	1,150	$25,885

Disabled	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	6	$23,994	6	$24,730
35-39	34	21,717	35	27,362
40-44	69	21,159	77	28,532
45-49	60	18,063	83	29,230
50-54	48	16,122	97	36,002
55-59	19	5,264	153	39,664
60-64	4	16,676	192	38,978
65-69	1	13,753	155	41,809
70-74	0	0	131	46,542
75-79	0	0	106	49,993
80-84	0	0	125	52,795
85-89	0	0	44	52,367
90-94	0	0	20	55,078
95-99	0	0	3	52,976
100 and over	0	0	2	100,104
Total	241	$18,176	1,229	$41,509

Terminated Vested	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	3	$9,806	3	$9,806
35-39	10	10,942	10	13,477
40-44	16	8,353	16	15,935
45-49	16	9,221	18	18,935
50-54	4	23,549	5	50,958
55-59	2	18,854	3	35,326
60-64	0	0	1	26,380
65-69	0	0	0	0
70-74	0	0	3	11,616
75-79	0	0	1	11,898
80-84	0	0	1	18,901
85-89	0	0	0	0
90-94	0	0	0	0
95-99	0	0	0	0
100 and over	0	0	0	0
Total	51	$10,822	61	$19,881

Inactive Fire Fighters

Retirees	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	0	$0	0	$0
35-39	0	0	0	0
40-44	0	0	0	0
45-49	0	0	0	0
50-54	85	24,409	87	67,368
55-59	105	18,509	145	65,581
60-64	52	13,987	227	60,263
65-69	9	8,751	242	58,219
70-74	0	0	151	54,586
75-79	0	0	77	60,026
80-84	0	0	39	71,881
85-89	0	0	17	73,883
90-94	0	0	3	67,368
95-99	0	0	1	55,416
100 and over	0	0	0	0
Total	251	$19,221	989	$60,991

Beneficiaries	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	26	$6,414	27	$11,099
35-39	2	38,497	2	45,894
40-44	2	15,563	4	25,518
45-49	2	5,936	8	20,013
50-54	2	3,925	8	26,289
55-59	2	4,063	12	24,378
60-64	2	14,013	33	27,718
65-69	1	1,690	61	27,005
70-74	1	44,732	48	29,188
75-79	0	0	68	28,028
80-84	0	0	77	30,439
85-89	0	0	57	29,599
90-94	0	0	26	33,846
95-99	0	0	5	30,914
100 and over	0	0	1	21,672
Total	40	$9,429	437	$27,718

Disabled	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	1	$21,468	1	$21,468
35-39	4	21,474	4	25,566
40-44	6	15,624	6	21,994
45-49	6	24,208	9	30,279
50-54	16	16,213	32	36,817
55-59	19	7,779	49	44,849
60-64	2	705	53	45,357
65-69	0	0	92	48,033
70-74	0	0	72	47,257
75-79	0	0	57	50,038
80-84	0	0	40	54,504
85-89	0	0	43	55,672
90-94	0	0	15	61,576
95-99	0	0	1	60,336
100 and over	0	0	0	0
Total	54	$13,981	474	$47,552

Terminated Vested	District Count	Average District Benefit	Total Count	Combined District and Fed Benefit
Under 35	2	$7,716	2	$7,716
35-39	1	10,701	1	16,646
40-44	5	6,721	5	11,987
45-49	3	15,618	3	28,705
50-54	5	3,959	6	18,079
55-59	0	0	0	0
60-64	0	0	0	0
65-69	0	0	0	0
70-74	0	0	0	0
75-79	0	0	0	0
80-84	0	0	0	0
85-89	0	0	0	0
90-94	0	0	0	0
95-99	0	0	0	0
100 and over	0	0	0	0
Total	16	$7,899	17	$16,858

Changes in Plan Membership: Teachers

	Actives	Non-Vested Terminations Due Refunds	Vested Terminations	Disabled	Retired	Benefic-iaries**	Total Participants
October 1, 2007	**5,027**	**3,862**	**999**	**440**	**4,968**	**445**	**15,741**
New Entrants	112	-	-	-	-	-	112
Rehires	103	(51)	(31)	-	(2)	-	19
Disabilities	(5)	-	(2)	7	-	-	0
Retirements	(34)	-	(16)	-	50	-	0
Vested Terminations	(78)	-	78	-	-	-	0
Died, With Beneficiaries' Benefit Payable		-	-	(1)	(4)	5	0
Died, Without Beneficiary, and Other Terminations	(215)	206	(4)	(22)	(104)	-	(139)
Transfers	-	-	-	-	-	-	0
Refund of Contributions	(88)	(260)	(148)	-	-	-	(496)
Beneficiary Deaths	-	-	-	-	-	(22)	(22)
Domestic Relations Orders	-	-	-	-	-	-	0
Data Corrections/Not Reported	(1)	35	-	4	4	3	45
July 1, 2008	**4,821***	**3,792**	**876**	**428**	**4,912**	**431**	**15,260**

* Includes members assumed to be on leave of absence.

