

## *Hall Actuarial Associates*

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Charles G. Hall  
F.C.A., M.A.A.A., A.S.A.  
Enrolled Actuary

1624 LaSalle Parc Drive  
Baton Rouge, La. 70806  
(225) 928-7866

September 7, 2009

Board of Trustees  
**LOUISIANA STATE POLICE**  
**RETIREMENT SYSTEM**  
3100 Brentwood Drive, Suite B  
Baton Rouge, Louisiana 70809

Gentlemen:

This report presents the results of the actuarial valuation of assets and liabilities, as well as funding requirements, for the Louisiana State Police Retirement System as of June 30, 2009.

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 Louisiana State Police 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 provided by the Fund's external auditors, Hientz & Macaloso LLC.

The present values shown herein have been calculated on the basis of the actuarial cost method specified in Louisiana Revised Statutes Title 11 Section 22(12). The actuarial assumptions, which have been approved by the Board of Trustees, are appropriate for the purpose of this valuation, are reasonable in the aggregate, and when applied in combination represent my best estimates of the anticipated experience under the plan.

Board of Trustees  
September 7, 2009

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

	<u>June 30, 2009</u>	<u>-----Prior Years-----</u>	
		<u>June 30, 2008</u>	<u>June 30, 2007</u>
I. Membership Census			
1) Retirees	1,175	1,153	1,146
2) Actives	1,103	1,059	1,003
3) Terminated Vested	25	24	23
4) DROP	18	27	32
II. Annual Benefits	\$ 33,536,628	\$ 31,258,056	\$ 29,168,340
III. Total Payroll	59,556,036	56,728,212	49,763,351
IV. Valuation Assets	395,905,112	438,074,647	428,880,461
V. Investment Yield <sup>1</sup>			
Market Value	-18.96%	-5.24%	16.15%
5 year avg.	0.86%	7.51%	9.76%
10 year avg.	2.15%	4.92%	7.06%
Actuarial Value <sup>1</sup>	-7.13%	4.55%	8.63%
5 year avg.	5.33%	7.80%	6.31%
10 year avg.	4.43%	6.31%	7.50%
DROP Accounts <sup>1</sup>	0.00%	4.05%	8.13%
VI. Experience Account	0	0	0
VII. Cost to Fund Annual Pension Accruals (Normal Costs)	15,716,185 26.39%	14,800,890 26.09%	12,024,456 24.16%
VIII. Unfunded Actuarial Accrued Liability	282,401,551	199,757,220	158,646,134
IX. Funded Percentage	58.37%	68.7%	73.0%
X. Funding Requirements (Mid Year Payment)			
1) Employee Contribution Rate	8.50%	8.00%	8.00%
Eff. 10/1/2009			
2) Employer Rate, plus Premium Tax Allocation (Current Year)	51.1% 1,500,000	30.9% 1,500,000	25.9% 1,500,000
3) Projected Employer Rate, plus Premium Tax Allocation (Next Year)	50.9% 1,500,000	41.3% 1,500,000	27.3% 1,500,000

Funding Requirements measure the cost of benefits in effect on June 30, 2009.

<sup>1</sup>Excludes Money Market DROP Accounts effective June 30, 2009.

Board of Trustees  
September 7, 2009

**UNFUNDED LIABILITY**

The Actuarial Valuation for the plan year ending June 30, 2009 discloses an increase in the value of the plan's unfunded actuarial accrued liability due in part to unfavorable investment experience on an actuarial basis. The dollar funding requirements have increased, and the funding as a percentage of payroll, has increased. It is generally appropriate for the current valuation process to disclose the source and causes of any significant changes in the plan from year to year. Changes that occur are generally the result of changes in actuarial assumptions, gains or losses resulting from actual experience which differs significantly from expected plan experience or some external force such as plan restructuring.

In accordance with Act 165 of the 1992 Legislative Session, beginning with the 1992-1993 plan year, the actuarial cost method was changed from the "Projected Unit Credit" to the "Entry Age Normal" cost method. Changes in actuarial methods, assumptions, benefit changes or plan experience are amortized as a level annuity. The amortization period is the later of the year 2029 or 30 years for changes after 6/30/2008 as provided for in Act 852 of the 2008 Legislative Session.

During the past fiscal year the actuarial accrued liability in excess of assets to pay benefits increased from 199.8 million to a 282.4 million dollar deficit.

To assist the Board of Trustees in reconciling changes in the unfunded actuarial accrued liability, the following gain/loss analysis is presented as follows:

**CHANGE IN UNFUNDED LIABILITY**

Unfunded Liability 6/30/2008 \$ 199,757,220

**INCREASES**

Interest on Unfunded Liability	\$ 14,981,792
Changes in Actuarial Assumptions	1,032,469
Change to Back-DROP	671,120
Employer Shortfall Loss	836,752
Investment Loss	63,085,974
Experience Loss	<u>11,854,647</u>
Incurred Increases	92,462,754

**DECREASES**

Net Amortization Payment	<u>9,818,423</u>
Incurred Decreases	9,818,423

Unfunded Liability 6/30/2009 \$ 282,401,551

Board of Trustees  
September 7, 2009

**Funding**

The projected employer contribution rate for the 2009-2010 plan year was set by PERSAC at 41.3%. The actual employer contribution rate determined by this valuation for the current plan year is 51.1%. Therefore, the current plan year should generate a contribution shortfall loss since the PERSAC approved rate understates the valuation rate by 9.8%.

**Legislative Changes**

Act 480 institutes a new BACK-DROP program which will replace the current DROP program for new participants beginning October 1, 2009. The Act mandates that the employee contribution rate be increased to 8.5% on the effective date. The basic difference in the two plans is that BACK-DROP allows an eligible member, at retirement, to look back up to three years and make an election to have entered DROP, based on the service and final average compensation that existed at that time. Benefit adjustments are made to the benefit accruals and employee contributions that occurred during the DROP period.

Act 270 permits the member to make an irrevocable election at retirement to receive a reduced benefit which increases 2.5% annually. The increases begin on the 1<sup>st</sup> retirement anniversary date, but not before the retiree attains age 55 or would have attained age 55 in the case of a surviving spouse. This option is not available to members electing BACK-DROP.

Act 852 of 2008 re-amortizes on July 1, 2009 the outstanding balances of existing increasing bases payable through June 30, 2029 as a level dollar amount. New bases established on and after the effective date will be amortized over a 30 year period as a level dollar amount.

