

October 8, 2013

Board of Trustees Teachers' Retirement System of Louisiana Post Office Box 94123, Capitol Station Baton Rouge, Louisiana 70804-9123

### Ladies and Gentlemen:

This report presents the results of the actuarial valuation of assets and liabilities, as well as funding requirements, for the Teachers' Retirement System of Louisiana as of June 30, 2013. The format of this report was designed with the intent of highlighting the pertinent results of the valuation and funding requirements.

In preparing this valuation, I have relied upon the information provided by the System regarding plan provisions, plan membership data, plan assets and other matters as detailed in the exhibits of this report. In particular, I have relied upon the statement of assets provided by Hawthorn, Waymouth and Carroll, Certified Public Accountants. We did not audit the data or plan assets but reviewed for reasonableness and consistency with prior year data. Our review concluded that the data is reasonable and consistent with the prior year's data.

The present values shown herein have been estimated on the basis of the actuarial cost method specified in Louisiana Revised Statutes Title 11 Section 22(13). All actuarial assumptions have been adopted by the Board of Trustees and are reasonable and appropriate for the purposes of this valuation. However, the use of another set of assumptions and methods could also be reasonable and could produce materially different results. Actual results may vary from assumptions used to prepare the valuation.

Exhibit 3, "Pension Accounting and Financial Disclosure", contains disclosure of the accrued liabilities required by the Governmental Accounting Standards Board Statement No. 25. This report has been prepared in accordance with actuarial standards of practice, and to the best of my knowledge, fairly reflects the actuarial present value of accrued benefits of the Teachers' Retirement System.

I am a member of the American Academy of Actuaries and an Associate in the Society of Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Shelley R. Johnson, MAAA, ASA

Shelley R. Johnson

Actuary

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# SUMMARY OF VALUATION RESULTS

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

F			Prior Y	ears
		June 30, 2013	June 30, 2012	June 30, 2011
I.	Membership Census			
	1) Retirees	71,031	67,657	65,512
	2) Actives	82,910	84,513	86,742
	3) DROP	2,451	2,637	3,032
	4) Terminated Vested	5,991	6,439	5,852
II.	Annual Benefits	\$1,644,237,684	\$1,548,631,764	\$1,471,714,284
III.	Current Payroll			
	Regular Teachers	3,155,147,352	3,220,120,617	3,418,593,800
	Higher Education	546,602,349	562,139,355	452,162,646
	Lunch A	1,755,008	2,610,172	6,388,920
	Lunch B	22,821,041	23,890,450	25,501,168
	Total	3,726,325,750	3,808,760,594	3,902,646,534
IV.	Valuation Assets	14,677,798,360	13,584,408,961	13,286,294,879
V.	Investment Yield			
	Market Value (Total Assets)	12.57%	-0.39%	24.91%
	Market Value (Excl LaDROP Assets)	12.79%	-0.32%	25.55%
	Actuarial Value	13.41%	5.05%	6.44%
	DROP	12.91%	4.55%	5.94%
VI.	Experience Account	211,094,496	0	0
VII.	Total Normal Cost	502,440,427	521,143,768	555,850,391
	Total Normal Cost (% of Payroll)	13.48%	13.68%	14.24%
	Employer Normal Cost (% of Payroll)	5.04%	5.22%	5.81%
VIII.	Unfunded Actuarial Accrued Liability	11,339,909,944	10,955,670,910	10,810,458,897
IX.	Funded Percentage	56.4%	55.4%	55.1%
X.	Funding Requirements (Mid-year Pmt)			
1	) Employee Contribution	302,615,214	312,565,974	320,347,489
	Reg Teachers/Higher Ed	8.00%	8.00%	8.00%
	Lunch Plan A	9.10%	9.10%	9.10%
	Lunch Plan B	5.00%	5.00%	5.00%
2	) Employer Contribution	1,154,955,269	1,088,298,250	1,064,568,518
	Aggregate Rate (Current Year) <sup>1</sup>	27.3%	25.0%	24.0%
3	Projected Employer Contribution	1,207,974,917	1,211,086,287	1,116,280,330
	Aggregate Rate (Next Year) <sup>2</sup>	27.7%	27.1%	24.5%

The above funding requirements measure the cost of benefits that were in effect on June 30, 2013, and Acts of the 2013 Regular Legislative Session.