**Domestic Relations Orders are excluded from count.

Changes in Plan Membership: Police Officers

	Actives	Non-Vested Terminations Due Refunds	Vested Terminations	Disabled	Retired	Benefic-iaries*	Total Participants
October 1, 2007	**3,844**	**588**	**196**	**1,272**	**3,132**	**1,142**	**10,174**
New Entrants	192	-	-	-	-	-	192
Rehires	24	(3)	(9)	-	(3)	-	9
Disabilities	(2)	-	-	2	-	-	0
Retirements	(43)	-	(1)	-	44	-	0
Vested Terminations	(12)	-	12	-	-	-	0
Died, With Beneficiaries' Benefit Payable	(2)	-	-	(24)	(20)	47	1
Died, Without Beneficiary, and Other Terminations	(32)	31	-	(24)	(8)	-	(33)
Transfers	-	-	-	-	-	-	0
Refund of Contributions	(41)	(374)	(138)	-	-	-	(553)
Beneficiary Deaths	-	-	-	-	-	(52)	(52)
Domestic Relations Orders	-	-	-	-	-	-	0
Data Corrections/Not Reported	-	3	1	3	(1)	13	19
July 1, 2008	**3,928**	**245**	**61**	**1,229**	**3,144**	**1,150**	**9,757**

*Domestic Relations Orders are excluded from count.

Changes in Plan Membership: Fire Fighters

	Actives	Non-Vested Terminations Due Refunds	Vested Terminations	Disabled	Retired	Benefic-iaries*	Total Participants
October 1, 2007	**1,706**	**211**	**38**	**493**	**957**	**446**	**3,851**
New Entrants	101	-	-	-	-	-	101
Rehires	5	(4)	-	-	-	-	1
Disabilities	(3)	-	-	3	-	-	0
Retirements	(41)	-	(1)	-	42	-	0
Vested Terminations	(3)	-	3	-	-	-	0
Died, With Beneficiaries' Benefit Payable	(2)	-	(1)	(10)	(3)	17	1
Died, Without Beneficiary, and Other Terminations	(20)	19	-	(12)	(7)	-	(20)
Transfers	-	-	-	-	-	-	0
Refund of Contributions	(9)	(166)	(22)	-	-	-	(197)
Beneficiary Deaths	-	-	-	-	-	(25)	(25)
Domestic Relations Orders	-	-	-	-	-	-	0
Data Corrections/Not Reported	(1)	-	-	-	-	(1)	(2)
July 1, 2008	**1,733**	**60**	**17**	**474**	**989**	**437**	**3,710**

*Domestic Relations Orders are excluded from count.

1.3: Actuarial Methods and Assumptions

Actuarial Funding Method

The funding method required by the Replacement Plan Act is commonly known as the Aggregate funding method. Under this method, the District must contribute the level percent of pay that – combined with the actuarial value of assets, expected investment earnings, and future employee contributions – will pay for the benefits of the current participants by the time the current workforce leaves employment.

Actuarial Assumptions

The demographic assumptions used for this valuation were developed during the experience study which c the period from October 1, 2002 through September 30, 2006.

Valuation Date	All assets and liabilities are computed as of October 1, 2008. Demographic information was collected as of June 30, 2008.
Rate of Return	The annual rate of return on all Fund assets is assumed to be 7.00%, net of all expenses. For the prior valuation, the assumed return was 7.50%, net of expenses.
Cost of Living	The cost of living as measured by the Consumer Price Index (CPI) will increase at the rate of 4.25% per year[1]. For the prior valuation, the rate was assumed to be 5.0%.
Increases in Pay	Assumed pay increases for active Members consist of increases due to cost of living adjustments and promotion and increases due to longevity and retention incentives. Cost of living increases are assumed to result in a general wage increase of 4.75% for all employees. Sample rates for the increases due to promotions are given in the table below.

Service	Teachers	Police	Fire
0	4.0%	5.0%	2.5%
5	4.0%	3.6%	2.5%
10	3.0%	2.6%	2.5%
15	0.5%	2.3%	2.5%
20	0.2%	2.5%	2.5%
30	0.2%	0.5%	2.5%

[1] The Board elected to use an inflation assumption that is slightly more conservative than the actuary's recommendation.

Increases in Pay

Allowances have also been made for special increases in Compensation prior to termination or retirement. For Police Officers, an additional increase of 5% is given for the Base Retention Differential after 20 years of service. Police Officers are assumed to receive a longevity increase of 5% of step 1 pay after 15 years of service, and additional increases of 5% after 20, 25, and 30 years of service. Longevity pay increases are not included in Officers pensionable compensation unless the Member has at least 25 years of service. Fire Fighters are assumed to receive retention incentives of 5%, 10%, 15%, and 20% applied to individual base pay after 15, 20, 25, and 30 years of service, respectively.

Active and Retiree Mortality

Rates of mortality for retired Teachers are given by the 1994 Uninsured Pension (UP94) Tables (sex distinct) with generational improvement using Projection Scale AA, projected to the valuation date.