**Comments and Disclosures**

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 Standards Board Statement No. 25.

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, 2009</u>		<u>June 30, 2008</u>	
	<u>Dollar</u>	<u>% of</u>	<u>Dollar</u>	<u>% of</u>
	<u>Amount</u>	<u>Salary</u>	<u>Amount</u>	<u>Salary</u>
I. Normal Costs				
(to fund annual pension accruals)				
Active Members				
a) Retirement Benefits	\$ 13,552,664	22.76%	\$ 12,734,046	22.45%
b) Disability Benefits	439,139	.74%	421,414	.74%
c) Survivor Benefits	394,970	.66%	388,724	.69%
d) Voluntary Termination	744,412	1.25%	681,706	1.20%
e) Expenses	<u>585,000</u>	<u>.98%</u>	<u>575,000</u>	<u>1.01%</u>
TOTAL	15,716,185	26.39%	14,800,890	26.09%
II. Actuarial Accrued Liability				
a) Active Members				
1) Retirement Benefits	\$ 239,706,682		\$ 217,386,970	
2) Disability Benefits	2,392,517		2,333,939	
3) Survivor Benefits	2,551,356		2,519,165	
4) Voluntary Termination	<u>4,865,649</u>		<u>4,805,322</u>	
	249,516,204		227,045,396	
b) Retired and Inactive Members				
1) Regular Retirees	308,544,207		285,319,687	
2) Disabled Retirees	15,520,750		14,574,750	
3) Survivors	42,488,112		41,339,395	
4) Vested Deferred & Transfers	4,173,879		2,895,229	
5) Contribution Refunds	433,377		499,692	
6) DROP Account Balance	34,565,918		33,136,477	
7) DROP Annuity Reserve	<u>23,064,216</u>		<u>33,021,241</u>	
	428,790,459		410,786,471	
c) TOTAL	678,306,663		637,831,867	

Exhibit 1 (Continued)**Costs, Liabilities & Contributions**

	<u>June 30, 2009</u>	<u>--Prior Year--</u> <u>June 30, 2008</u>
II. Actuarial Accrued Liability	\$ 678,306,663	\$ 637,831,867
III. Actuarial Assets	395,905,112	438,074,647
IV. Unfunded Actuarial Accrued Liabilities	282,401,551	199,757,220
a) Change over prior year	82,644,331	41,111,086
b) Funded Percentage	58.37%	68.68%
V. Employer Contributions to Fund		
<u>Current Plan Year<sup>1</sup></u>		
a) Employer Portion of Normal Cost	10,513,509	9,828,430
b) Amortization Payments	27,048,751	13,940,518
c) Prior Contribution Variance	-5,210,674	-4,470,790
GROSS Required Contribution	32,351,586	19,298,158
d) Insurance Premium Tax Fund (IPTF) Offset		
ACT 1160 Normal Cost	993,571	946,742
ACT 1160 Amortization payment	1,653,150	1,581,962
TOTAL ITPF Allocation <sup>2</sup>	1,500,000	1,500,000
TOTAL Required Contribution	30,851,586	17,798,158
	51.1%	30.9%
<u>PERSAC approved Rate</u>	<u>41.3%</u>	<u>27.3%</u>
VI. Projected Employer Contributions		
<u>To Fund 2010-11 Plan Year<sup>1</sup></u>		
a) Employer Portion of Normal Cost	10,806,048	10,104,840
b) Amortization Payments	27,048,751	20,750,170
c) Prior Contribution Variance	-4,755,157	-4,898,045
d) IPTF allocation <sup>2</sup>	-1,500,000	-1,500,000
TOTAL Projected Contribution	31,599,642	24,456,965
	50.9%	41.3%
VII. Current Payroll	59,556,036	56,728,212
Projected Payroll - Mid Year	60,399,430	57,552,683
Projected Payroll - Next Year	62,080,051	59,171,264

<sup>1</sup>Dollar Amounts reflect estimated payments due mid-year on January 1st per Act 81.

<sup>2</sup>ITPF allocation is the lesser of the normal cost plus amortization or \$1,500,000.

## EXHIBIT 2

**FINANCIAL SUMMARY**  
**STATEMENT OF REVENUES AND EXPENSES**  
**FOR FISCAL YEAR ENDING**

	<u>June 30, 2009</u>	-----Prior Years----- <u>June 30, 2008</u>	<u>June 30, 2007</u>
<b><u>OPERATING REVENUES:</u></b>			
1. Contribution Income			
Member	\$ 4,919,092	\$ 4,608,593	\$ 4,020,197
MV Fees	2,829,204	2,983,488	2,990,066
Appropriations	14,834,075	13,753,551	35,940,246
Insurance Premium Tax	1,500,000	1,500,000	1,500,000
2. Other Income			
Transfers/Purchases	1,431,620	1,302,820	1,001,566
Miscellaneous	83,265	137,242	126,861
TOTAL CONTRIBUTIONS	<u>25,597,256</u>	<u>24,285,694</u>	<u>45,578,936</u>
3. Investment Income			
Investments	-77,875,453	-22,178,691	64,971,991
Less, Manager fees	-1,066,596	-1,446,184	-1,236,193
TOTAL INVESTMENT INCOME	<u>-78,942,049</u>	<u>-23,624,875</u>	<u>63,735,798</u>
4. Total Revenues	-53,344,793	660,819	109,314,734
<b><u>OPERATING EXPENSES:</u></b>			
1. General Administration	584,866	572,064	429,042
Other Expenses	2,481	3,472	3,739
2. Benefits Paid			
a) Pension Benefits	36,091,478	33,321,008	30,430,391
b) Transfers Out	193,620	0	0
c) Return of Contributions	113,351	507,995	162,483
TOTAL BENEFITS PAID	<u>36,204,829</u>	<u>33,829,003</u>	<u>30,592,874</u>
3. Total Expenses	36,985,796	34,404,539	31,025,655
<b><u>NET INCREASE:</u></b>	-90,330,589	-33,743,720	78,289,079

