

**MUNICIPAL POLICE EMPLOYEES'  
RETIREMENT SYSTEM  
JUNE 30, 2003  
ACTUARIAL VALUATION**

## *Hall Actuarial Associates*

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*Charles G. Hall*  
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November 5, 2003

Board of Trustees

**MUNICIPAL POLICE EMPLOYEES'**  
**RETIREMENT SYSTEM**

8550 United Plaza Boulevard, Suite 501  
Baton Rouge, Louisiana 70809-0200

Gentlemen:

This report presents the results of the actuarial valuation of assets and liabilities, as well as funding requirements, for the Municipal Police Employees' Retirement System as of June 30, 2003.

This report has been prepared in accordance with generally accepted actuarial principles and practices and to the best of my knowledge, fairly reflects the actuarial present value of accrued benefits of the Municipal Police Employees' Retirement System.

In preparing this valuation, I have relied upon the information provided regarding plan provisions, plan membership, plan assets and other matters as detailed in the exhibits of this report. In particular, I have relied upon the statement of assets as audited by Duplantier, Hrapmann, Hogan and Maher, Certified Public Accountants.

The present values shown herein have been estimated on the basis of actuarial method, as specified in Louisiana Revised Statutes Title 11 Section 22(7). The Actuarial Assumptions, which have been approved by the Board of Trustees, are appropriate for the purposes of this valuation, are reasonable in the aggregate, and when applied in combination represents my best estimates of the anticipated experience under the plan.

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A brief summary of the more important figures developed in this valuation, with comparable results from previous valuations are as follows:

	<u>June 30, 2003</u>	<u>-----Prior Years-----</u>	
		<u>June 30, 2002</u>	<u>June 30, 2001</u>
I. Membership Census			
1) Retirees	3,544	3,438	3,283
2) Actives	5,957	5,924	5,846
3) DROP	247	272	237
II. Annual Benefits	\$65,454,708	\$61,576,524	\$57,471,468
III. Total Payroll	197,254,559	187,567,901	181,737,834
IV. Valuation Assets	1,076,306,717	1,189,425,524	1,275,127,921
V. Investment Yield			
(To Actuarial Value)	-6.81%	-4.06%	1.71%
(Net of mergers)	-7.43%	-4.94%	1.99%
VI. Cost to Fund Annual Pension Accruals (Normal Costs)	40,219,989 20.39%	38,148,120 20.34%	37,313,879 20.53%
VII. Unfunded Actuarial Accrued Liability	379,484,302	195,180,068	-14,071,173
VIII. Funded Percentage	73.93%	85.90%	101.12%
IX. Funding Requirements to Pay (Mid-year Payments)			
1) Employee Rate	7.50%	7.50%	7.50%
2) Employer Rate <sup>1</sup> (Current Year) Premium Tax Allocation	21.75% 10,135,228	15.30% 8,689,205	9.00% 4,806,272
3) Projected Employer Rate <sup>1</sup> (Next Year)	21.50%	15.25% <sup>2</sup>	9.00%

The above Funding requirements measure the cost of benefits in effect on June 30, 2003, and do reflect changes due to Acts of the last regular Legislative Session.

<sup>1</sup>The governing statutes mandate that the employer rate shall not be less than 9%. The rate is based on the estimated allocation from the Insurance Premium Tax Fund.

<sup>2</sup>Act 1079 of 2003 changed amortization period effective June 30, 2002

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**History of Changes in Funding Requirements**

It should be noted that in the past the casualty insurance premium has been critical to the successful funding of pension benefits. Previously, employees and employers contributed a combined 14% of payroll each year which is now 14.0% below the actuarial funding requirement. This deficit in funding percentage has, in the past, been supplemented by a portion of the insurance premium taxes collected by the State. This premium income is not fixed as a percentage of payroll unlike the employee contribution rate. The table below indicates the past relationship between premium tax allocation and membership salary growth:

**Tax Revenue as a Percentage of Covered Salary**

<u>Year</u>	<u>Tax Revenue</u>	<u>Salary</u>	<u>Percentage</u>
1988	11,413,944	76,057,176	15.01%
1998	3,041,136	131,639,692	2.31%
1999	0	143,669,670	0.00%
2000	0		0.00%
2001	0	181,737,834	0.00%
2002	4,806,272	187,567,901	2.56%
2003	8,689,205	197,254,559	4.41%

During the early eighties, the percentage of tax revenue to payroll continued to decline. This was largely due to the influx of new members resulting from mergers of non-participating municipalities into the system.

During the 1988 Legislative Session, two bills were enacted which had a tremendous impact on the future funding of the system. The insurance premium tax, which was dedicated by statute, was revoked. As a result of Act 81, the employee contribution rate was raised from 7% to 8% of payroll. Furthermore, Act 81 required the employer to fund the employer portion, raising the employer rate from 7% to approximately 12.0%. The contribution rates were increased to replace the lost revenue provided by the insurance premium tax in order to meet actuarial funding requirements. During the 1990 Legislative Session, the Actuarial Forecast Committee set the employer contribution rate at 11.38%, or 9.00% plus a \$2,236,000 appropriation. However, Governor Roemer vetoed the enabling legislation which resulted in a reversion to the higher 11.38% rate for the municipalities during the 1990-1991 fiscal year.

During the 1991 Legislative Session Act 397 reestablished the employee rate at 7% and the employer rate at 9%. The System would receive the balance of the funding requirement from the insurance premium tax. The excess insurance premium tax, if any, would revert to the general fund. Also, during the 1991 Legislative Session Act 456 added a 25 year at any age retirement benefit.

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To offset the cost of the benefit, member contribution rate was increased from 7% to 8%. Members will pay the increased rate for thirty years or until the system becomes 100% funded, whichever occurs first. At that time, the employee contribution rate would decrease to approximately 7.5% which reflects the liquidation of the unfunded accrued liability attributable to Act 456. Since the plan was fully funded as of June 30, 1993, the employee rate declined to 7.5% effective with the Plan Year beginning on July 1, 1994.

**Changes in Unfunded Actuarial Liability**

During the past fiscal year, the actuarial unfunded accrued liability/(surplus) increased from a 195.2 million to 379.5 million dollars. This increase was due primarily to the decline in investment markets.

To clarify the increase in the actuarial unfunded accrued liability, the following gain/loss analysis is presented as follows:

<b><u>CHANGE IN UNFUNDED LIABILITY (SURPLUS)</u></b>	
<b>Unfunded Liability 6/30/2002</b>	<b>\$ 195,180,068</b>
<b>INCREASES</b>	
Net Amortization Payment	\$13,662,605
Act 610	118,003
Retiree COLA	0
Investment Loss	159,523,858
Experience Loss	<u>30,721,935</u>
Incurred Increases	204,026,401
<b>DECREASES</b>	
Interest on Unfunded Liability	19,496,887
Employer Contribution Variance	<u>225,280</u>
Incurred Decreases	19,722,167
<b>Unfunded Liability 6/30/2003</b>	<b>\$379,484,302</b>

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Exhibit 3 "Pension Accounting and Financial Disclosure" contains disclosure of the accrued liabilities under the Entry Age Normal Actuarial Cost Method required by the Governmental Accounting Board Statement No. 25.

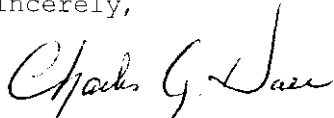
**Consideration for Cost-of-Living Increase**

The Development of the Target Ratio (see Exhibit 7) makes specific provisions for the determination of whether or not a retirement system is systematically approaching the targeted funding ratio. This is an important consideration for both retired members and members of the Board of Trustees. The Board is specifically prohibited from granting a cost-of-living raise to retirees and survivors by Act 256 of the 1986 regular session unless the system has met the Funding Target.

For the plan year ending June 30, 2003 the funding target is 1.0, which is greater than the current .7393 funding ratio. Therefore, the Board is not permitted to consider granting a cost-of-living increase by statute.

The format of this report was designed with the intent of highlighting the pertinent results of the valuation's funding requirements. Should you have any questions or comments, please do not hesitate to contact me.

Sincerely,



Charles G. Hall, FCA, MAAA, ASA  
Actuary

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EXHIBIT 1  
DEVELOPMENT  
OF  
COSTS, LIABILITIES AND CONTRIBUTIONS

Normal Costs and Accrued Liabilities are calculated in accordance with the Individual entry Age Normal Actuarial Cost Method, and the Actuarial Assumptions outlined in Exhibit 6 based on the Provisions of the Plan as summarized in Exhibit 5.