Rates of mortality for retired Police Officers and Fire Fighters are given by the 1994 Uninsured Pension (UP94) Tables (sex distinct) with generational improvement using Projection Scale AA, with a two-year age set forward for retirees and a three-year age set forward for active members.

Disabled Member Mortality

Rates of mortality among disabled Members are specified for male and female members; separate tables are used for Teachers and for Public Safety disabled members. Sample rates are as follows:

	Teachers		Police/Fire	
Age	Male	Female	Male	Female
30	2.4000%	2.4000%	0.9033%	0.5616%
40	2.4000%	2.4000%	0.9033%	0.5616%
50	2.4545%	2.4000%	0.9033%	0.5616%
60	2.5910%	2.4000%	1.3029%	0.8310%
70	3.8006%	2.4000%	2.6405%	1.7147%
80	7.2111%	4.1413%	6.4974%	4.2282%
90	13.1554%	10.0013%	15.6801%	12.2128%

Service Retirement

Retirement is assumed to occur in accordance with the tables below.

Age	Teachers	
	Normal Retirement	Involuntary Retirement
50 -54	10%	0.5%
55	35%	8%
56-59	25%	8%
60-62	25%	N/A
63-70	20%	N/A
71-74	25%	N/A
75+	100%	N/A

Age	Police	Service	Fire
40-49	15%	25-29	12%
50-59	22%	30-34	25%
60+	100%	35+	35% until age 60, then 100%

It is assumed that 50% of Police members will retire after 31 years of service.

Disability

Separate rates of disability are assumed among Teachers, Police Officers and Fire Fighters. For Police Officers and Fire Fighters, it is assumed that 75% of the disabilities are due to accidents in the line of duty. Below are sample rates:

Age	Police		Fire	Teachers
	Male	Female		
25	0.2192%	0.4383%	0.1447%	0.0300%
30	0.2875%	0.5750%	0.1898%	0.0572%
35	0.4250%	0.8500%	0.2805%	0.0932%
40	0.6250%	1.2500%	0.4125%	0.1292%
45	0.9817%	1.9633%	0.6479%	0.2040%
50	1.6250%	3.2500%	1.0725%	0.3212%
55	2.8875%	5.7750%	1.9058%	0.5520%
60	4.1250%	8.2500%	2.7225%	0.5700%

For all Police Officer and Fire Fighter disabilities, the "% of disability" is assumed to be 100%.

Withdrawal

Separate rates of withdrawal are assumed among Teachers, Police Officers, and Fire Fighters. Withdrawal rates are not applied to Members eligible for service retirement.

Age	Police			
	<3 Years Service Male	<3 Years Service Female	3+ Years Service Male	3+ Years Service Female
20-29	10.0%	8.0%	6.00%	2.50%
30-34	10.0%	8.0%	3.50%	2.00%
35-39	10.0%	8.0%	2.00%	2.00%
40-44	10.0%	8.0%	1.75%	1.75%
45-49	10.0%	8.0%	1.50%	1.50%
50-54	10.0%	8.0%	1.25%	1.25%
55-59	10.0%	8.0%	1.00%	1.00%
60+	10.0%	8.0%	0.00%	0.00%

Age	Fire	
	<2 Years Service	2+ Years Service
20-24	9.0%	2.80%
25-29	9.0%	1.87%
30-34	9.0%	1.24%
35-39	9.0%	0.83%
40-44	9.0%	0.55%
45-49	9.0%	0.37%
50-54	9.0%	0.25%
55+	9.0%	0.00%

Age	Teachers		
	0-3 Years Service	4-9 Years Service	10+ Years Service
20-24	25.00%	18.00%	N/A
25-29	23.50%	16.00%	N/A
30-34	22.00%	14.00%	3.50%
35-39	20.50%	12.00%	3.50%
40-44	19.00%	10.00%	3.50%
45-49	17.50%	8.00%	3.50%
50-54	16.00%	8.00%	3.50%
55-59	14.50%	8.00%	3.50%
60-64	13.00%	8.00%	3.50%
65+	0.00%	0.00%	0.00%

For all members with less than 5 years of service, terminations are assumed to result in the withdrawal of contributions, with no further benefits payable. For those terminated with at least 5 years of service, 20% of Police/Fire members and 65% of Teachers are assumed to receive a deferred vested benefit, with the remaining members are assumed to receive a refund of accumulated contributions.

Family Composition

64% of Teachers and 80% of Police Officers and Fire Fighters are assumed to be married. Male spouses are assumed to be three years older than their wives. Active employees are assumed to have one dependent child aged 10.

To value the pre-retirement death benefit for Police Officers and Fire Fighters, the benefit form for all retirements (normal or disabled) is assumed to be a 67.8% Joint and Survivor annuity for all participants (based on 40% of average pay survivor benefits). One-fourth of all Police Officer and Fire Fighter active deaths are assumed to occur in the line of duty.