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

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

<u>ASSETS</u>	<u>June 30, 2009</u>	<u>-----Prior Years-----</u>	
		<u>June 30, 2008</u>	<u>June 30, 2007</u>
1. Cash Equivalents	\$ 26,030	\$ 73,476	\$ 15,258
Short Term	7,747,883	-	-
2. Bonds			
United States Obligations	13,605,060	17,026,853	16,441,249
Bonds - General	80,481,818	32,137,520	72,336,202
3. Equities			
Property and Equipment	8,188	7,865	7,601
Common Stock - Domestic	93,005,057	124,187,839	137,713,506
- Foreign	40,940,747	53,164,769	57,757,494
Mutual Funds - Index	54,170,395	169,181,860	153,002,886
Real Estate	27,836,803	28,501,687	20,540,706
Alternatives	16,970,262	-	-
4. Receivables (-) Payables	<u>-595,119</u>	<u>245,842</u>	<u>456,529</u>
TOTAL ASSETS - Market Value	334,197,124	424,527,711	458,271,431
- Valued at Cost	363,788,005	386,396,582	376,368,623

**INVESTMENT YIELD:**

Actuarial Value	-7.13%	4.55%	8.63%
DROP Account Yield <sup>1</sup>	0.00%	4.05%	8.13%
Market Value	-18.96%	-5.24%	16.15%

**EXPERIENCE ACCOUNT FUND:**

Prior Year End Balance	0	0	0
+ Experience Account Allocation	0	0	0
- Current Year Distribution	0	0	0
+ Accumulated Interest	<u>0</u>	<u>0</u>	<u>0</u>
Fund Balance - Year End	0	0	0

**ACTUARIAL VALUE OF ASSETS:**

Total Assets, less	334,197,124	424,527,711	458,271,431
Change in Unrealized (G/L)			
Plan Year - 2 (wt. 1/4)	43,877,439	-10,627,587	7,186,740
Plan Year - 1 (wt. 2/4)	-43,771,679	43,877,439	-10,627,587
Plan Year - (wt. 3/4)	<u>-67,722,010</u>	<u>-43,771,679</u>	<u>43,877,439</u>
Gross Actuarial Value of Assets	395,905,112	438,074,647	428,880,461
Less, Side Fund Accounts	<u>0</u>	<u>0</u>	<u>0</u>
Valuation Assets	395,905,112	438,074,647	428,880,461

<sup>1</sup> Effective 7/1/2003 new DROP Accounts are credited with Money Market rates.

## 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)
2000	244,015	337,701	93,686	72.3	33,603	278.8
2001	261,576	355,629	94,053	73.6	32,157	292.5
2002	271,694	386,698	115,004	70.3	31,695	362.8
2003	271,062	447,694	176,631	60.6	44,148	400.1
2004	288,865	477,085	188,220	60.6	47,923	392.8
2005	322,482	516,427	193,945	62.4	49,290	393.5
2006	379,704	546,238	166,534	69.5	49,256	338.1
2007	428,880	587,527	158,646	73.0	49,763	318.8
2008	438,075	637,832	199,757	68.7	56,728	352.1
2009	395,905	678,307	282,402	58.4	59,556	474.2

The total actuarial accrued liability determined using the Individual Entry Age Normal cost method increased by \$40,474,796 from June 30, 2008 to June 30, 2009. There was a change in actuarial assumptions and benefit enhancements resulting from Act 480, increasing the liability \$1,703,589. From all sources, there was a net experience loss of \$74,940,621.

Fiscal year gains/losses are summarized on page 3 under "Change in Unfunded Liability".

<sup>1</sup> UAAL differs from the UFAL for funding purposes. UFAL for funding purposes excludes the Texaco Settlement Fund Assets, which appear on page 9.

**EXHIBIT 3 (Continued)****Pension Accounting & Financial Disclosure****SUPPLEMENTARY INFORMATION****SCHEDULE OF EMPLOYER CONTRIBUTIONS**

<u>Fiscal Year</u>	<u>Actuarial Required Contribution</u> <sup>1</sup>	<u>Percent Contributed</u>	<u>Annual Pension Cost (APC)</u> <sup>1</sup>	<u>Actual Contribution</u> <sup>1</sup>	<u>Percentage of APC Contributed</u>	<u>Net Pension Obligation</u> <sup>1</sup>
2000	20,651,122	114.6	24,171,405	23,661,417	97.9	-10,102,965
2001	20,152,607	120.0	23,198,292	24,174,644	104.2	-11,079,317
2002	21,153,440	124.6	24,483,266	26,362,607	107.7	-12,958,661
2003	24,411,521	107.2	28,272,466	26,126,060	92.4	-10,812,252
2004	30,288,239	87.0	33,855,791	26,347,773	77.8	-3,304,234
2005	33,658,907	87.4	35,886,584	29,432,635	82.0	3,149,715
2006	36,698,310	102.1	37,621,412	37,483,229	99.6	3,287,896
2007	18,482,551	226.8	18,615,913	41,919,040	225.2	-20,015,231
2008	16,208,885	116.7	19,099,665	18,908,564	99.0	-19,824,130
2009	20,705,663	96.0	23,854,267	19,868,911	83.3	-15,838,774

Analysis of the percentage contributed over a period of years will give a relative indication of the funding progress for the liabilities of the Louisiana State Police 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**

Actuarial Required Contribution	20,705,663
Interest on Net Pension Obligation (+)	-1,486,810
Amortization of Net Pension obligation (-)	-4,635,414
Annual Pension Cost	23,854,267
Employer Contribution <sup>1</sup>	19,868,911
Increase (decrease) in Net Pension Obligation	3,985,356
Net Pension Obligation - Beginning of Year	-19,824,130
Net Pension Obligation - End of Year	-15,838,774

<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. 27, paragraph 21.