	<u>June 30, 2003</u>		<u>--Prior Year--</u> <u>June 30, 2002</u>	
	<u>Dollar</u> <u>Amount</u>	<u>% of</u> <u>Salary</u>	<u>Dollar</u> <u>Amount</u>	<u>% of</u> <u>Salary</u>
I. Normal Costs				
(to fund annual pension accruals)				
Active Members with Complete Data				
a) Retirement Benefits	\$ 30,319,628	15.37%	\$ 28,756,187	15.33%
b) Disability Benefits	2,759,569	1.40%	2,608,090	1.39%
c) Survivor Benefits	1,595,880	.81%	1,514,807	.81%
d) Voluntary Termination	4,707,912	2.39%	4,463,036	2.38%
e) Expenses	837,000	.42%	806,000	.43%
TOTAL	<u>40,219,989</u>	<u>20.39%</u>	<u>38,148,120</u>	<u>20.34%</u>
II. Actuarial Accrued Liability				
a) Active Members				
1) Retirement Benefits	574,767,924		548,721,170	
2) Disability Benefits	20,382,998		19,066,295	
3) Survivor Benefits	10,895,146		10,236,376	
4) Voluntary Termination	<u>2,549,473</u>		<u>1,961,327</u>	
	608,595,541		579,985,168	
b) Retired and Inactive Members				
1) Regular Retirees	513,956,174		480,908,309	
2) Disabled Retirees	33,739,633		33,305,602	
3) Survivors	89,455,637		88,628,142	
4) Vested Deferred & Transfers	6,952,853		9,750,801	
5) Contributions Refunded	2,354,490		2,247,720	
6) DROP Deferred Benefits	148,925,465		139,433,042	
7) DROP Account Balance	<u>51,811,226</u>		<u>50,346,805</u>	
	847,195,478		804,620,421	
c) TOTAL	1,455,791,019		1,384,605,589	



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**Exhibit 1 (Continued)**

**Costs, Liabilities & Contributions**

	<u>June 30, 2003</u>	<u>--Prior Year-- June 30, 2002</u>
II. Actuarial Accrued Liability		
TOTAL (Preceding page)	\$ 1,455,791,019	\$ 1,384,605,589
III. Valuation Assets	1,076,306,717	1,189,425,521
IV. Unfunded Actuarial Accrued Liabilities - (-Surplus)	379,484,302	195,180,068
a) Change over prior year	184,304,234	209,251,241
b) Funded Percentage	73.93%	85.90%
V. Employer Contributions		
To Fund current Plan Year <sup>1</sup>		
a) Employer Portion of Normal Cost	26,300,752	24,909,091
b) Amortization Payments	27,377,746	13,018,538 <sup>2</sup>
c) Employer Shortfall Credit	<u>-41,718</u>	<u>-17,806</u>
TOTAL Required Contribution	53,636,780	37,909,823
Estimated Premium Tax Offset	<u>10,135,228</u>	<u>8,689,205</u>
Net Employer Contribution	43,501,552	29,220,618
	21.75%	15.50% <sup>2</sup>
VI. Projected Employer Contributions		
To Fund Next Plan Year <sup>1</sup>		
a) Employer Portion of Normal Cost	27,309,276	25,866,815
b) Amortization Payments	27,377,746	13,018,538 <sup>2</sup>
c) Employer Shortfall Credit	<u>-41,718</u>	<u>-17,806</u>
TOTAL Projected Contribution	54,645,304	38,867,547
Estimated Premium Tax Offset	<u>10,200,000</u>	<u>8,700,000</u>
Net Employer Contribution	44,445,304	30,167,547
	21.50%	15.25% <sup>2</sup>
VII. Current Payroll	197,254,559	187,567,901
Projected Payroll - Mid Year	199,833,101	190,017,005
Projected Payroll - Next Year	207,495,861	197,322,923

<sup>1</sup> Dollar Amounts reflect estimated payments due mid-year on January 1st.

The Net Employer Rate is rounded to the nearest .25%, but not less than 9.00%

<sup>2</sup> Act 1079 of 2003 changed amortization period effective June 30, 2002

EXHIBIT 2

FINANCIAL SUMMARY  
STATEMENT OF REVENUES AND EXPENSES  
FOR FISCAL YEAR ENDING

	<u>June 30, 2003</u>	-----Prior Years-----	
		<u>June 30, 2002</u>	<u>June 30, 2001</u>
<b><u>OPERATING REVENUES:</u></b>			
1. Contribution Income			
Member	\$14,727,154	\$14,032,129	\$13,838,527
Employer	17,890,371	16,923,788	16,617,526
2. Other Income			
General Fund/Premium Tax	8,689,205	5,535,258	0
Merger Interest	1,597,147	6,739,641	7,047,975
Merger Contributions	0	0	0
Miscellaneous	741,425	609,654	1,797,917
TOTAL CONTRIBUTIONS	<u>43,645,302</u>	<u>43,840,470</u>	<u>39,301,945</u>
3. Investment Income			
Investments	42,000,195	-67,960,339	-39,669,654
Less, investment expenses	<u>-2,123,643</u>	<u>-2,499,292</u>	<u>-2,364,785</u>
TOTAL INVESTMENT INCOME	39,876,552	-70,459,631	-42,034,439
4. Total Revenues	83,521,854	-26,619,161	-2,732,494
<b><u>OPERATING EXPENSES:</u></b>			
1. General Administration	837,261	806,266	743,947
Other Expenses	146,504	53,783	40,549
2. Benefits Paid			
a) Pension Benefits	71,862,749	67,241,501	59,414,407
b) Return of Contrib.	<u>2,491,874</u>	<u>2,767,657</u>	<u>2,689,175</u>
TOTAL BENEFITS PAID	74,354,623	70,009,158	62,103,582
3. Total Expenses	75,338,388	70,869,207	62,888,078
<b><u>NET INCOME:</u></b>	8,183,466	-97,488,368	-65,620,572

**EXHIBIT 2 (Continued)**  
**Financial Summary**

**FINANCIAL SUMMARY**  
**STATEMENT OF ASSETS**  
**FOR FISCAL YEAR ENDING**

<b>ASSETS</b>	<b>June 30, 2003</b>	<b>-----Prior Years-----</b>	
		<b>June 30, 2002</b>	<b>June 30, 2001</b>
1. Short Term Assets			
Cash in Banks	\$ 7,345,920	\$ 8,468,046	\$ 5,375,351
Cash Equivalents	47,626,810	24,881,426	37,779,793
2. Bonds			
Domestic and Foreign	320,517,891	271,086,469	365,656,171
United States Agencies	126,944,627	155,027,594	139,006,025
Mutual Funds	574,000	622,000	696,000
3. Equities, Insurance Agreements			
Domestic Stock	486,775,637	436,119,403	419,883,108
Foreign Stocks	0	110,756,184	118,292,211
4. Other Assets			
Property/Equipment	3,403,576	2,705,491	1,158,091
Real Estate	10,249,808	9,000,000	8,500,000
Receivables - Payables	101,069,505	1,579,898	-3,215,409
Receivables - from Mergers	1,899,695	77,977,492	102,581,030
<b>TOTAL ASSETS</b>			
Market Value	1,106,407,469	1,098,224,003	1,195,712,371
Valued at Cost	1,058,558,605	1,154,832,959	1,196,308,097
<b>INVESTMENT YIELD:</b>			
To Actuarial Value	-6.81%	-4.06%	1.71%
-Net of Mergers	-7.43%	-4.94%	1.99%
DROP Account Yield	0.00%	0.00%	1.49%
Market Value	3.84%	-5.34%	-3.35%
<b>ACTUARIAL VALUE OF ASSETS:</b>			
TOTAL Assets, less	1,106,407,469	1,098,224,003	1,195,712,371
Change in Unrealized (G/L)			
Plan Year - 2 (wt. 1/4)	-80,943,988	-34,878,400	-5,073,427
Plan Year - 1 (wt. 2/4)	-56,013,232	-80,943,988	-34,878,400
Plan Year - (wt. 3/4)	104,457,820	-56,013,232	-80,943,988
Valuation Assets	1,076,306,717	1,189,425,521	1,275,127,921

EXHIBIT 3

PENSION ACCOUNTING  
AND  
FINANCIAL DISCLOSURE

The Governmental Accounting Standards Board (GASB) was established as an arm of the Financial Accounting Foundation in April, 1984 by amendment to the Foundation's certificate of incorporation and by-laws. GASB's objective is to promulgate standards of financial accounting and reporting relative to the activities and transactions of state and local governmental entities. The following disclosures and statistical tables are in accordance with the GASB's Statement No. 25.