Actuarial Value of Plan Assets

The actuarial value of District assets is a modified market-related value. The actuarial value of assets method approved by the Board is defined as the expected actuarial value of assets (assuming the Plan's actuarial rate of return) plus 1/7 of the difference between the expected actuarial value and actual market value of assets. Previously, this fraction was 1/3. There is then a final adjustment made for the effect of the adjustment pursuant to D.C. Code §1-907.02(c). This adjustment is explained and developed in Section 3.5.

The detailed calculation of the actuarial value of District assets is shown in Section 2.2.

Participant Data

Data on active and inactive Members and their beneficiaries as of the valuation date was supplied by the D.C. Office of Pay and Retirement Services and the U.S. Department of the Treasury, on electronic media. As is usual in studies of this type, Member data was neither verified nor audited, but was reviewed for reasonableness.

Certain assumptions were made with respect to information provided by the District of Columbia:

- Data for charter school teachers with Plan benefits is not available. To account for this group, active liabilities and payroll were increased by 1.5%
- The data is incomplete with respect to former members who have a deferred vested benefit. Thus, benefits for these individuals are estimated based on their service and pay history as available.
- Benefit Service has been determined based on employee contribution history.
- Benefit Splits between Federal and District have been estimated for terminated vested participants with missing benefit amounts based on employee contribution history.
- It is assumed that all Fire and Police members with prior military service will purchase this service. To account for this, an average amount of prior service of 0.4 years based on a prior study is assumed for all Police and Fire members which determined this to be the average amount of military service for Plan members.

Section 2:

Asset Information

2.1: Current Value of District Assets as of October 1, 2008

The allocation of benefit payments and investment income between police and fire are approximations based on the most recent information available from the District of Columbia and the D.C. Retirement Board.

	$ millions	Teachers	Police	Fire	Police & Fire	Total Fund
(1)	Current Value of Assets as of October 1, 2007[1]	$1,519.4	$2,060.6	$796.6	$2,857.2	$4,376.6
(2)	FY 2008 District Contributions	$6.0	$103.2	$33.8	$ 137.0	$ 143.0
(3)	FY 2008 Employee Contributions	$26.0	$23.5	$8.3	$ 31.8	$ 57.8
(4)	FY 2008 Actual Benefit Payments	$(45.1)	$(30.0)	$(6.0)	$(36.0)	$(81.1)
(5)	FY 2008 Investment Earnings	$(252.8)	$(366.6)	$(142.2)	$(508.8)	$(761.6)
(6)	Actual Current Value of Assets as of October 1, 2008	$1,253.5	$1,790.7	$690.5	$2,481.2	$3,734.7
(7)	Benefits Payable for FY 2008	$0.0	$0.0	$0.0	$0.0	$0.0
(8)	Present Value of D.C. Code §1-908 Adjustment	$(0.3)	$1.5	$3.4	$4.9	$4.6
(9)	Final Current Value of Assets as of October 1, 2008	$1,253.2	$1,792.2	$693.9	$2,486.1	$3,739.3
(10)	Approximate Rate of Return					(17.5%)

[1] The current value of assets as of October 1, 2007 was equal to the market value less estimated benefits payable of $15.6 million for the Teachers, $9.9 million for the Police Officers, and $3.1 million for the Fire Fighters.

2.2: Actuarial Value of District Assets as of October 1, 2008

The current actuarial value of assets method approved by the Board is the expected actuarial value of assets plus one-seventh of the difference between the expected actuarial value and actual current value of assets. The actuarial value of assets can be no greater than 120% and no less than 80% of the market value. In prior years, this adjustment was one-third of the difference. There is then a final adjustment made for the effect of the adjustment pursuant to D.C. Code §1-908.

	$ millions	Teachers	Police	Fire	Police & Fire	Total Fund
(1)	Actuarial Value of Assets as of October 1, 2007	$1,396.0	$1,926.8	$746.1	$2,672.9	$4,068.9
(2)	FY 2008 District Contributions	$6.0	$103.2	$33.8	$ 137.0	$ 143.0
(3)	FY 2008 Employee Contributions	$26.0	$23.5	$8.3	$ 31.8	$ 57.8
(4)	FY 2008 Benefit Payments (including refunds)	$(45.1)	$(30.0)	$(6.0)	$(36.0)	$(81.1)
(5)	FY 2008 Expected Investment Earnings	$ 97.4	$141.3	$54.5	$ 195.8	$ 293.2
(6)	Expected Actuarial Value of Assets as of October 1, 2008	$1,480.3	$2,164.8	$836.7	$3,001.5	$4,481.8
(7)	Final Current Value of Assets as of October 1, 2008 [without D.C. Code §1-908 Adjustment]	$1,253.5	$1,790.7	$690.5	$2,481.2	$3,734.7
(8)	Smoothed Value of Assets as of October 1, 2008 [(6) + 1/7 x (7 – 6)]	$1,447.9	$2,111.4	$815.8	$2,927.2	$4,375.1
(9)	Present Value of D.C. Code §1-908 Adjustment	$(0.3)	$1.5	$3.4	$4.9	$4.6
(10)	Final Actuarial Value of Assets as of October 1, 2008 [(8) + (9)]	$1,447.6	$2,112.9	$819.2	$2,932.1	$4,379.7
(11)	Approximate Rate of Return (on AVA)					4.6%

Section 3:

Actuarial Computations

3.1: Computation of Fiscal Year 2010 District Payment

This table shows the development of the fiscal year 2010 District payment. It represents the values used in the Required Actuarial Certification under D.C. Code §1-907.