EXHIBIT 3 (Continued)

## Pension Accounting &amp; Financial Disclosure

## STATISTICAL DATA

COMPARATIVE SUMMARY OF REVENUES BY SOURCE  
AND EXPENSES BY TYPE

## Revenues by Source

<u>Fiscal</u> <u>Year End</u>	<u>Members</u> <u>Contribution</u>	<u>Employer</u> <u>Contribution</u>	<u>Investment</u> <u>Income</u>	<u>Total</u>
2000	2,940,289	22,821,097	10,660,541	36,421,927
2001	2,748,089	23,316,097	-1,388,040	24,676,146
2002	2,880,248	25,426,356	-7,113,040	21,193,564
2003	4,015,207	25,198,210	12,889,340	42,102,757
2004	4,090,079	26,252,523	31,363,198	61,705,800
2005	4,182,096	30,177,649	27,796,776	62,156,521
2006	3,997,156	37,560,697	25,561,079	67,118,932
2007	4,020,197	41,558,739	63,735,798	109,314,734
2008	4,608,593	19,677,101	-23,624,875	660,819
2009	4,919,092	20,678,164	-78,942,049	-53,344,793

## Expenses by Type

<u>Fiscal</u> <u>Year End</u>	<u>Benefits</u>	<u>Refunds</u>	<u>Administrative</u> <u>Expenses</u>	<u>Total</u>
1999	17,551,193	50,912	370,652	17,972,757
2000	19,125,651	223,607	372,549	19,721,807
2001	20,000,815	208,673	396,623	20,606,111
2002	22,197,351	203,420	419,195	22,819,966
2003	22,484,503	193,891	444,651	23,123,045
2004	23,889,741	298,653	429,177	24,617,571
2005	25,216,731	309,370	416,736	25,942,837
2006	27,039,512	218,572	415,344	27,673,428
2007	30,430,391	162,483	432,781	31,025,655
2008	33,321,008	507,995	575,536	34,404,539
2009	36,091,478	113,351	587,347	36,985,796

## EXHIBIT 4

## CENSUS DATA

## GENERAL COMMENTS

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 database. 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

This year there were no records purged from the database containing errors or categorized as suspicious data, which is consistent with recent years' reporting. Suspicious data are not necessarily errors, but is data which falls outside the parameters of the editing process for further checking.

Salary data contained in the profiles and valuation report may exceed the sums reported by internal audit due to salary annualization. Retiree data reflects the benefit amount in pay status on the 1<sup>st</sup> day of the next fiscal year. 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:

	----- June 30 -----		
	---2009---	---2008---	---2007---
	<u>Census</u>	<u>Census</u>	<u>Census</u>
Active Members	1,103	1,059	1,003
Regular Retirees	795	782	780
Disability Retirees	56	55	54
Survivors	324	316	312
Vested & Reciprocals	25	24	23
DROP Participants	<u>18</u>	<u>27</u>	<u>32</u>
TOTAL	2,321	2,263	2,204

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED

LOUISIANA STATE POLICE  
ACTIVE MEMBERS

CELLS DEPICT - MEMBER COUNT  
TOTAL SALARY

VALUATION DATE 6/30/2009

Age	YEARS EMPLOYED									Total	
	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )		
[ 0-19)	0	0	0	0	0	0	0	0	0	0	0
[ 20-24)	16	13	0	0	0	0	0	0	0	0	29
	545889	508592	0	0	0	0	0	0	0	0	1054481
[ 25-29)	29	70	20	0	0	0	0	0	0	0	119
	894609	2846620	897877	0	0	0	0	0	0	0	4639106
[ 30-34)	16	50	87	43	0	0	0	0	0	0	196
	486892	2075234	3900672	2139142	0	0	0	0	0	0	8601940
[ 35-39)	7	24	60	180	40	0	0	0	0	0	311
	216807	1027572	2700732	10182450	2474360	0	0	0	0	0	16601921
[ 40-44)	5	10	13	96	122	8	0	0	0	0	254
	177511	423324	584432	5698770	8158967	560402	0	0	0	0	15603406
[ 45-49)	1	1	9	25	57	19	7	0	0	0	119
	34326	40149	422873	1423878	3845092	1324813	576569	0	0	0	7667700
[ 50-54)	0	0	0	1	20	5	13	0	0	0	39
	0	0	0	56739	1320644	359772	1000225	0	0	0	2737380
[ 55-59)	0	0	0	4	0	7	1	0	0	0	12
	0	0	0	232831	0	470529	70956	0	0	0	774316
[ 60-64)	0	0	0	0	0	1	0	0	0	0	1
	0	0	0	0	0	69019	0	0	0	0	69019
[ 65-69)	0	0	1	0	0	0	0	0	0	0	1
	0	0	49236	0	0	0	0	0	0	0	49236
[ 70-74)	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
TOTALS	74	168	190	349	239	40	21	0	0	0	1081
salary	2356035	6921491	8555822	19733810	15799063	2784535	1647750	0	0	0	57798506

AVERAGES --- Attained Age 38.15  
Service Years 11.05  
Active Salary 53,468

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED

LOUISIANA STATE POLICE  
ACTIVE AFTER DROP

CELLS DEPICT - MEMBER COUNT  
TOTAL SALARY  
DROP BENEFITS

VALUATION DATE 6/30/2009

Age	YEARS EMPLOYED									Total	
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )		
[ 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	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	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	0	0	0
[45-49)	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	0	0	0
[50-54)	6	3	2	0	0	0	0	0	0	0	11
:	519549	234474	168351	0	0	0	0	0	0	0	922374
:	367320	168780	118272	0	0	0	0	0	0	0	654372
[55-59)	0	1	1	1	2	4	0	0	0	0	9
:	0	63437	66307	75622	155774	288427	0	0	0	0	649567
:	0	54600	40284	49572	68328	107148	0	0	0	0	319932
[60-64)	0	0	0	1	0	1	0	0	0	0	2
:	0	0	0	107827	0	77762	0	0	0	0	185589
:	0	0	0	73620	0	22548	0	0	0	0	96168
[65-69)	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	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	0	0
:	0	0	0	0	0	0	0	0	0	0	0
TOTALS	6	4	3	2	2	5	0	0	0	0	22
count	6	4	3	2	2	5	0	0	0	0	22
salary	519549	297911	234658	183449	155774	366189	0	0	0	0	1757530
benefit	367320	223380	158556	123192	68328	129696	0	0	0	0	1070472

AVERAGES --- Attained Age 55.40  
Post Drop Years 2.88  
Active Salary 79,888  
Annual Benefit 48,658