SCHEDULE OF FUNDING PROGRESS

(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability(AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Payroll ((b-a)/c)
1994	739,788	736,148	-3,640	100.5	98,106	-3.7
1995	766,365	772,984	6,619	99.1	100,455	6.6
1996	839,234	812,079	-27,156	103.3	104,741	-25.9
1997	929,844	911,662	-18,182	102.0	123,502	-14.7
1998	1,018,384	950,228	-49,974	107.2	131,640	-38.0
1999	1,148,896	1,038,470	-110,426	110.6	143,670	-76.9
2000	1,277,548	1,167,247	-110,301	109.5	163,773	-71.6
2001	1,275,128	1,261,057	-14,071	101.1	181,738	-7.7
2002	1,189,425	1,384,605	195,180	85.9	187,568	104.1
2003	1,076,306	1,455,791	379,484	73.9	197,254	192.4

The total actuarial accrued liability determined using the Individual Entry Age Normal cost method increased by \$71,185,430 from June 30, 2002 to June 30, 2003. Act 615 of 2003 increased liabilities \$118,003. There was a net experience loss of \$184,314,964.

**EXHIBIT 3 (Continued)**

**Pension Accounting & Financial Disclosure**

**SUPPLEMENTARY INFORMATION**

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**

<u>Fiscal Year</u>	<u>Actuarial Required Contribution<sup>1</sup></u>	<u>Percent Contributed</u>	<u>Annual Pension Cost (APC)<sup>1</sup></u>	<u>Actual Contribution<sup>1</sup></u>	<u>Percentage of APC Contributed</u>	<u>Net Pension Obligation<sup>1</sup></u>
1994	12,007,523	101.9	12,042,891	12,235,639	101.6	-515,564
1995	13,551,208	98.0	13,611,763	13,278,514	97.6	-187,629
1996	15,317,128	98.5	15,343,306	15,089,800	98.3	53,645
1997	12,376,075	99.4	12,381,951	12,299,110	99.3	136,486
1998	15,340,965	101.2	15,344,190	15,517,638	101.1	-36,962
1999	13,568,502	99.3	13,578,983	13,478,928	99.3	63,093
2000	15,362,721	100.1	15,370,370	15,347,513	100.2	85,949
2001	17,123,946	99.6	17,131,525	17,189,303	99.7	28,172
2002	22,389,583	99.6	22,400,294	22,477,751	99.7	-49,285
2003	27,268,852	99.2	27,283,821	27,494,127	99.2	-259,591

Analysis of the percentage contributed over a period of years will give a relative indication of the funding progress for the liabilities of the Municipal Police Employees' Retirement System.

The difference between the Actuarial Required Contribution and the APC is the amortization payment for the Net pension Obligation (see Exhibit A).

**DEVELOPMENT OF NET PENSION OBLIGATION:**

(1) Actuarial Required Contribution	\$27,268,852
(2) Interest on Net Pension Obligation	-3,450
(3) Amortization of Net Pension Obligation	-18,419
(4) Accrued Pension Cost (1)+(2)-(3)	27,283,821
(5) Employer Contribution	27,494,127
(6) Increase (-decrease) in Net Pension Obligation	-210,306
(7) Net Pension Obligation Beginning of Year	-49,285
(8) Net Pension Obligation End of Year(6)+(7)	-259,591

<sup>1</sup>Actuarial Contributions, the Annual Pension Cost (APC), and the actual employer contribution made have been adjusted with interest at the valuation rate to the end of the fiscal year in accordance with GASB's Statement No. 25.

EXHIBIT 3 (Continued)

Pension Accounting & Financial Disclosure

STATISTICAL DATA

COMPARATIVE SUMMARY OF REVENUES BY SOURCE  
AND EXPENSES BY TYPE

Revenues by Source

<u>Fiscal Year End</u>	<u>Members Contribution</u>	<u>Employer Contribution</u>	<u>Investment Income</u>	<u>Total</u>
1994	7,918,416	13,936,075	52,828,085	74,682,576
1995	7,791,235	12,806,937	43,346,622	63,944,794
1996	8,168,543	14,587,861	73,792,139	96,545,543
1997	8,721,597	11,889,998	102,508,299	123,119,894
1998	9,824,612	15,160,629	90,074,934	115,060,175
1999	10,930,972	43,841,701 <sup>1</sup>	99,479,917	154,252,590
2000	12,376,419	87,844,851 <sup>1</sup>	44,467,036	144,688,306
2001	13,838,527	18,415,443	-34,986,464	-2,732,494
2002	14,032,129	23,068,690	-63,719,980	-26,619,161
2003	14,727,154	27,321,001	41,473,699	83,521,854

Expenses by Type

<u>Fiscal Year End</u>	<u>Benefits</u>	<u>Refunds</u>	<u>Administrative Expenses<sup>2</sup></u>	<u>Total</u>
1994	31,161,466	1,243,864	514,248	32,921,578
1995	35,893,815	1,761,257	507,430	38,162,502
1996	40,491,226	1,392,630	533,934	42,417,790
1997	42,832,983	1,529,331	658,622	45,020,936
1998	46,854,583	1,529,407	1,489,663	49,873,653
1999	50,777,251	1,752,904	714,756	53,244,911
2000	54,814,794	2,027,856	701,576	57,544,226
2001	59,414,407	2,689,175	784,496	62,888,078
2002	67,241,501	2,767,657	860,049	70,869,207
2003	71,862,749	2,491,874	983,765	75,338,388

<sup>1</sup>Includes merger contract prepayments of \$30,248,342 in 1999 and \$72,283,023 in 2000.

<sup>2</sup>Includes other expenses incurred not directly related to the administration of daily operation. (See Exhibit 2).

EXHIBIT 4

CENSUS DATA

The data contained in this valuation is summarized on the following pages with exceptions noted below. The profile depicted in the cellular graphs represents "error-free data", which serves as the basis for determining costs and liabilities. Active members are allocated to cells based upon attained age and years of service. Retirees and Survivors are allocated to cells based upon attained age and years elapsed since retirement or commencement of benefits.

The validity of the results of any actuarial valuation is dependent upon the accuracy of the data base. Prior to processing, suspicious data and data containing errors were purged from the data base and processed separately based on the following error types:

- missing sex code
- missing or invalid date of birth
- missing or invalid date of employment
- missing or invalid salary
- invalid retirement dates

There were no records purged from the data base containing errors or categorized as suspicious data which is a significant reduction when compared to previous years. Suspicious data are not necessarily errors, but data which falls outside the parameters of the editing process for further checking.

Salary data contained in the profiles and valuation report exceed the sums reported by internal audit due to salary annualization. In the valuation process, membership data with fractional service annualizes the salary in the first year of employment.

The following is a summary by participant status of the data submitted for valuation:

	---2003---	---2002---
	<u>Census</u>	<u>Census</u>
Active Members	5,781	5,792
Regular Retirees	2,254	2,156
Disability Retirees	222	220
Survivors	989	982
Vested & Reciprocals	79	80
Due Refunds	679	617
DROP Participants	247	272
DROP To Active	<u>176</u>	<u>132</u>
TOTAL	10,427	10,251

MEMBERSHIP PROFILE  
 CATEGORIZED BY AGE AND YEARS EMPLOYED

MUNICIPAL POLICE SYSTEM  
 ALL ACTIVE MEMBERS

CELLS DEPICT - MEMBER COUNT  
 TOTAL SALARY

VALUATION DATE 6/30/2003

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	Total :
[ 0 - 19) :	0	4	0	0	0	0	0	0	0	4 :
:	0	119973	0	0	0	0	0	0	0	119973 :
:										
[20 - 24) :	156	220	0	0	0	0	0	0	0	376 :
:	1688843	5601185	0	0	0	0	0	0	0	7290028 :
:										
[25 - 29) :	170	531	272	2	0	0	0	0	0	975 :
:	1879082	14834347	8593843	73439	0	0	0	0	0	25380711 :
:										
[30 - 34) :	127	330	620	167	3	0	0	0	0	1247 :
:	1386445	8972526	20190391	6058373	108502	0	0	0	0	36716238 :
:										
[35 - 39) :	54	222	289	353	146	7	0	0	0	1071 :
:	575588	6059586	9426088	12758768	6177208	307136	0	0	0	35304374 :
:										
[40 - 44) :	32	117	140	182	243	197	0	0	0	911 :
:	397343	2970118	4413357	6640478	10089499	8951522	0	0	0	33462318 :
:										
[45 - 49) :	19	85	79	96	146	287	84	0	0	796 :
:	190922	2144297	2442408	3297096	5857378	12845796	4380654	0	0	31158551 :
:										
[50 - 54) :	6	33	46	42	62	62	41	6	0	298 :
:	81865	766919	1329861	1462802	2406461	2776695	2075996	366008	0	11266607 :
:										
[55 - 59) :	1	5	14	20	23	12	10	2	0	87 :
:	11862	116342	400692	604125	871299	459423	530484	100202	0	3094429 :
:										
[60 - 64) :	0	0	1	4	6	3	1	0	0	15 :
:	0	0	18491	130652	166413	97945	44680	0	0	458181 :
:										
[65 - 69) :	0	0	0	0	0	1	0	0	0	1 :
:	0	0	0	0	0	6600	0	0	0	6600 :
:										
[70 - 74) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										
Total :	565	1547	1461	866	629	569	136	8	0	5781 :
Total :	6211950	41585293	46815132	31025733	25676760	25445118	7031814	466210	0	184258010 :