	$ millions	Teachers	Police	Fire	Total
(1)	Present Value of Future District Benefits	$1,599.9	$3,294.2	$1,463.2	$6,357.3
(2)	Actuarial Value of Assets (Section 3.2)	$1,447.6	$2,112.9	$819.2	$4,379.7
(3)	Present Value of Future Employee Contributions	$191.2	$241.4	$132.0	$ 565.2
(4)	Present Value of Future Normal Costs [(1) – (2) – (3)]	$(38.9)	$ 939.9	$ 512.1	$1,420.8
(5)	Present Value Future Payroll	$2,600.3	$3,301.9	$1,788.1	$7,698.8
(6)	Normal Contribution Rate [(4) ÷ (5), not less than 0%]	0.0%	28.5%	28.6%	n/a
(7)	Projected FY 2010 Payroll	$376.2	$316.1	$125.8	$ 818.4
(8)	Projected FY 2010 Payment Before §1-907.02(c) [(6) x (7)]	$0.0	$90.1	$36.0	$ 126.1
(9)	Applicable D.C. Code §1-907.02(c) Adjustment (Section 3.3)	$0.0	$4.3	$1.9	$6.2
(10)	FY 2010 Payment [(8) + (9), not less than $0]	$0.0	$94.4	$37.9	$ 132.3

3.2: Computation of Gain/Loss from Prior Valuation

Teachers' Retirement Plan

	$ millions	Prior Year Results	Continuing Members Only			Investment Experience	With Changes in Assumptions and Methods
			Demographic Experience	Salary Experience	New Entrants		
(1)	Present Value of Future District Benefits	$ 1,509.9	$ 1,625.9	$ 1,559.3	$ 1,576.5	$ 1,576.5	$ 1,560.0
(2)	Actuarial Value of Assets	1,396.0	1,480.3	1,480.3	1,480.3	1447.6	1,447.6
(3)	Present Value of Future Employee Contributions	198.8	194.5	182.2	188.4	188.4	191.2
(4)	Present Value of Future Normal Costs (not less than $0)	$ 0.0	$ 0.0	$ 0.0	$ 0.0	$ 0.0	$ 0.0
(5)	Present Value Future Payroll	2,708.7	2,654.3	2,487.5	2,568.8	2,568.8	2,600.3
(6)	Normal Contribution Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(7)	Projected Payroll	$ 393.3	$ 390.1	$ 366.4	$ 378.0	$ 378.0	$ 376.2
(8)	Projected Contribution before Adjustments	$ 0.0	$ 0.0	$ 0.0	$ 0.0	$ 0.0	$ 0.0
	Change in Contribution Rate		0.0%	0.0%	0.0%	0.0%	0.0%
	Change in Contribution Amount		$ 0.0	$ 0.0	$ 0.0	$ 0.0	$ 0.0

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Police Officers and Fire Fighters' Retirement Plan

	$ millions	Prior Year Results	Continuing Members Only			Investment Experience	With Changes in Assumptions and Methods
			Demographic Experience	Salary Experience	New Entrants		
(1)	Present Value of Future District Benefits	$ 4,265.2	$4,578.1	$4,488.2	$4,623.1	$4,623.1	$4,757.4
(2)	Actuarial Value of Assets	2,672.9	3,001.5	3,001.5	3,001.5	2,833.0	2,932.1
(3)	Present Value of Future Employee Contributions	350.9	351.7	343.3	366.5	366.5	373.4
(4)	Present Value of Future Normal Costs	$ 1,241.4	$1,224.9	$1,143.4	$1,255.1	$1,423.6	$1,451.9
(5)	Present Value Future Payroll	4,821.1	4,822.5	4,708.7	5,009.6	5,009.6	5,090.1
(6)	Normal Contribution Rate	25.8%	25.4%	24.3%	25.1%	28.4%	28.5%
(7)	Projected Payroll	$416.4	$ 435.1	$ 425.8	$ 444.0	$ 444.0	$ 441.9
(8)	Projected Contribution before Adjustments	$106.9	$ 110.0	$ 103.3	$ 111.1	$ 126.5	$ 126.1
	Change in Contribution Rate		(0.4%)	(1.1%)	0.8%	3.3%	0.1%
	Change in Contribution Amount		$ 3.1	($ 6.7)	$ 7.8	$ 15.4	($ 0.4)

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3.3: Summary of Principal Valuation Results
Teachers Retirement Fund