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

LOUISIANA STATE POLICE  
REGULAR RETIREES

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2009

Age	YEARS RETIRED									Total	
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )		
[ 0-39)	0	0	0	0	0	0	0	0	0	0	0
[40-44)	0	0	0	0	0	0	0	0	0	0	0
[45-49)	2	2	3	1	1	0	0	0	0	0	9
[50-54)	8	7	12	24	12	3	7	2	2	2	77
[55-59)	3	0	4	11	13	52	37	48	22	22	190
[60-64)	0	0	1	0	1	20	47	83	56	56	208
[65-69)	1	0	0	0	0	2	10	44	73	73	130
[70-74)	0	0	0	0	0	0	0	17	64	64	81
[75-79)	0	0	0	0	0	0	0	1	58	58	59
[80-84)	0	0	0	0	0	0	0	1	27	27	28
[85-89)	0	0	0	0	0	1	0	1	7	7	9
[90-99)	0	0	0	0	0	0	0	0	4	4	4
TOTALS	14	9	20	36	27	78	101	197	313	313	795
benefit	852972	550896	1193376	2267832	1653996	4164936	4389192	5588784	5926284	5926284	26588268

AVERAGES --- Attained Age 64.20  
Years Retired 17.59  
Annual Benefit 33,444

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

LOUISIANA STATE POLICE  
DISABILITY RETIREES

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2009

Age	YEARS RETIRED									Total	
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )		
[ 0-39)	0	1	0	0	0	0	0	0	0	1	
	0	25980	0	0	0	0	0	0	0	25980	
[40-44)	2	0	0	0	0	0	1	0	0	3	
	73416	0	0	0	0	0	36132	0	0	109548	
[45-49)	1	0	0	0	0	3	2	0	0	6	
	45576	0	0	0	0	73908	59520	0	0	179004	
[50-54)	0	0	0	0	1	0	1	1	2	5	
	0	0	0	0	37380	0	14604	36264	36684	124932	
[55-59)	0	0	0	0	0	0	0	5	8	13	
	0	0	0	0	0	0	0	84372	199068	283440	
[60-64)	0	0	0	0	0	0	1	3	9	13	
	0	0	0	0	0	0	22320	68388	208056	298764	
[65-69)	0	0	0	0	0	0	1	0	7	8	
	0	0	0	0	0	0	24708	0	150888	175596	
[70-74)	0	0	0	0	0	0	0	0	3	3	
	0	0	0	0	0	0	0	0	66000	66000	
[75-79)	0	0	0	0	0	0	0	0	4	4	
	0	0	0	0	0	0	0	0	80664	80664	
[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	
TOTALS	count	3	1	0	0	1	3	6	9	33	56
	benefit	118992	25980	0	0	37380	73908	157284	189024	741360	1343928

AVERAGES --- Attained Age 59.26  
Years Retired 20.68  
Annual Benefit 23,999

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

LOUISIANA STATE POLICE  
SURVIVOR BENEFITS

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2009

Age	YEARS RETIRED									Total
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	
[ 0-39)	0	0	0	0	0	1	4	3	0	8
:	0	0	0	0	0	16944	41736	29064	0	87744
[40-44)	0	0	0	0	0	0	1	0	0	1
:	0	0	0	0	0	0	8964	0	0	8964
[45-49)	0	0	0	0	0	1	1	0	3	5
:	0	0	0	0	0	3972	9600	0	57216	70788
[50-54)	0	0	2	0	0	1	2	1	4	10
:	0	0	41172	0	0	12444	41352	1596	17160	113724
[55-59)	1	0	0	2	0	6	1	6	17	33
:	40680	0	0	75096	0	106248	12024	89436	254556	578040
[60-64)	1	1	0	2	0	4	3	5	32	48
:	25344	42624	0	87516	0	136920	30816	83232	438360	844812
[65-69)	0	0	0	0	0	0	0	4	34	38
:	0	0	0	0	0	0	0	79728	692376	772104
[70-74)	0	0	0	0	0	1	0	0	59	60
:	0	0	0	0	0	37032	0	0	1087416	1124448
[75-79)	0	0	0	0	0	0	0	1	45	46
:	0	0	0	0	0	0	0	15240	741912	757152
[80-84)	0	0	0	0	0	0	0	0	39	39
:	0	0	0	0	0	0	0	0	659748	659748
[85-89)	0	0	0	0	0	0	0	0	23	23
:	0	0	0	0	0	0	0	0	381204	381204
[90-99)	0	0	0	0	0	0	0	0	13	13
:	0	0	0	0	0	0	0	0	205704	205704
TOTALS	2	1	2	4	0	14	12	20	269	324
benefit:	66024	42624	41172	162612	0	313560	144492	298296	4535652	5604432

AVERAGES --- Attained Age 70.35  
Years Retired 71.59  
Annual Benefit 17,298

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

LOUISIANA STATE POLICE  
DROP PARTICIPANTS

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2009

Age	YEARS PARTICIPATED									Total
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	
[ 0-39)	0	0	0	0	0	0	0	0	0	0
[40-44)	0	0	0	0	0	0	0	0	0	0
[45-49)	0	2	0	0	0	0	0	0	0	2
[50-54)	3	5	8	0	0	0	0	0	0	16
[55-59)	0	0	0	0	0	0	0	0	0	0
[60-64)	0	0	0	0	0	0	0	0	0	0
[65-69)	0	0	0	0	0	0	0	0	0	0
[70-74)	0	0	0	0	0	0	0	0	0	0
[75-79)	0	0	0	0	0	0	0	0	0	0
[80-84)	0	0	0	0	0	0	0	0	0	0
[85-89)	0	0	0	0	0	0	0	0	0	0
[90-99)	0	0	0	0	0	0	0	0	0	0
TOTALS	3	7	8	0	0	0	0	0	0	18
benefit	132828	414912	426240	0	0	0	0	0	0	973980

AVERAGES --- Attained Age 51.50  
Years Retired 1.84  
Annual Benefit 54,110

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED

LOUISIANA STATE POLICE  
TERM-VESTED/RECIPROCAL

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2009

Age	YEARS EMPLOYED									Total
	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	
[ 0-19)	0	0	0	0	0	0	0	0	0	0
[ 20-24)	0	0	0	0	0	0	0	0	0	0
[ 25-29)	0	0	0	0	0	0	0	0	0	0
[ 30-34)	0	0	0	0	0	0	0	0	0	0
[ 35-39)	0	0	0	2	0	0	0	0	0	2
[ 40-44)	0	0	1	6	4	0	0	0	0	11
[ 45-49)	0	0	0	5	3	3	0	0	0	11
[ 50-54)	0	0	0	0	0	0	0	0	0	0
[ 55-59)	0	0	0	0	0	0	0	0	0	0
[ 60-64)	0	0	0	0	0	0	0	0	0	0
[ 65-69)	0	0	0	0	0	0	0	0	0	0
[ 70-74)	0	0	0	0	0	0	0	0	1	1
TOTALS	0	0	1	13	7	3	0	0	1	25
benefit	0	0	8244	203808	206712	111708	0	0	0	530472