AVERAGES : Attained Age 37.03  
 Service Years 9.12  
 Active Salary 31,873



MEMBERSHIP PROFILE  
 CATEGORIZED BY AGE AND YEARS EMPLOYED

MUNICIPAL POLICE SYSTEM  
 ACTIVE MALE MEMBERS

CELLS DEPICT - MEMBER COUNT  
 TOTAL SALARY

VALUATION DATE 6/30/2003

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	Total :
[ 0 - 19) :	0	3	0	0	0	0	0	0	0	3 :
:	0	87065	0	0	0	0	0	0	0	87065 :
:										
[20 - 24) :	111	153	0	0	0	0	0	0	0	264 :
:	1181087	4007138	0	0	0	0	0	0	0	5188225 :
:										
[25 - 29) :	131	408	234	1	0	0	0	0	0	774 :
:	1513394	11642467	7409007	46928	0	0	0	0	0	20611796 :
:										
[30 - 34) :	95	238	543	155	2	0	0	0	0	1033 :
:	1065822	6690275	17779782	5659921	71609	0	0	0	0	31267410 :
:										
[35 - 39) :	36	155	245	297	131	6	0	0	0	870 :
:	435407	4465967	8056742	10877711	5590868	255174	0	0	0	29681869 :
:										
[40 - 44) :	20	69	105	152	206	170	0	0	0	722 :
:	299277	1827863	3411637	5596383	8606573	7821012	0	0	0	27562746 :
:										
[45 - 49) :	14	48	58	64	122	232	77	0	0	615 :
:	137415	1290590	1851405	2259072	4944108	10578523	4049346	0	0	25110459 :
:										
[50 - 54) :	6	12	31	30	48	57	33	6	0	223 :
:	81865	305867	922260	1065382	1896435	2549760	1641020	366008	0	8828597 :
:										
[55 - 59) :	0	2	13	12	15	11	6	2	0	61 :
:	0	47232	385075	397299	584768	424543	310160	100202	0	2249279 :
:										
[60 - 64) :	0	0	0	3	3	2	1	0	0	9 :
:	0	0	0	107909	94016	78648	44680	0	0	325253 :
:										
[65 - 69) :	0	0	0	0	0	1	0	0	0	1 :
:	0	0	0	0	0	6600	0	0	0	6600 :
:										
[70 - 74) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										
Total :	413	1088	1229	714	527	479	117	8	0	4575 :
Total :	4714267	30364464	39815909	26010605	21788377	21714261	6045206	466210	0	150919299 :

AVERAGES : Attained Age 36.94  
 Service Years 9.55  
 Active Salary 32,988

MEMBERSHIP PROFILE  
 CATEGORIZED BY AGE AND YEARS EMPLOYED

MUNICIPAL POLICE SYSTEM  
 ACTIVE FEMALE MEMBERS

CELLS DEPICT - MEMBER COUNT  
 TOTAL SALARY

VALUATION DATE 6/30/2003

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	Total :
[ 0 - 19) :	0	1	0	0	0	0	0	0	0	1 :
:	0	32908	0	0	0	0	0	0	0	32908 :
:										
[20 - 24) :	45	67	0	0	0	0	0	0	0	112 :
:	507756	1594047	0	0	0	0	0	0	0	2101803 :
:										
[25 - 29) :	39	123	38	1	0	0	0	0	0	201 :
:	365688	3191880	1184836	26511	0	0	0	0	0	4768915 :
:										
[30 - 34) :	32	92	77	12	1	0	0	0	0	214 :
:	320623	2282251	2410609	398452	36893	0	0	0	0	5448828 :
:										
[35 - 39) :	18	67	44	56	15	1	0	0	0	201 :
:	140181	1593619	1369346	1881057	586340	51962	0	0	0	5622505 :
:										
[40 - 44) :	12	48	35	30	37	27	0	0	0	189 :
:	98066	1142255	1001720	1044095	1482926	1130510	0	0	0	5899572 :
:										
[45 - 49) :	5	37	21	32	24	55	7	0	0	181 :
:	53507	853707	591003	1038024	913270	2267273	331308	0	0	6048092 :
:										
[50 - 54) :	0	21	15	12	14	5	8	0	0	75 :
:	0	461052	407601	397420	510026	226935	434976	0	0	2438010 :
:										
[55 - 59) :	1	3	1	8	8	1	4	0	0	26 :
:	11862	69110	15617	206826	286531	34880	220324	0	0	845150 :
:										
[60 - 64) :	0	0	1	1	3	1	0	0	0	6 :
:	0	0	18491	22743	72397	19297	0	0	0	132928 :
:										
[65 - 69) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										
[70 - 74) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										
Total :	152	459	232	152	102	90	19	0	0	1206 :
Total :	1497683	11220829	6999223	5015128	3888383	3730857	986608	0	0	33338711 :

AVERAGES : Attained Age 37.37  
 Service Years 7.49  
 Active Salary 27,644

MEMBERSHIP PROFILE  
 CATEGORIZED BY AGE AND YEARS EMPLOYED

MUNICIPAL POLICE SYSTEM  
 ACTIVE AFTER DROP

CELLS DEPICT - MEMBER COUNT  
 TOTAL SALARY  
 DROP BENEFITS

VALUATION DATE 6/30/2003

Age/Years :	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	Total :
[ 0 - 34) :	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	0	0 :
:										
[35 - 39) :	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	0	0 :
:										
[40 - 44) :	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	0	0 :
:										
[45 - 49) :	14	1	0	1	0	0	0	0	0	16 :
:	257482	66120	0	45889	0	0	0	0	0	369491 :
:	556488	52944	0	22128	0	0	0	0	0	631560 :
:										
[50 - 54) :	50	16	11	5	5	9	0	0	0	96 :
:	1044951	847454	584220	208039	231558	492499	0	0	0	3408721 :
:	1691832	512724	317112	116724	133572	256356	0	0	0	3028320 :
:										
[55 - 59) :	11	2	6	3	3	18	0	0	0	43 :
:	313351	93288	278277	136099	150441	908531	0	0	0	1879987 :
:	378864	50352	137904	65040	79248	468960	0	0	0	1180368 :
:										
[60 - 64) :	1	2	0	1	2	6	0	0	0	12 :
:	25964	103122	0	40997	87597	227592	0	0	0	485272 :
:	24972	62004	0	21132	45264	120252	0	0	0	273624 :
:										
[65 - 69) :	1	0	0	0	0	1	2	0	0	4 :
:	40302	0	0	0	0	44731	107771	0	0	192804 :
:	29040	0	0	0	0	24372	13932	0	0	67344 :
:										
[70 - 74) :	0	0	0	1	0	0	2	2	0	5 :
:	0	0	0	24995	0	0	113849	91355	0	230199 :
:	0	0	0	9252	0	0	75600	45012	0	129864 :
:										
Total :	77	21	17	11	10	34	4	2	0	176 :
Total :	1682050	1109984	862497	456019	469596	1673353	221620	91355	0	6566474 :
Total :	2681196	678024	455016	234276	258084	869940	89532	45012	0	5311080 :

AVERAGES : Attained Age 54.96  
 Post Drop Years 2.77  
 Active Salary 37,310  
 Annual Benefit 30,177