Participant Data			
	July 1, 2008	October 1, 2007	Change
Active Members			
Hired Prior to November 1, 1996	2,076	2,089	(0.6)%
Hired After November 1, 1996	2,745	2,938	(6.6)%
Total Active	4,821	5,027	(4.1)%
Retired Members, Beneficiaries and Terminated Vested (Post June 30, 1997)	2,929	3,016	(2.9%)
Total Participants	7,750	8,043	(3.6)%
Annual Salaries of Active Members	$359.1	$349.9	2.7%
Annual Retirement Benefits for Retirees & Beneficiaries (Post June 30, 1997)	$25.0	$23.9	4.6%
Assets and Liabilities			
	October 1, 2008	October 1, 2007	
Present Value of Future District Benefits	$1,599.9	$1,509.9	6.5%
District Assets for Valuation Purposes (Actuarial Value)	1,447.6	1,396.0	3.7%
Present Value of Future Employee Contributions	191.2	198.8	(3.5)%
Present Value of Future District Contributions	0.0	0.0	0.0%
Present Value of Future Salaries	2,600.3	2,708.7	(3.7)%
Current Value of District Assets (Market Value)	1,253.5	1,517.2	(17.4%)
Contribution Results			
	FY 2010	FY 2009	Change
Normal Contribution Rate	0.0%	0.0%	0.0%
Projected Payroll	$376.2	$393.3	(4.3)%
District Payment Before Adjustment	$0.0	$0.0	0.0%
District Payment After Adjustment	$0.0	$0.0	0.0%

Police Officers Retirement Fund

Participant Data			
($ millions)			
	July 1, 2008	October 1, 2007	Change
Active Members			
Hired Prior to February 15, 1980	58	62	(6.5)%
Hired Between February 15, 1980 and November 10, 1996	2,047	2,089	(2.0)%
Hired After November 10, 1996	1,823	1,693	7.7%
Total Active	3,928	3,844	2.2%
Retired Members, Beneficiaries and Terminated Vested (Post June 30, 1997)	1,070	1,076	(0.6)%
Total Participants	4,998	4,920	1.6%
Annual Salaries of Active Members	$301.7	$261.0	15.6%
Annual Retirement Benefits for Retirees & Beneficiaries (Post June 30, 1997)	$16.0	$14.5	10.3%
Assets and Liabilities			
	October 1, 2008	October 1, 2007	
Present Value of Future District Benefits	$3,294.2	$2,934.6	12.3%
District Assets for Valuation Purposes (Actuarial Value)	2,112.9	1,926.8	9.7%
Present Value of Future Employee Contributions	241.4	224.6	7.5%
Present Value of Future District Contributions	939.9	783.1	20.0%
Present Value of Future Salaries	3,301.9	3,095.8	6.7%
Current Value of District Assets (Market Value)	1,790.7	2,062.3	(13.2%)
Contribution Results			
	FY 2010	FY 2009	Change
Normal Contribution Rate	28.5%	25.3%	12.6%
Projected Payroll	$316.1	$292.7	8.0%
District Payment Before Adjustment	$90.1	$74.0	21.8%
District Payment After Adjustment	$94.4	$71.5	32.0%

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Fire Fighters Retirement Fund

Participant Data			
($ millions)			
	July 1, 2008	October 1, 2007	Change
Active Members			
Hired Prior to February 15, 1980	32	58	(44.8)%
Hired Between February 15, 1980 and November 10, 1996	761	770	(1.2)%
Hired After November 10, 1996	940	878	7.1%
Total Active	1,733	1,706	1.6%
Retired Members, Beneficiaries and Terminated Vested (Post June 30, 1997)	361	283	27.6%
Total Participants	2,094	1,989	5.3%
Annual Salaries of Active Members	$120.1	$110.3	8.9%
Annual Retirement Benefits for Retirees & Beneficiaries (Post June 30, 1997)	$6.2	$4.8	29.2%
Assets and Liabilities			
	October 1, 2008	October 1, 2007	
Present Value of Future District Benefits	$1,463.2	$1,330.6	10.0%
District Assets for Valuation Purposes (Actuarial Value)	819.2	746.1	9.8%
Present Value of Future Employee Contributions	132.0	126.2	4.6%
Present Value of Future District Contributions	512.1	458.3	11.7%
Present Value of Future Salaries	1,788.1	1,725.3	3.6%
Current Value of District Assets (Market Value)	690.5	798.7	(13.5%)
Contribution Results			
	FY 2010	FY 2009	Change
Normal Contribution Rate	28.6%	26.6%	7.5%
Projected Payroll	$125.8	$123.8	1.6%
District Payment Before Adjustment	36.0	32.9	9.4%
District Payment After Adjustment	37.9	34.5	9.9%

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3.4: Accrued Liabilities under the Entry Age Normal Method

The Governmental Accounting Standards Board (GASB) has recently announced issuance of Statement No. 50, which amends Statements 25 and 27. The revisions require that plan sponsors that use the aggregate actuarial cost method disclose the funded status and present a multiyear schedule of funding progress using the entry age actuarial cost method as a surrogate. This is because the Aggregate method does not explicitly define an accrued liability.