AVERAGES --- Attained Age 45.79  
Service Years 16.80  
Annual Benefit 21,219

EXHIBIT 5

SUMMARY OF THE STATE POLICE  
RETIREMENT SYSTEM'S PLAN PROVISIONS

**EFFECTIVE DATE:**

Legislative Act No. 293 of 1938

**EMPLOYEE:**

Sworn, commissioned law enforcement officers of the Division of State Police of the Department of Public Safety who have completed the State Police Training Academy Course of Instruction; those members employed on the Effective Date of the Fund, those subsequently employed who did not withdraw employee contributions; the secretary and deputy secretary of the Department of Public Safety, provided they are sworn, commissioned State Police officers as defined above.

**EMPLOYER:**

Division of State Police of the Department of Public Safety of the State of Louisiana

**CREDITABLE SERVICE:**

1. Service as defined as a member of the retirement system.
2. Police duty qualifying as having contributed to the war effort during World War II.
3. Credit for military service, not to exceed four years as follows:
  - a) Members employed prior to September 8, 1977 receive a maximum of three years free military service credit. Members may purchase eligible service credit in excess of three years.
  - b) Members employed on or after September 8, 1977 but prior to September 8, 1978 were eligible to purchase military service credit after one year of employment. Military service credit in a) and b) applied to retirement eligibility.
  - c) Members employed on or after September 8, 1978 were eligible to purchase military service credit; however, such service did not apply to retirement eligibility.
  - d) Upon retirement, all unused accumulated sick and annual leave.

**EMPLOYEE CONTRIBUTIONS:**

7% of earnable compensation; 8% effective July 1, 1989; 8.5% effective October 1, 2009

**EMPLOYER CONTRIBUTIONS:**

State contributions each fiscal year consists of various fees and taxes collected by the Motor Vehicle Office within the Department of Public Safety.

Effective June 29, 2001 - 1.5M from Insurance Premium Tax (see RS 22:1419(A)(3)).

EXHIBIT 5 (Continued)  
Plan Provisions

EARNABLE COMPENSATION:

Full salary earned by an employee in qualified service.

AVERAGE FINAL COMPENSATION:

1. For members employed prior to September 8, 1978

Average annual earned compensation for the highest 12 successive or joined months prior to Retirement or Date of Death.

2. For members employed on or after September 8, 1978

Average annual earned compensation for the highest 36 successive or joined months prior to Retirement or Date of Death.

NORMAL RETIREMENT:

ELIGIBILITY:

1. Attained Age 50 with 10 years of creditable service
2. Employed prior to September 8, 1978, 20 years of service regardless of age
3. Employed after September 7, 1978, 25 years of service regardless of age.

Note: Compulsory retirement at age 65  
(except for the Secretary and Deputy Secretary of the Department of Public Safety).

BENEFIT:

3 1/3% of average final compensation for each year of service

Note: Maximum benefit accrual cannot exceed 100% of Average Final Compensation.

ANNUITY FORM:

An Annuity payable for the lifetime of the member

An Initial Benefit Option is available to retirees who have not participated in DROP. Election pays up to 36 months of regular benefits in lump-sum, with monthly annuity actuarially reduced for life.

An increasing annuity option permits the member to make an irrevocable election at retirement to receive a reduced benefit which increases 2.5% annually. The increases begin on the 1<sup>st</sup> retirement anniversary date, but not before the retiree attains age 55 or would have attained age 55 in the case of a surviving spouse. This option is not available to members electing BACK-DROP

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

**DISABILITY BENEFITS:**

ELIGIBILITY:

1. Non-service related total disability - 5 years of service
2. Service related total disability - condition of employment

BENEFIT:

1. Disabled members eligible will receive a benefit equal to fifty percent of average salary, plus one and one-half percent of average salary for each year of service in excess of ten years.
2. Greater of 100% of Average Final Compensation or 36,000 for loss of sight or hearing, permanent damage to brain or spinal cord, paralysis, loss of organ, or loses the use of a limb

**DEATH BENEFITS:**

ELIGIBILITY:

1. Death of an active member in the line of duty
2. Death of an active member not in the line of duty
3. Death of a retiree or terminated vested member

BENEFIT:

1. Surviving Spouse receives 75% of the Average Monthly Salary
  - A. If no surviving spouse, eligible children under the age of 18 receive the following benefit to be shared equally:

<u>Number of Children</u>	<u>Percentage Average Monthly Salary</u>
1	30%
2	40%
3	50%
4	60%

Benefit ceases at age 18 unless child is handicapped or mentally handicapped. Students may have benefits extended to age 23.

- B. If no surviving spouse and no eligible children, dependent parent(s) will receive 25% of the Average Monthly Salary.

2. Surviving Spouse receives benefits according to the following schedule:

<u>Years of Service at Death</u>	<u>Percentage Average Monthly Salary</u>
5 or less	25%
5 - 10	30%
10 - 15	40%
15 - 20	50%
20 or more	Member's Accrued Benefit

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

- A. If no surviving spouse, eligible children receive benefits in accordance with section 1(A) above.
  - B. If no surviving spouse and no surviving eligible children, dependent parent(s) Receive benefits in accordance with section 1(B) above.
3. Surviving spouse, who was married and living with the member at least two years prior to the date of death, eligible surviving children or the dependent parent(s) shall receive the same monthly pension which was paid to the retired member in the following order of priority: Surviving Spouse, Eligible Children, Dependent Parent(s)

**Note:** Under all survivor benefits, the spouse forfeits benefits upon remarriage if remarriage occurs prior to age 55. Subsequent monthly benefit payments will be made to eligible surviving children or dependent parent(s).

**VESTING:**

All members are entitled to a refund of employee contributions in excess of benefits received upon termination or death of the member or survivor(s).

Any member employed on or after September 8, 1978 who is vested for retirement benefits by virtue of 20 years of service but less than attained age 50, who terminates employment will be vested for disability benefits during the deferred period. This provision was deleted in accordance with Act 679 of the 1991 Legislative Session.