MEMBERSHIP PROFILE  
 CATEGORIZED BY AGE AND YEARS RETIRED

MUNICIPAL POLICE SYSTEM  
 REGULAR RETIREES

CELLS DEPICT - MEMBER COUNT  
 TOTAL BENEFITS

VALUATION DATE 6/30/2003

Age/Years :	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	Total :
[ 0 - 39) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[40 - 44) :	2	0	0	0	0	0	0	0	0	2 :
:	63120	0	0	0	0	0	0	0	0	63120 :
:										:
[45 - 49) :	15	9	11	18	5	9	0	0	0	67 :
:	475260	203520	338928	586320	109044	135996	0	0	0	1849068 :
:										:
[50 - 54) :	19	28	47	65	45	132	9	0	0	345 :
:	595104	721140	1498572	1959708	1235928	3619896	255408	0	0	9885756 :
:										:
[55 - 59) :	15	21	28	29	47	322	92	8	30	592 :
:	238500	367548	647268	634332	1067556	8579340	2739756	213168	384084	14871552 :
:										:
[60 - 64) :	4	4	7	9	9	107	221	9	80	450 :
:	99936	51204	153120	181368	173148	2263860	6078840	196308	1107348	10305132 :
:										:
[65 - 69) :	0	2	3	1	5	32	65	89	118	315 :
:	0	18684	34824	12672	101220	548904	1628796	2570904	1898940	6814944 :
:										:
[70 - 74) :	0	0	0	1	1	7	20	64	120	213 :
:	0	0	0	4056	30648	137280	389256	1616688	1926420	4104348 :
:										:
[75 - 79) :	0	0	1	0	0	3	13	18	128	163 :
:	0	0	8868	0	0	54024	219132	565440	2142024	2989488 :
:										:
[80 - 84) :	0	0	1	0	0	0	1	7	71	80 :
:	0	0	6240	0	0	0	58776	215268	1183812	1464096 :
:										:
[85 - 89) :	0	0	0	0	0	0	0	0	25	25 :
:	0	0	0	0	0	0	0	0	302268	302268 :
:										:
[90 - 99) :	0	0	0	0	0	0	0	0	2	2 :
:	0	0	0	0	0	0	0	0	12648	12648 :
:										:
Total :	55	64	98	123	112	612	421	195	574	2254 :
Total :	1471920	1362096	2687820	3378456	2717544	15339300	11369964	5377776	8957544	52662420 :

AVERAGES : Attained Age 62.89  
 Years Retired 13.15  
 Annual Benefit 23,364

MEMBERSHIP PROFILE  
 CATEGORIZED BY AGE AND YEARS RETIRED

MUNICIPAL POLICE SYSTEM  
 DISABILITY RETIREES

CELLS DEPICT - MEMBER COUNT  
 TOTAL BENEFITS

VALUATION DATE 6/30/2003

Age/Years :	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	Total :
[ 0 - 39) :	1	6	2	3	2	7	1	0	0	22 :
:	12396	76020	25260	10668	25536	52332	9756	0	0	211968 :
:										
[40 - 44) :	2	2	1	7	4	7	6	1	0	30 :
:	16908	22524	17004	76248	49860	66732	50136	0	0	299412 :
:										
[45 - 49) :	4	2	3	0	3	18	10	7	0	47 :
:	81216	43860	52764	0	64332	230544	109968	41052	0	623736 :
:										
[50 - 54) :	1	3	1	2	1	10	19	5	4	46 :
:	10944	38376	8676	25716	12528	139524	242976	51696	42960	573396 :
:										
[55 - 59) :	2	1	0	0	2	6	4	3	9	27 :
:	22596	8652	0	0	42732	85428	58272	25716	132876	376272 :
:										
[60 - 64) :	0	0	0	0	1	4	2	2	12	21 :
:	0	0	0	0	10272	32256	20568	35736	177192	276024 :
:										
[65 - 69) :	0	0	0	0	0	0	0	0	10	10 :
:	0	0	0	0	0	0	0	0	140160	140160 :
:										
[70 - 74) :	0	0	0	0	0	0	0	2	13	15 :
:	0	0	0	0	0	0	0	22668	155280	177948 :
:										
[75 - 79) :	0	0	0	0	0	0	0	0	1	1 :
:	0	0	0	0	0	0	0	0	10068	10068 :
:										
[80 - 84) :	0	0	0	0	0	0	0	0	2	2 :
:	0	0	0	0	0	0	0	0	27456	27456 :
:										
[85 - 89) :	0	0	0	0	0	0	0	0	1	1 :
:	0	0	0	0	0	0	0	0	5532	5532 :
:										
[90 - 99) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										
Total :	10	14	7	12	13	52	42	20	52	222 :
Total :	144060	189432	103704	112632	205260	606816	491676	176868	691524	2721972 :

AVERAGES : Attained Age 52.68  
 Years Retired 12.66  
 Annual Benefit 12,261

MEMBERSHIP PROFILE  
 CATEGORIZED BY AGE AND YEARS RETIRED

MUNICIPAL POLICE SYSTEM  
 SURVIVOR BENEFITS

CELLS DEPICT - MEMBER COUNT  
 TOTAL BENEFITS

VALUATION DATE 6/30/2003

Age/Years :	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	Total :
[ 0 - 39) :	8	3	5	4	9	26	32	16	9	112 :
:	51936	15192	35124	30960	48648	136368	131796	48276	35700	534000 :
[40 - 44) :	0	1	0	1	1	24	4	0	2	33 :
:	0	17712	0	0	17184	108720	51372	0	11448	206436 :
[45 - 49) :	4	2	4	0	4	27	8	7	4	60 :
:	46512	20232	49608	0	20640	196284	59460	62628	33072	488436 :
[50 - 54) :	1	3	0	7	0	26	11	10	7	65 :
:	28752	14268	0	96876	0	244044	137724	147024	55908	724596 :
[55 - 59) :	0	1	3	1	2	26	6	4	21	64 :
:	0	7704	25464	18084	27528	373188	104532	61596	180192	798288 :
[60 - 64) :	0	2	0	0	0	15	20	10	33	80 :
:	0	19140	0	0	0	312564	310164	154524	305424	1101816 :
[65 - 69) :	0	0	1	0	2	11	8	12	71	105 :
:	0	0	30276	0	22248	136032	92364	177204	666792	1124916 :
[70 - 74) :	0	0	3	0	0	5	11	24	94	137 :
:	0	0	14400	0	0	68244	172488	466920	960744	1682796 :
[75 - 79) :	0	0	1	0	1	0	5	12	109	128 :
:	0	0	4800	0	6468	0	68352	230292	1108056	1417968 :
[80 - 84) :	0	0	2	0	0	0	1	4	101	108 :
:	0	0	0	0	0	0	15036	83904	969348	1068288 :
[85 - 89) :	0	0	0	0	0	2	0	4	62	68 :
:	0	0	0	0	0	11952	0	48312	611148	671412 :
[90 - 99) :	0	0	0	0	0	0	0	0	29	29 :
:	0	0	0	0	0	0	0	0	251364	251364 :
Total :	13	12	19	13	19	162	106	103	542	989 :
Total :	127200	94248	159672	145920	142716	1587396	1143288	1480680	5189196	10070316 :

AVERAGES : Attained Age 64.50  
 Years Retired 20.66  
 Annual Benefit 10,182

MEMBERSHIP PROFILE  
 CATEGORIZED BY AGE AND YEARS RETIRED

MUNICIPAL POLICE SYSTEM  
 DROP PARTICIPANTS

CELLS DEPICT - MEMBER COUNT  
 TOTAL BENEFITS

VALUATION DATE 6/30/2003

Age/Years :	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	Total :
[ 0 - 39) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[40 - 44) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[45 - 49) :	33	23	13	0	0	0	0	0	0	69 :
:	1169460	793392	421644	0	0	0	0	0	0	2384496 :
:										:
[50 - 54) :	35	44	42	0	0	0	0	0	0	121 :
:	1142040	1496808	1319892	0	0	0	0	0	0	3958740 :
:										:
[55 - 59) :	14	17	6	0	0	0	0	0	0	37 :
:	402492	375240	170532	0	0	0	0	0	0	948264 :
:										:
[60 - 64) :	1	15	1	0	0	0	0	0	0	17 :
:	17604	344832	17136	0	0	0	0	0	0	379572 :
:										:
[65 - 69) :	0	2	0	0	0	0	0	0	0	2 :
:	0	27156	0	0	0	0	0	0	0	27156 :
:										:
[70 - 74) :	0	1	0	0	0	0	0	0	0	1 :
:	0	2508	0	0	0	0	0	0	0	2508 :
:										:
[75 - 79) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[80 - 84) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[85 - 89) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[90 - 99) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
Total :	83	102	62	0	0	0	0	0	0	247 :
Total :	2731596	3039936	1929204	0	0	0	0	0	0	7700736 :