The table below shows the present value of the future District benefits, as well as the value of the District benefits accrued based on past service computed under the Entry Age Normal method, which assigns total liabilities to past service (accrued liabilities), current service (normal cost), and future service (future normal costs). The actuarial assumptions (demographic and economic) used for the calculations in the table below are the same as were used to determine the required contributions. These assumptions are described in detail in Section 1.3, and summarized in Section 4.1 of this report.

	Present Value of Future District Benefits as of October 1, 2008			
($ millions)	Teachers	Police	Fire	Total
Active Present Value of Future District Benefits	$1,177.1	$2,983.6	$1,345.1	$5,505.8
Inactive Present Value of Future District Benefits				
Retirees	362.9	167.2	91.9	622.0
Disabled Employees	22.8	122.2	19.0	164.0
Beneficiaries	4.8	14.6	5.8	25.2
Terminated	32.3	6.6	1.4	40.3
Total Inactive	422.8	310.6	118.1	851.5
Total Present Value of Future District Benefits	$1,599.9	$3,294.2	$1,463.2	$6,357.3
	Accrued Liabilities for District Benefits as of October 1, 2008			
Active Accrued Liability	$915.2	$1,858.8	$651.3	$3,425.3
Inactive Accrued Liability	422.8	310.6	118.1	851.5
Total Accrued Liability (AL)	$ 1,338.0	$2,169.4	$ 769.4	$4,276.8
Actuarial Value of Assets (AVA)	$1,447.6	$2,112.9	$819.2	$4,379.7
Market Value of Assets (MVA)	$1,253.5	$1,790.7	$690.5	$3,734.7
AVA Funding Ratio (AVA/AL)	108.2%	97.4%	106.5%	102.4%
MVA Funding Ratio (MVA/AL)	93.7%	82.5%	89.7%	87.3%

3.5: §1-907.02(c) Adjustment to the Fiscal Year 2010 District Payment

Beginning in fiscal year 2001, the District payment was adjusted pursuant to D.C. Code §1-907.02(c). This section stipulates that "... the enrolled actuary shall determine whether the amount appropriated for the applicable fiscal year resulted in an overpayment or a shortfall based upon the actual covered payroll."

The D.C. Code §1-907.02(c) adjustment to the fiscal year 2010 District payment is calculated by taking the actual fiscal year 2008 covered payroll for each employee class (which is provided by the District) and multiplying by the corresponding fiscal year 2008 normal contribution rates, which were determined as of October 1, 2006. This result is the fiscal year 2008 contribution that was required to be made by the District, based on actual payroll. The required contribution is then compared to the actual contribution that was paid by the District based on projected payroll. The difference between the required and actual contributions is the D.C. Code §1-907.02(c) adjustment. Any adjustment amount that cannot be used in a given year is carried forward to the next fiscal year.

	$ millions	Teachers	Police	Fire
(1)	Actual FY 2008 Covered Payroll	$327.3	$274.6	$111.3
(2)	FY 2008 Normal Contribution Rate	2.4%	37.7%	31.5%
(3)	Actual FY 2008 Contribution Required	$7.9	$103.5	$35.1
(4)	Actual FY 2008 Contribution Paid	$8.1	$99.2	$33.2
(5)	Preliminary D.C. Code §1-907.02(c) Adjustment to FY 2009 Payment [(3) – (4)]	$(0.2)	$4.3	$1.9
(6)	FY 2007 Unrecognized Amount	$(0.1)	$0.0	$0.0
(7)	Final D.C. Code §1-907.02(c) Adjustment to FY 2010 Payment [(5) + (6) if applicable]	$(0.3)	$4.3	$1.9
(8)	Applicable Adjustment	$ 0.0	$4.3	$1.9
(9)	Carryover Adjustment [(7)-(8)]	$(0.3)	$0.0	$0.0

Section 4:

Disclosure Information

4.1: Schedules of Funding Status and Employer Contributions Required Under GASB Statement No. 25

The Governmental Accounting Standards Board (GASB) Statements No. 25, 27, and 50 relate to the disclosure of pension liabilities shown in public employers' financial statements. For accounting periods beginning after June 15, 1996, information required under these statements must be prepared for public employers who seek compliance with generally accepted accounting principles (GAAP) on behalf of their public employee retirement systems.

GASB Statement No. 25 requires preparation of schedules of funding status and employer contributions, as well as the disclosure of plan provisions, actuarial assumptions, and other information.

The required schedules are shown below. In each case, we have relied upon information from our files and contained in the reports of other actuaries employed by the District in completing the schedules. While we have no reason to believe that this information is inaccurate, we strongly recommend that employer personnel verify the schedules below before they are included in the District's financial statements.