Reflects the restated aggregate employer contribution rate for the fiscal year following the valuation, as determined by the current year valuation.

Reflects the projected aggregate employer contribution rate for fiscal year that begins one year after the valuation date.

# **Projected Contribution Rates by Plan:**

Act 716 of the 2012 Regular Legislative Session requires the employer rate to be individually determined for each plan type as defined within the Act beginning with Fiscal Year 2012/2013. The term "plan" is used to define each employer group defined in the Act, and not to imply that each group has a separate plan of benefits. The normal cost portion of each plan's employer contribution rate varies based upon that plan's benefits, member demographics, and the rate contributed by employees. The shared UAL contribution rate is determined in aggregate for all plans. The UAL established due to a specific plan or group of plans due to legislation will be allocated entirely to that plan or those plans. The employer rates by plan are as follows:

		Recommended Employer Rate for FY 14/15								
						Total				
	Total	Employee	Employer	Shared	Particularized	Employer				
	Normal	Normal Cost	Normal Cost	UAL	UAL	Contribution				
	Cost Rate	Rate	Rate	Rate	Rate	Rate				
Regular Teachers	13.3%	8.0%	5.2545%	22.7%	0.0%	27.9%				
Higher Education	11.7%	8.0%	3.6658%	22.7%	0.0%	26.3%				
Lunch Plan A	19.5%	9.1%	10.4157%	22.7%	0.0%	33.1%				
Lunch Plan B	12.4%	5.0%	7.4148%	22.7%	0.0%	30.1%				
Aggregate Rate	13.0%	8.0%	5.0371%	22.7%	0.0%	27.7%				

The reduction in the Higher Education Normal Cost rate from the prior year's valuation is a result of the increase in assumed withdrawal rates, following the experience study recently adopted by the Board. The variation in normal cost by plan reflects differences in benefits, actuarial assumptions, and member demographics based on the projected unit credit cost method, as required by statutes. One aspect of this method is that the average normal cost tends to increase as the average age of plan members increases. The aggregate normal cost rate would be expected to remain fairly level if the average membership age for all plans remains level. The entry age normal cost method would result in more stable funding requirements by plan in the event of changing demographics.

# Changes in Funding Requirements and UAL

The basic elements of the annual required contribution are the normal cost and amortization of the Unfunded Actuarial Liability (UAL). The normal cost is the annual cost to provide an additional year of benefit accrual. The normal cost is divided into the employee portion and the employer portion, both expressed as a percentage of payroll. Statutes provide for the amortization of the IUAL plus subsequent changes in benefits, methods or gain/loss experience.

The Actuarial Valuation for the plan year ending June 30, 2013, discloses an increase in the value of the plan's unfunded accrued liability and a decrease in prospective funding requirements. However, the required employer contribution as a percentage of payroll has increased. Changes in the required contribution are usually the result of changes in actuarial assumptions, and/or gains or losses resulting from actual experience differing from expected plan experience, and expected changes in the UAL payment due to statutory requirements. Changes in the employer contribution rate are impacted by both the change in the total dollar required contribution and by the total aggregate payroll for active members. The changes most affecting the increase in liability are the decrease in the discount from 8.25% to 8.00% and the change in mortality assumptions. The increase was partially offset by an investment experience gain relative to the assumed actuarial rate, the increase in assets that resulted from the change in the asset valuation method, and an experience gain from assumptions other than the investment assumption. The increase in the projected employer rate was due to many factors, as shown below.

The total of the items contributing to the contribution rate change may not exactly equal the actual contribution rate change due to rounding and since the items impacting the rate do not operate in isolation of each other, hence are not additive.