AVERAGES : Attained Age 52.70  
 Years Retired 1.38  
 Annual Benefit 31,177

MEMBERSHIP PROFILE  
 CATEGORIZED BY AGE AND YEARS EMPLOYED

MUNICIPAL POLICE SYSTEM  
 TERM-VESTED/RECIPROCAL

CELLS DEPICT - MEMBER COUNT  
 TOTAL BENEFITS

VALUATION DATE 6/30/2003

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	Total :
[ 0 - 19) :	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0 :
:										:
[25 - 29) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[30 - 34) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[35 - 39) :	0	0	0	9	1	0	0	0	0	10 :
:	0	0	0	79267	10573	0	0	0	0	89840 :
:										:
[40 - 44) :	0	0	0	9	4	9	0	0	0	22 :
:	0	0	0	92952	54859	151986	0	0	0	299797 :
:										:
[45 - 49) :	0	0	0	3	10	11	0	0	0	24 :
:	0	0	0	31416	146660	241636	0	0	0	419712 :
:										:
[50 - 54) :	0	0	0	4	14	0	0	0	0	18 :
:	0	0	0	43104	182163	0	0	0	0	225267 :
:										:
[55 - 59) :	0	0	1	0	2	0	0	0	0	3 :
:	0	0	4333	0	24321	0	0	0	0	28654 :
:										:
[60 - 64) :	0	0	1	1	0	0	0	0	0	2 :
:	0	0	1656	8307	0	0	0	0	0	9963 :
:										:
[65 - 69) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[70 - 74) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
Total :	0	0	2	26	31	20	0	0	0	79 :
Total :	0	0	5989	255046	418576	393622	0	0	0	1073233 :

AVERAGES : Attained Age 46.89  
 Service Years 16.38  
 Annual Benefit 13,585



EXHIBIT 5

SUMMARY OF THE MUNICIPAL POLICE EMPLOYEES'  
RETIREMENT SYSTEM PLAN PROVISIONS

EFFECTIVE DATE:

July 1, 1973; last amendment date - July 1, 2003.

EMPLOYEE:

Any full-time police officer, empowered to make arrests, employed by a municipality of the State and engaged in law enforcement, earning at least \$375/month excluding state supplemental pay, or an elected Chief of Police whose salary is at least \$100.00 per month, and any employee of this System. City or Ward Marshals, elected Councilmen and Mayors excluded.

EMPLOYER:

Any municipality in the State which employs a full-time police officer, empowered to make arrests, or which has an elected Chief of Police whose salary is at least \$100.00 per month; and Municipal Police Employees' Retirement System.

MEMBERSHIP:

1. Persons who were members on 9/7/77 must remain members and persons hired on or after 9/9/77 must become members as a condition of employment, if under age 50; providing they do not have to pay social security. (Act 141 of 1983).
2. Persons who transferred from another police retirement system in 1973 and 1974 under R.S. 42:697 as it read at that time. (Act 46 of 1972).
3. Persons who transferred from another police retirement system in 1975 and 1976 under R.S. 42:697 as it read at that time. (Act 548 of 1975).
4. Persons who became members under R.S. 42:697 and are having credit/or will have credit "recognized" between this system and another system or systems. (Act 416 of 1976 AMENDED by Act 344 of 1978 and Act 103 of 1979).
5. Persons who became members because of a merger agreement entered into between a local police pension fund and this retirement system.
6. Employees, employed by any municipality or parish of this state which has its employees covered under the federal Social Security program, may elect not to be or become a member. Any member who elects not to be a member shall be refunded his employee contributions received by the system, without interest. (Act 32 of 1984).

**EXHIBIT 5 (Continued)**  
**Plan Provisions**

**CREDITABLE SERVICE:**

As follows:

1. Prior Service - service credit which was not credited in any other retirement system and for which a prior service certificate was issued.
2. Membership Service - service as a member for which the system received contribution. Qualifying cadet service may be purchased per Act 215 of 1992.

**NOTE:**

- a. No prior service credit to be given for employee who becomes member after July 31, 1976; extended to 1/1/77 for employee who is required to pay Social Security contributions.
- b. Credit for military service up to July 1, 1973 given, not to exceed 4 years, provided employee pays employee and employer contributions that would have been required based on rate of pay when first hired as police officer, plus 6% compound interest.

**EMPLOYEE CONTRIBUTIONS:**

7% of earnable compensation. (Over 30 years of service, no contributions required). 8% effective July 1, 1989; 7.5% effective July 1, 1994.

**EMPLOYER CONTRIBUTIONS:**

Municipality Rate set at 9%; balance to be determined by the Actuarial Forecast Committee and to be funded from dedicated Insurance Premium Taxes.

**EARNABLE COMPENSATION:**

Full amount of regular salary earned by an employee for a given month, including State supplemental pay, but excluding overtime pay.

**AVERAGE FINAL COMPENSATION:**

Average annual earned compensation of an employee for any period of highest 36 successive or joined month's earnable compensation.

**NORMAL RETIREMENT:**

The average compensation of a member for purposes of computing benefits cannot increase more than 25% per year. (Effective 1/1/87 Act 367 of 1986)

**ELIGIBILITY:**

20 years of service and age 50 or 12 years of service and age 55 or 25 years of service at any age; member of the System for one year.

**EXHIBIT 5 (Continued)**  
**Plan Provisions**

**BENEFIT:**

3 1/3% of average final compensation times years of creditable service (not to exceed 100% of final salary).

**ANNUITY FORM:**

An annuity payable for the lifetime of the member.

**EARLY RETIREMENT:**

**ELIGIBILITY:**

20 years of service regardless of attained age.

**BENEFIT:**

3 1/3% of Average Final Compensation times creditable service actuarially reduced for retirement prior to age 50.

**EARLY REDUCED RETIREMENT:**

**ELIGIBILITY:**

20 years of Service Credit regardless of attained age.

**BENEFIT:**

Normal retirement benefit, based upon service accrued to date, actuarially reduced from the earliest date member would be eligible if employment had continued to the earliest normal retirement date.

**DISABILITY BENEFITS:**

**ELIGIBILITY:**

Any member may retire due to total and permanent disability, with at least five (5) years of creditable service, unless injuries were sustained in the performance of official duty.

**BENEFIT:**

3% of Average Final Compensation multiplied by years of creditable service, but not less than 40% nor more than 60% of Average Final Compensation.

100% of Average Final Compensation if in a coma, is paraplegic or loses the use of a limb

**NOTE:**

Upon reaching age, disability pensioner receives greater of the disability benefit or the accrued benefit earned to date of disability.

EXHIBIT 5 (Continued)

Plan Provisions

DEATH BENEFITS:

ELIGIBILITY:

1. Death of active contributing member or disability retiree.
2. Death of member eligible for retirement, except for the one year of membership requirement.
3. Death of member while in the line of duty.

BENEFIT:

1. Surviving spouse receives the retirement benefit the member had earned to his date of death, but not less than 40% and not more than 60% of the member's Average Final Compensation. Benefit ceases upon widow's death or remarriage, unless member was killed in the line of duty or the spouse attains age 55.
2. Automatic Option 2 for widow or shall be paid benefits as provided above in (1), whichever is greater.
3. Surviving spouse receives 100% of member's Average Final Compensation

NOTE:

Surviving minor children with surviving spouse receive benefits equal to the greater of 10% of average compensation or \$200 per month per child payable to age 18, except for retarded children and those who go directly to college after high school (maximum extension, four years).

Surviving minor children with no surviving spouse receive benefits equal to 30% of average compensation with an aggregate limit of 60% of average compensation. If only one surviving minor child, benefits equal 40% of average compensation.

VESTING:

ELIGIBILITY:

1. Member who terminates employment after one year as member of the System before attaining age 50 with 20 years of creditable service.
2. Member who terminates employment after one year as member of the System before attaining age 55, with 12 years of creditable service.
3. Member who terminates, receives refund, and returns must complete 3 additional years service in order to repay refund with 5% compound interest.

**EXHIBIT 5 (Continued)**  
**Plan Provisions**

**BENEFIT:**

1. Deferred retirement benefit payable at age 50.
2. Deferred retirement benefit payable at age 55.

**NOTE:**

Terminated vested member shall be covered by survivor benefit provision.

**OPTIONAL FORMS OF BENEFIT:**

1. Balance of value of annuity to beneficiary if death before receiving value of annuity at time of retirement.
2. 100% survivor's benefits - reduced retirement benefit continued to beneficiary at member's death.
3. 50% survivor's benefits - 50% of reduced retirement benefit continued to beneficiary at member's death.
4. Initial Benefit Option - maximum benefit actuarially reduced for partial lump sum equal to not more than 36 months of maximum monthly pension.
5. Other benefits of equal actuarial value, upon approval of Board.