The District of Columbia Retirement Board uses the Aggregate actuarial cost method, which does not result in the calculation of an unfunded accrued liability. GASB Statement No. 50 requires funds using the Aggregate method to disclose funding status information based on Entry Age Normal (EAN) calculations. The numbers shown below have been determined based on the EAN method.

Schedule of Funding Status ($ Millions)

Actuarial Valuation Date	Actuarial Value of Assets	EAN Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded Liability as a Percent of Payroll
10/1/2006	$3,482.6	$3,565.0	$82.4	97.7%	$673.4	12.2%
10/1/2007	4,068.9	3,898.6	(170.3)	104.4%	771.2	(22.1%)
10/1/2008	4,379.7	4,276.8	(102.9)	102.4%	781.0	(13.2%)

Schedule of Employer Contributions ($ millions)						
	Teachers' Retirement Fund		Police Officers and Fire Fighters' Retirement Fund		Total Fund	
Year Ending	Annual Required Contribution	Percentage Contributed	Annual Required Contribution	Percentage Contributed	Annual Required Contribution	Percentage Contributed
9/30/1998	$9.6	100%	$47.7	100%	$57.3	100%
9/30/1999	12.8	145%	35.1	100%	47.9	112%
9/30/2000	10.7	100%	39.9	100%	50.6	100%
9/30/2001	6.6	100%	47.0	100%	53.6	100%
9/30/2002	1.0	100%	61.4	100%	62.4	100%
9/30/2003	0.0	100%	69.8	100%	69.8	100%
9/30/2004	2.9	100%	95.5	100%	98.4	100%
9/30/2005	10.2	100%	106.2	100%	116.4	100%
9/30/2006	15.7	100%	116.7	100%	132.4	100%
9/30/2007	15.7	100%	130.3	100%	146.0	100%
9/30/2008	6.0	100%	137.0	100%	143.0	100%

The table below summarizes certain information about this actuarial report.

Valuation date	October 1, 2008
Actuarial cost method for Contributions	Aggregate
Actuarial cost method for Accrued Liabilities	Entry Age Normal
Amortization method	N/A
Remaining amortization period	N/A
Asset valuation method	Actuarial value: 1/7 Excess earnings subtracted from expected actuarial value.
Actuarial assumptions:	
Investment rate of return*	7.00%
Projected salary increases*	5.0% - 8.9% for Teachers, 5.3% - 10.0% for Police Officers and Fire Fighters
*Includes inflation at	4.25%
Cost of living adjustments	4.25% (COLA limited to 3.0% for those hired after November 1, 1996)

Appendix:

Entry Age Normal Calculations and Solvency Test

Contributions under the Entry Age Normal Cost Method

The Retirement Board has adopted the Entry Age Normal (EAN) method for the purpose of determining annual contributions to both the Teachers' Retirement Fund and the Police Officers' and Firefighters' Retirement Fund, pending legislative approval. The table below represents the contributions for fiscal year 2010 using this method.

These numbers are provided for information purposes only. While these contribution amounts are higher than those shown in the body of the report, this does not imply that calculations under the EAN method would always be higher than the current method. The method simply produces a different pattern of contributions.

($ millions)	Teachers	Police	Fire	Total
Employer Normal Cost Rate (% of Pay)				
Total Accrued Liability	4.4%	31.7%	40.0%	20.4%
Actuarial Value of Assets	$ 1,447.6	$ 2,112.9	$ 819.2	$ 4,379.7
Unfunded Accrued Liability (UAL)	($ 109.5)	$ 56.4	($ 49.8)	$ 102.9
Amortization of UAL (level $, 20 years)	(9.7)	5.0	(4.4)	(9.1)
Amortization Rate (% of Pay)	(2.7%)	1.7%	(3.7%)	(1.2%)
Total Employer Contribution Rate	1.7%	33.4%	36.4%	19.3%
Projected Payroll	$ 376.2	$ 316.1	$ 125.8	$ 818.1
Contribution Amount	$ 6.4	$ 105.6	$ 45.8	$ 157.8
§1-907.02(c) Adjustment	(0.3)	4.3	1.9	5.9
District FY2010 Contribution	$ 6.1	$ 109.9	$ 47.7	$ 163.7

Solvency Test

As part of the information required for financial reporting, a solvency test and history of such is shown in the table below. Information for prior to 10/1/2006 does not exist as no accrued liability was required to be determined for funding or disclosure purposes before this date.

Valuation Date	Actuarial Accrued Liability					Portion of Accrued Liabilities Covered by Assets		
	Active Member Contributions	Inactive Members	Active Members	Total	Valuation Assets	Active Member Contributions	Retirees and Beneficiaries	Active Members
10/1/2006	273,886,843	624,109,859	2,667,040,773	3,565,037,475	3,621,500,000	100%	100%	100%
10/1/2007	303,059,191	805,474,837	2,790,093,046	3,898,627,074	4,405,200,000	100%	100%	100%
10/1/2008	332,833,566	851,489,426	3,092,491,329	4,276,814,321	3,734,700,000	100%	100%	82%

EFI