Aggregate	Contribution	Rate	Change	from	FY	13/14	to ]	FΥ	14/15

Normal Cost (demographic change)	0.0%
Normal Cost (experience study assumption change)	-0.7%
UAL Payment	
Investment Experience Gain	-1.3%
Other Experience Gain	-0.2%
Asset Valuation Method Change	-0.1%
Experience Account Allocation	0.5%
Experience Study Assumption Change	0.7%
Statutory UAL Payment Increase	0.9%
Contribution Variance Payment Change	0.4%
Payroll Change	0.7%
Total	0.8%
Actual Contribution Rate Change	0.6%

A reconciliation of the change in the UAL from the prior year is shown below:

# **Change In Unfunded Actuarial Accued Liability**

Unfunded Liability - June 30, 2012		\$ 10,955,670,910
Interest on Unfunded Liability	\$ 903,842,850	
Employer Amortization Payment	(919,796,518)	
Contribution Variance	11,400,601	
Investment Experience Gain	(570,815,797)	
Other Experience Gain	(71,795,294)	
Experience Account Allocation	211,094,496	
Assumption Changes (discount rate)	580,606,082	
Assumption Changes (experience study changes)	291,075,809	
Asset Valuation Method Change	(51,373,196)	
Total Change		384,239,034

Unfunded Liability - June 30, 2013

\$ 11,339,909,944

The aggregate employer contribution rate established by the Public Retirement Systems' Actuarial Committee for the 2013/2014 plan year was 27.1%. The restated employer contribution rate determined by this valuation for the 2013/2014 plan year is 27.3%. Therefore, an employer contribution deficit of 0.2% is expected in next year's valuation.

# Legislative/Plan Changes

Act 483 of 2012 created a cash balance plan for all Higher Education members whose first employment for membership in a state retirement system affected by the Act occurred on or after July 1, 2013. The plan was suspended to July 1, 2014, during the 2013 legislative session. On June 28, 2013, the Louisiana Supreme Court ruled that the plan enacted in 2012 required a two-thirds vote of the legislature, which did not occur, so was unconstitutional. Given the Supreme Court's ruling, the plan will not take effect.

### **Actuarial Assets/Valuation Assets**

Because the market value of assets can be volatile from one year to the next, an asset valuation method is generally used to adjust the market value of assets to smooth the effects of short-term volatility. The adjusted asset value is called the actuarial value of assets. The Board adopted a change in the asset valuation method, effective for the June 30, 2013 valuation. The method changed from smoothing (or gradually recognizing) unrealized appreciation/depreciation over four years to smoothing investment gains/losses relative to the assumed rate over five years. Under the current method, an increase in asset turnover may cause a significant change in the actuarial value of assets. The change was recommended in order to eliminate this aspect, to decrease contribution rate volatility even more so than current method by smoothing over five years rather than four, to bring continuity between other Louisiana State and Statewide retirement systems that have recently changed to this method, and to allow for better prediction of the impact of changes in funding requirements due to investment results.

The net increase in the actuarial value of assets due to the change in method, after adjusting for the portion of interest to be credited to DROP accounts, is \$51,373,196. If the change had not occurred, this increase in assets would have been recognized gradually over the next 3 years. Since the increase in assets is accelerated recognition of prior year's investment experience gains/losses not yet recognized, a portion of this change will be allocated to the experience account. This change, less the portion allocated to the Experience Account, will be amortized over 30 years with level payments.

The gross actuarial assets represent the total assets to fund all liabilities of the pension plan as well as side-fund accounts dedicated for other programs. The valuation assets exclude the side-fund accounts for purposes of determining the employer contribution rate as illustrated in Exhibit 2.

The side-fund accounts excluded from valuation assets are as follows:

- <u>Employer Credit Account</u>: This account, established by Act 588 of 2004, is credited with the excess of the contributions at the statutory minimum rate of 15.5% over the Actuarially Required Contribution (ARC). The account continues to have a \$0 balance.
- <u>LSU Agriculture and Extension Service Fund</u>: Participants of the LSU Agriculture and Extension Service receive supplement benefits from TRSL equal to the difference between the TRSL benefit formula and the Federal Civil Service formula. The funding is recorded separately in the side-fund with assets co-mingled with the actuarial value of assets. The current balance is \$1,322,042.