**COST OF LIVING INCREASE:**

The Board of Trustees is authorized to provide a cost of living increase for retirees not to exceed 3% of the original benefit for each year of retirement and an additional 2% for retirees age 65 and over, provided the system has reached its Funding Target.

**DEFERRED RETIREMENT OPTION PLAN:**  
**(Act 475 of 1984)**

Instead of terminating employees and accepting a service retirement allowance, any member who has met the following eligibility requirements may elect to participate in the Deferred Retirement Option Plan (DROP) and defer receipt of benefits.

**ELIGIBILITY:**

Twenty (20) years of creditable service (including reciprocal service) and eligible to receive a normal service retirement allowance.

**BENEFIT:**

Duration of participation is specified and does not exceed three (3) years, effective July 1, 1992.

**EXHIBIT 5 (Continued)**  
**Plan Provisions**

**BENEFIT:**

1. Deferred retirement benefit payable at age 50.
2. Deferred retirement benefit payable at age 55.
  - (2) a true annuity based upon his account; or
  - (3) any other method of payment if approved by the board of trustees. Monthly benefits being paid into the fund during participation will begin being paid to the retiree.

If a participant dies during the period of participation in the program, a lump sum payment equal to his account balance shall be paid to the beneficiary, or if none, to his estate; in addition, normal survivor benefits payable to survivors of retirees shall be payable.

If employment is not terminated at the end of the specified period of participation, then:

- (1) payment into account shall cease;
- (2) payment from account is suspended until employment is terminated; and
- (3) participant shall resume active contributions to the system.

Then, upon termination of employment, the benefit payments indicated above shall be paid. The participant shall receive an additional retirement benefit based on additional service rendered since termination of participation in the fund, usually the normal method of computation of benefit subject to the following:

- (1) If additional service was less than 36 months, average compensation figure used to calculate additional benefit shall be that used to calculate original benefit.
- (2) If additional service was 36 or more months, the average compensation figure used to calculate the additional benefit shall be based on compensation during the period of additional service.

**NOTE:**

DROP Accounts shall earn interest following termination of DROP at a rate .5% below the actuarial rate of the System's investment portfolio.

Effective 1/1/2004 new DROP accounts are credited with Money Market rates.

EXHIBIT 6

ACTUARIAL COST METHODS AND ASSUMPTIONS

COST METHOD:

The individual "Entry Age Normal" cost method was used to calculate the funding requirements of the retirement system. Under this cost method, the actuarial present value of projected benefits of each individual included in the valuation is allocated on a level basis as percentage of payroll for each participant between entry age and assumed retirement age(s). That portion of the actuarial present value attributable to current year benefit accruals is called the Normal Cost. The actuarial present value of future benefits in excess of the actuarial present value of future normal costs is called the actuarial accrued liability.

ACCOUNTING DISCLOSURE:

The Governmental Accounting Standards Board Statement No. 25 requires disclosure of certain Actuarial Liabilities for Public Employee Retirement Systems. The disclosures illustrated in Exhibit 3 were developed using the Entry Age Normal cost method. The statement of assets provided by the independent auditors was a copy of the final draft prior to publication. Should the statement of assets received differ from the final audit report, a revised actuarial statement will be issued, but only to the extent that any difference in reporting affects the employer's Premium Tax Allocation or the yield to the Actuarial Value of Assets.

MORTALITY ASSUMPTIONS:

Pre-retirement deaths and post-retirement life expectancies were projected in accordance with the experience of the 1971 Sex Distinct Group Annuity Mortality Table.

DISABILITY ASSUMPTION:

Rates of total and permanent disability were projected by age in accordance with the Eleventh Actuarial Valuation of the Railroad Retirement System. For mortality after disability, rates were on the Eleventh Actuarial Valuation of the Railroad Retirement System for occupational disabilities. As an approximation of the Railroad Retirement tables, an age set-up of the 1971 GAM table was used equal to 1/2 the rate at disability and the rate at age 82.

RETIREMENT ASSUMPTION:

Retirement without reduction in benefits can occur at any given age after satisfying the service eligibility requirements. Absent from the plan is a traditional "Normal Retirement Age". Since the age and service requirements are varied, the frequency of retirements will depend on the exposure plus intangibles such as health, economy, Social Security and other work patterns. Retirement rates were projected based on the 1981-1986 Experience Study for the Municipal and State Police Retirement Plan.

**EXHIBIT 6 (Continued)**  
**Cost Methods & Assumptions**

**TERMINATION ASSUMPTIONS:**

Voluntary termination or withdrawal rates are the same as those used in prior valuations. During the first five years of employment, the probability of voluntarily terminating is a multiple of the attained age rate as follows:

1st year	3.33x
2nd year	2.50x
3rd year	2.00x
4th year	1.60x
5th year	1.25x

Furthermore, for members terminating with twelve (12) or more years of service it is assumed that 80% will not withdraw their accumulated employee contributions.

**SALARY GROWTH:**

The rate of annual salary growth is based on Technical Paper #16 "Present Value of Estimated Lifetime Earnings", for Clerical and Kindred Workers published by the U.S. Department of Commerce. The table's original source data was derived from the 1960 Census.

It is further assumed that these rates are increased by 2% during the first ten (10) years of employment.

**FAMILY STATISTICS:**

The composition of the Family was based on Age-Specific Fertility Rates from the 1983 Vital Statistics of the United States. 80% of the membership was assumed to be married with the wife assumed to be three (3) years younger than the husband. Sample rates are as follows:

<u>Age at Death</u>	<u>Number of Minor Chn.</u>	<u>Years for Youngest Child to Attain Majority</u>
25	1.3	17
30	1.8	15
35	2.2	13
40	2.1	10
45	1.7	8
50	1.2	4

**REMARRIAGE:**

Annuities payable to the spouse which cease upon death or remarriage were taken from "A Technical Note for the Construction of Widow's Annuities." The Remarriage and Mortality rates used to develop these annuities were based on the graduated rates from "Mortality and Remarriage Experience for Widow's Beneficiaries under OASDI.



EXHIBIT 6 (Continued)

Cost Methods & Assumptions

ASSUMPTION FOR INCOMPLETE DATA:

Records identified as containing suspicious data or errors in data were assumed to possess the same characteristics of "good data" in the same cohort.

INVESTMENT EARNINGS:

An effective annual rate of 7%, net expenses.

ASSET VALUATION:

For the Plan Year ending prior to June 30, 1999 equities are valued at a four year weighted average. The computation of the actuarial value of assets is the sum of the bonds at amortized cost, less a weighted average of unrealized losses or (gains) in the market value of equities, plus the market value of equities.

Effective June 30, 1999 the Board of Trustees approved a change in the Asset Valuation Method. The Actuarial Value of Assets is the market value of assets adjusted for a four year weighted average in the unrealized gain or loss in the value of all assets. This value is determined in accordance with Reg.1.412(c)(2)-1-(6) & (7) of the Internal Revenue Service Code and is subject to the Corridor Limits defined therein.

As a result of the change in the Asset Valuation Method, the reporting of realized income has been changed to realized, plus unrealized income for valuations beginning on June 30, 1999 and thereafter.

ADMINISTRATIVE EXPENSES:

These expenses are included in Normal Cost and are assumed to be \$837,000 per year. Investment Expenses are not included in Normal Cost but are treated as a direct offset to investment income. The Employer portion of the Normal Cost includes an allocation for administrative expenses.

COST OF LIVING:

Past retirement cost of living increases are paid from interest earnings in excess of the assumed Investment Earning for actuarial valuation purposes. The liability for cost of living raises already granted is included in the retirees reserve.