**COST OF LIVING INCREASES:**

HB 658 of 2007 establishes an Experience Account, which is credited with 50% of the excess investment experience gain and debited with 50% of the net investment experience loss. Balances in the experience account accrue interest at the actuarial yield for the System portfolio. If the balance of the Experience Account is sufficient to grant retirees a COLA, the Board may (with concurrence from the Legislature) grant such COLA not to exceed the lesser of the CPI-U or 3%. Benefits are restricted to those retirees who have attained the age of 60 and have been retired for at least one year.

**DEFERRED RETIREMENT OPTION PLAN:**(To be phased out & replaced with BACK-DROP eff. 10/1/2009)

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:**

Any Active member who is eligible to receive a service retirement allowance may begin participation on the eligibility date for a period not to exceed the 3rd anniversary of retirement eligibility.

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

BENEFIT:

Upon termination of employment at the end of or prior to the end of the specified period of participation, a participant will receive, at his option:

- (1) lump sum payment (equal to the payments to the account)
- (2) a true annuity based upon his account; or
- (3) any other option available to a retiree

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

If employment is not terminated after DROP participation, then:

- (1) payment into account shall cease
- (2) payment from account only upon termination of employment, and
- (3) the participant shall resume active contributing membership

Upon termination of employment, the benefit payments indicated above shall be paid. The participant shall receive a supplemental benefit based on additional service rendered since termination of participation in the fund subject to the following:

- (1) Members employed prior to September 8, 1978
  - (a) If additional service was less than 12 months, average compensation figure used to calculate original benefit.
  - (b) If additional service was 12 or more months, the average compensation figure used to calculate the additional benefit shall be based on compensation during the period of additional service.
- (2) Members employed on or after September 8, 1978
  - (a) If additional service was less than 36 months, average compensation figure used to calculate additional benefit shall be that used to calculate original benefit.
  - (b) 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.

Effective 10/1/2009 active members who have not participated in the regular DROP program may elect, at retirement, to participate in BACK-DROP. The basic difference in the two plans is that BACK-DROP allows an eligible member, at retirement, to look back up to three years and make an election to have entered DROP, based on the service and final average compensation that existed at that time. Benefit adjustments are made to the benefit accruals and employee contributions that occurred during the DROP period.

**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 7/1/2003 new DROP accounts are credited with Money Market rates or self directed accounts approved by the Board of Trustees.

## 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.

**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 subject to Corridor Limits of 80% to 120% of the Market Value of Assets.

**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 to the extent that any difference in reporting affects the employer's contribution rate or the yield to the Actuarial Value of Assets.

**ACTUARIAL ASSUMPTIONS:**

The Retirement System is required to conduct an experience study every five years, but the scope of such a study is not necessarily limited to a five year period. The five year observation period (2003-2007) was chosen to coincide with the most recent period of data reporting following the restructuring of the Deferred Retirement Option Program.

**MORTALITY ASSUMPTIONS:**

Pre-retirement deaths and post-retirement life expectancies were projected in accordance with the experience of the RP-2000 Sex Distinct Mortality Table.

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

**DISABILITY ASSUMPTION:**

Rates of total and permanent disability were projected in accordance in accordance with the experience of the RP-2000 Sex Distinct Disability Mortality Table.

**RETIREMENT/DROP ASSUMPTION:**

Retirement rates are based on age and service eligibility requirements for normal benefits. Back-DROP is viewed as an alternative form of retirement benefit elected at the date of retirement. Retirement rates and DROP utilization probabilities are based on the most recent Experience Study.

**TERMINATION ASSUMPTIONS:**

Voluntary termination or withdrawal rates are based upon the most recent Experience Study. During the first five years of employment, the probability of voluntarily terminating is a multiple of the attained age rate in prior reports and a multiple of employment duration in the current valuation as follows:

1st year	1.00x
2nd year	1.50x
3rd year	1.15x
4th year	1.00x
5th year	1.00x

Furthermore, for members terminating with twenty (20) or more years of service it is assumed that 80% will not withdraw their accumulated employee contributions.

**SALARY GROWTH:**

The rates of annual salary growth are base upon the members years of service and are illustrated in the rate tables at the end of this exhibit.

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

**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	1.2	17
30	1.4	15
35	1.7	13
40	1.7	10
45	1.4	8
50	1.1	4

**REMARRIAGE:**

Annuities payable to a 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."

**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 1/2%, net expenses.

**ADMINISTRATIVE EXPENSES:**

Expenses are included in Aggregate Normal Cost and are assumed to be \$585,000 per year. Investment Manager fees are not included in Normal Cost but are treated as a direct offset to investment income. The Employer portion of the Normal Cost excludes an allocation for administrative expenses.

**COST OF LIVING:**

The liability for cost-of-living raises already granted is included in the retiree reserve.