ACTUARIAL TABLES AND RATES

- Death Rates -			Remarriage	Termination	Disability	Retirement	Salary	
Age	Male	Female	Rates	Rates	Rates	Rates	Scale	Age
20	.00050	.00026	.09350	.11000	.00110	.00000	1.08000	20
21	.00052	.00028	.09152	.10400	.00110	.00000	1.07500	21
22	.00054	.00029	.08954	.09800	.00110	.00000	1.07100	22
23	.00057	.00031	.08757	.09200	.00110	.00000	1.06700	23
24	.00059	.00033	.08569	.08600	.00110	.00000	1.06400	24
25	.00062	.00035	.08402	.08000	.00110	.00000	1.06100	25
26	.00065	.00037	.08225	.07600	.00110	.00000	1.05800	26
27	.00068	.00039	.08028	.07200	.00110	.00000	1.05500	27
28	.00072	.00041	.07802	.06800	.00110	.00000	1.05300	28
29	.00076	.00044	.07556	.06400	.00110	.00000	1.05100	29
30	.00081	.00047	.07281	.06000	.00200	.00000	1.05000	30
31	.00086	.00050	.06976	.05600	.00200	.00000	1.04800	31
32	.00092	.00053	.06652	.05200	.00200	.00000	1.04700	32
33	.00098	.00057	.06308	.04800	.00230	.00000	1.04600	33
34	.00105	.00061	.05945	.04400	.00230	.00000	1.04400	34
35	.00112	.00065	.05582	.04000	.00260	.00000	1.04300	35
36	.00120	.00070	.05230	.03600	.00260	.00000	1.04200	36
37	.00130	.00075	.04890	.03200	.00290	.00000	1.04100	37
38	.00140	.00081	.04570	.02800	.00320	.42000	1.04000	38
39	.00151	.00087	.04271	.02400	.00360	.42000	1.03900	39
40	.00163	.00094	.03993	.02000	.00400	.42000	1.03800	40
41	.00179	.00101	.03769	.01800	.00400	.42000	1.03700	41
42	.00200	.00109	.03480	.01600	.00400	.42000	1.03600	42
43	.00226	.00119	.03256	.01400	.00400	.42000	1.03500	43
44	.00257	.00129	.03037	.01200	.00420	.42000	1.03400	44
45	.00292	.00140	.02822	.01000	.00420	.42000	1.03300	45
46	.00332	.00152	.02632	.01000	.00450	.42000	1.03200	46
47	.00375	.00165	.02455	.01000	.00500	.42000	1.03100	47
48	.00423	.00180	.02303	.01000	.00570	.42000	1.03100	48
49	.00474	.00197	.02154	.01000	.00640	.42000	1.03000	49
50	.00528	.00215	.02019	.01000	.00730	.42000	1.03000	50
51	.00587	.00232	.01889	.01000	.00830	.26380	1.03000	51
52	.00648	.00252	.01808	.01000	.00940	.24280	1.03000	52
53	.00713	.00274	.01733	.01000	.01080	.31510	1.03000	53
54	.00781	.00298	.01671	.01000	.01240	.20750	1.03000	54
55	.00852	.00326	.01622	.01000	.01400	.34260	1.03000	55
56	.00926	.00357	.01596	.01000	.01580	.22130	1.03000	56
57	.01004	.00395	.01584	.01000	.01780	.23120	1.03000	57
58	.01089	.00439	.01589	.01000	.01990	.21390	1.03000	58
59	.01192	.00490	.01622	.01000	.02220	.24240	1.03000	59
60	.01312	.00549	.01682	.01000	.02480	.36010	1.03000	60
61	.01444	.00616	.01764	.01000	.02920	.29270	1.03000	61
62	.01586	.00690	.01906	.01000	.03450	.62020	1.03000	62
63	.01741	.00771	.02061	.01000	.03400	.23120	1.03000	63
64	.01919	.00861	.02239	.01000	.03000	.30740	1.03000	64
65	.02126	.00956	.02446	.01000	.00000	.22220	1.03000	65
66	.02364	.01057	.02684	.01000	.00000	.31450	1.03000	66
67	.02632	.01162	.02952	.01000	.00000	.89550	1.03000	67
68	.02919	.01288	.03209	.01000	.00000	.99990	1.03000	68
69	.03244	.01446	.03504	.01000	.00000	.99990	1.03000	69
70	.03611	.01648	.03851	.00000	.00000	.99990	1.03000	70
71	.04001	.01900	.04211	.00000	.00000	.99990	1.03000	71
72	.04383	.02191	.04563	.00000	.00000	.99990	1.03000	72
73	.04749	.02511	.04909	.00000	.00000	.99990	1.03000	73
74	.05122	.02863	.05262	.00000	.00000	.99990	1.03000	74

EXHIBIT 7  
DEVELOPMENT OF TARGET RATIO

Funded Ratio of the System as of the 1986 fiscal year end .93194

Number of fiscal years elapsed since the 1986 fiscal year end multiplied by one-thirtieth of the difference between one hundred percent and the Initial Funded Ratio .03857

Changes in Funded Ratio after the 1986 fiscal year end:

Date of Change in funded Ratio

<u>6/30/87</u>	<u>-.08841</u>
<u>6/30/88</u>	<u>.12270</u>
<u>6/30/91</u>	<u>-.00911</u>
<u>6/30/93</u>	<u>.01350</u>
<u>6/30/96</u>	<u>.01671</u>
<u>6/30/99</u>	<u>.00572</u>

Total Change in Funded Ratio .06111

Number of fiscal years elapsed since the date of each change multiplied by one-thirtieth of the amount of such change in the unfunded ratio and of opposite arithmetic sign of such change:

Date of Amortization of Change

<u>6/30/87</u>	<u>.04715</u>
<u>6/30/88</u>	<u>-.06135</u>
<u>6/30/91</u>	<u>.00364</u>
<u>6/30/93</u>	<u>-.00450</u>
<u>6/30/96</u>	<u>-.00390</u>
<u>6/30/99</u>	<u>-.00076</u>

Total Amortization of Changes -.01972

Target Ratio as of the end of the just completed fiscal year 1.00000

Actual Funded Ratio of the system as of the just completed fiscal year 0.73933

This system has met the target ratio required to grant a cost-of-living increase to current benefit recipients.

EXHIBIT A

AMORTIZATION OF UNFUNDED  
ACTUARIAL ACCRUED LIABILITY  
JUNE 30, 2003

<u>DATE</u> <u>6/30</u>	<u>DESCRIPTION</u>	<u>AMTZ.</u> <u>METHOD</u>	<u>AMTZ.</u> <u>PERIOD</u>	<u>INITIAL</u> <u>LIABILITY</u>	<u>YEARS</u> <u>REMAING</u>	<u>REMAINING</u> <u>BALANCE</u>	<u>MID-YEAR</u> <u>PAYMENT</u>
1996	Change in Liability	L	15	-27,209,779	8	-17,839,179	-2,888,113
1997	Change in Liability	L	15	7,807,987	9	5,585,346	828,759
1998	Change in Liability	L	15	-50,648,475	10	-39,057,647	-5,375,954
1999	Change in Liability	L	15	-45,292,161	11	-37,289,676	-4,807,422
2000	Change in Liability	L	15	-4,827,975	12	-4,210,304	-512,453
2001	Change in Liability	L	15	90,820,890	13	83,339,531	9,639,954
2002	Change in Liability	L	30	207,093,231	29	204,900,858	16,133,767
2003	Change in Liability	L	30	184,314,964	30	<u>184,314,964</u>	<u>14,359,208</u>
TOTAL OUTSTANDING BALANCE						379,743,893	27,377,746

Act 1079 of 2003 changed amortization period effective June 30, 2002

*Hall Actuarial Associates*

EXHIBIT A (Continued)  
 Amortization of Unfunded  
 Actuarial Accrued Liability

EMPLOYER'S SHORTFALL BALANCE

<u>DATE</u> <u>6/30</u>	<u>DESCRIPTION</u>	<u>AMTZ.</u> <u>METHOD</u>	<u>AMTZ.</u> <u>PERIOD</u>	<u>INITIAL</u> <u>LIABILITY</u>	<u>YEARS</u> <u>REMAING</u>	<u>REMAINING</u> <u>BALANCE</u>	<u>MID-YEAR</u> <u>PAYMENT</u>
1992	Contribution Variance	L	15	-513,554	4	-190,989	-54,510
1993	Contribution Variance	L	15	191,419	5	86,173	20,318
1994	Contribution Variance	L	15	-228,116	6	-119,382	-24,213
1995	Contribution Variance	L	15	303,610	7	179,651	32,226
1996	Contribution Variance	L	15	227,328	8	149,040	24,129
1997	Contribution Variance	L	15	76,966	9	55,057	8,169
1998	Contribution Variance	L	15	-176,672	10	-136,241	-18,752
1999	Contribution Variance	L	15	89,574	11	73,748	9,508
2000	Contribution Variance	L	15	15,208	12	13,262	1,614
2001	Contribution Variance	L	15	-65,357	13	-59,973	-6,937
2002	Contribution Variance	L	15	-88,166	14	-84,657	-9,358
2003	Contribution Variance	L	15	-225,280	15	<u>-225,280</u>	<u>-23,912</u>
TOTAL EMPLOYER CREDIT						-259,591	-41,718
TOTAL UNFUNDED ACTUARIAL ACCRUED LIABILITY						379,484,302	