ACTUARIAL TABLES AND RATES  
NEW RATES 6/30/2008

Age	- Death Rates -		Disability Rates	Termination Rates	Retirement Rates	DROP Rates	Dur	Salary Scale
	Male	Female						
18	.000316	.000188	.0020	.0300	.0000	.000	1	1.1550
19	.000331	.000190	.0020	.0300	.0000	.000	2	1.0600
20	.000345	.000191	.0020	.0300	.0000	.000	3	1.0400
21	.000357	.000192	.0020	.0300	.0000	.000	4	1.0400
22	.000366	.000194	.0020	.0300	.0000	.000	5	1.0500
23	.000373	.000197	.0020	.0300	.0000	.000	6	1.0500
24	.000376	.000201	.0020	.0300	.0000	.000	7	1.0500
25	.000376	.000207	.0020	.0300	.0000	.000	8	1.0500
26	.000378	.000214	.0020	.0300	.0000	.000	9	1.0550
27	.000382	.000223	.0020	.0300	.0000	.000	10	1.0600
28	.000393	.000235	.0020	.0300	.0000	.000	11	1.0500
29	.000412	.000248	.0020	.0300	.0000	.000	12	1.0500
30	.000444	.000264	.0020	.0300	.0000	.000	13	1.0500
31	.000499	.000307	.0020	.0250	.0000	.000	14	1.0500
32	.000562	.000350	.0020	.0250	.0000	.000	15	1.0500
33	.000631	.000394	.0020	.0250	.0000	.000	16	1.0500
34	.000702	.000435	.0020	.0250	.0000	.000	17	1.0500
35	.000773	.000475	.0020	.0250	.0000	.000	18	1.0500
36	.000841	.000514	.0020	.0250	.0000	.000	19	1.0600
37	.000904	.000554	.0020	.0200	.0000	.000	20	1.0600
38	.000964	.000598	.0020	.0200	.0000	.000	21	1.0700
39	.001021	.000648	.0020	.0200	.0000	.000	22	1.0600
40	.001079	.000706	.0020	.0200	.0000	.000	23	1.0600
41	.001142	.000774	.0020	.0200	.0000	.000	24	1.0650
42	.001215	.000852	.0020	.0200	.0000	.000	25	1.0650
43	.001299	.000937	.0020	.0100	.0000	.000	26	1.0650
44	.001397	.001029	.0020	.0100	.0000	.000	27	1.0700
45	.001508	.001124	.0020	.0100	.0000	.000	28	1.0700
46	.001616	.001223	.0020	.0100	.0000	.000	29	1.0700
47	.001734	.001326	.0020	.0100	.1000	.000	30	1.0700
48	.001860	.001434	.0020	.0100	.1000	.400	31	1.0450
49	.001995	.001550	.0020	.0100	.1000	.400	32	1.0450
50	.002138	.001676	.0020	.0100	.2500	.400	33	1.0450
51	.002449	.001852	.0020	.0100	.2500	.050	34	1.0450
52	.002667	.002018	.0020	.0100	.2700	.050	35	1.0450
53	.002916	.002207	.0020	.0100	.2700	.050	36	1.0450
54	.003196	.002424	.0020	.0100	.2700	.050	37	1.0450
55	.003624	.002717	.0020	.0100	.2700	.050	38	1.0450
56	.004200	.003090	.0020	.0100	.4200	.050	39	1.0450
57	.004693	.003478	.0020	.0100	.5000	.050	40	1.0450
58	.005273	.003923	.0020	.0100	.5000	.050	41	1.0450
59	.005945	.004441	.0020	.0100	.5000	.000	42	1.0450
60	.006747	.005055	.0020	.0100	.5000	.000	43	1.0450
61	.007676	.005814	.0020	.0000	.5000	.000	44	1.0450
62	.008757	.006657	.0020	.0000	.5000	.000	45	1.0450
63	.010012	.007648	.0020	.0000	.9900	.000	46	1.0450
64	.011280	.008619	.0020	.0000	.9900	.000	47	1.0450
65	.012737	.009706	.0000	.0000	.9900	.000	48	1.0450
66	.014409	.010954	.0000	.0000	.9900	.000	49	1.0450
67	.016075	.012163	.0000	.0000	.9900	.000	50	1.0450
68	.017871	.013445	.0000	.0000	.9900	.000	51	1.0450
69	.019802	.014860	.0000	.0000	.9900	.000	52	1.0450
70	.022206	.016742	.0000	.0000	.9900	.000	53	1.0450
71	.024570	.018579	.0000	.0000	.9900	.000	54	1.0450
72	.027281	.020665	.0000	.0000	.9900	.000	55	1.0450
73	.030387	.022970	.0000	.0000	.9900	.000	56	1.0450
74	.033900	.025458	.0000	.0000	.9900	.000	57	1.0450

## EXHIBIT A

**AMORTIZATION of UNFUNDED  
ACTUARIAL ACCRUED LIABILITY  
JUNE 30, 2009**

<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>
1993	Initial Liability	L	16	171,274,213	0	0	0 <sup>1</sup>
1993	Change in Liability	L	20	21,465,804	20	21,294,386	2,030,848
1994	Change in Liability	L	20	-1,381,660	20	-1,381,660	-130,717
1995	Change in Liability	L	20	20,128,380	20	20,128,380	1,904,316
1996	Change in Liability	L	20	-9,762,782	20	-9,762,782	-923,642
1997	Change in Liability	L	20	4,409,601	20	4,409,601	417,186
1998	Change in Liability	L	20	-2,444,207	20	-2,444,207	-231,243
1999	Change in Liability	L	20	12,418,148	20	12,418,148	1,174,862
2000	Change in Liability	L	20	-21,262,939	20	-21,262,939	-2,011,655
2001	Change in Liability	L	20	14,218,540	20	14,218,540	1,345,195
2002	Change in Liability	L	20	36,882,500	20	36,882,500	3,489,398
2003	Change in Assumptions	L	24	14,644,647	24	14,644,647	1,286,042
2003	Change in Liability	L	20	60,111,382	20	60,111,382	5,687,048
2004	Change in Liability	L	20	16,579,889	20	16,579,889	1,568,599
2005	Change in Liability	L	20	14,086,441	20	14,086,441	1,332,697
2006	Change in Liability	L	20	-11,718,142	20	-11,718,142	-1,108,636
2007	Change in Liability	L	20	13,788,779	20	13,788,779	1,304,536
2008	Change in Assumptions	L	29	9,487,421	29	9,487,421	782,349
2008	Change in Liability	L	20	29,944,312	20	29,944,312	2,832,987
2009	Change in Assumptions	L	30	1,032,469	30	1,032,469	84,316
2009	Change in Benefits	L	10	671,120	10	671,120	94,300
2009	Change in Liability	L	30	74,940,622	30	74,940,622	6,119,965
TOTAL OUTSTANDING BALANCE						298,240,325	27,048,751
<b>EMPLOYER'S CREDIT BALANCE</b>							
2005	Contribution Variance	L	5	4,226,271	1	971,707	1,007,487
2006	Contribution Variance	L	5	-784,919	2	-348,347	-187,114
2007	Contribution Variance	L	5	-23,436,489	3	-15,063,996	-5,586,950
2008	Contribution Variance	L	5	-2,699,680	5	-2,234,890	-643,568
2008	Contribution Variance	L	5	836,752	5	836,752	199,471
TOTAL EMPLOYER CREDIT						-15,838,774	-5,210,674
<b>TOTAL UNFUNDED ACTUARIAL ACCRUED LIABILITY</b>						282,401,551	

<sup>1</sup> Effective 6/30/2006, the accumulated balance of \$50,084,124 in the Texaco Settlement Fund exceeds the outstanding balance of the Initial Unfunded Actuarial Liability. Therefore, the IUAL was liquidated and the corresponding amortization payment eliminated.