• Experience Account Fund: The account is used to fund permanent benefit increases for retirees. Fifty percent of any excess return above \$200,000,000 will be credited to the Experience Account. The benefit increase granted must be funded at 100% of the actuarial cost. The account balance is restricted to the reserve for two permanent benefit increases. The current balance of the fund is \$211,094,496, the value of the allocation on June 30, 2013.

# Plan Experience

The actuary is charged with recommending actuarial assumptions based on the best estimate of future plan experience to properly fund future benefits. These assumptions, which are adopted by the Board of Trustees, are detailed in Exhibit 6 of the valuation report. The results of the actuarial valuation are dependent on the actuarial assumptions used. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. If the actual experience differs from the projected experience, a gain or loss occurs. This gain or loss is then amortized over a thirty year period with level dollar payments.

# **Economic/Investment Experience**

For the plan year ending June 30, 2013, the realized actuarial rate of return of 13.41% exceeded last year's assumed rate of 8.25%, used to discount benefits. This return is based upon the June 30, 2013 actuarial value of assets, which includes the change in asset valuation method. Therefore, the actuarial rate of return includes investment returns recognized in the prior plan year due to the change in method. The result was a net investment experience gain of \$570,815,797 relative to projected investment income, based on the actuarial value of assets prior to changing the asset valuation method. The additional net gain of \$51,373,196 due to the method change, after adjusting for the experience account allocation, will be amortized as a separate base. Both gains are net of the interest to be credited to DROP accounts.

Per Act 497, if the actuarial return exceeds the assumed rate, the first \$100,000,000 of investment gains will be used to reduce and re-amortize the OAB. The next \$100,000,000 of investment gains will be used to reduce and re-amortize the EAAB. Fifty percent of any additional excess return is credited to the Employee Experience Account. Therefore, the investment experience gains described above, less the portion allocated to the Experience Account, will be amortized over 30 years with level payments.

The historical geometric average rates of return on the actuarial value of assets for plan years ending June 30 are as follows:

1	Actuarial Rate		Geometric	
 	of Return		Average	
2009	-12.31%	5 Year	1.96%	
2010	-0.89%	10 Year	6.42%	
2011	6.44%	20 Year	7.30%	
2012	5.05%	25 Year	7.93%	
2013	13.41%	30 Year	8.54%	

# **Demographic Experience and Salary Assumptions**

Demographic assumptions include rates of retirement/DROP, rates at which members become disabled, turnover rates, mortality rates, and several other demographic assumptions. Salary assumptions anticipate future salary increases. During the 2012/2013 plan year, the system incurred an experience gain of \$71,795,294 from plan experience differing from that anticipated by the demographic and salary assumptions.

# **Assumption Changes:**

In addition to experience gains or losses, changes in actuarial assumptions or methods can also impact contribution rates. The change in the discount rate from 8.25% to 8.00% increased plan liabilities by \$580,606,082. A five year experience study was completed in April 2013 based on TRSL's experience through June 30, 2012. All demographic assumptions and salary assumptions were reviewed relative to recent plan experience. As a result of this study, changes to the actuarial assumptions were recommended to the Board of Trustees and adopted. All changes are described in Exhibit 6 of this report. The change in assumptions resulting from the experience study increased plan liabilities by \$291,075,809. The combined effect of all assumption changes is an increase in plan liabilities of \$871,681,891, which impacts the UAL by the same amount. This change will be amortized with 30 year level dollar payments.

# **Funding of Administrative and Investment Expenses**

Expected administrative expenses are included in aggregate normal cost and are assumed to be \$17,300,000, based on prior year expenses. The employer portion of the normal cost and employer contribution rate exclude administrative expenses. Sections 101 and 102 of LA R. S. 11 define employee and employer normal cost. Neither section includes provisions for administrative expenses; therefore these are treated as a direct offset to investment income. Investment manager fees are not included in normal cost and are also treated as a direct offset to investment income.

### **Funding of Future Post Retirement Benefit Increases**

The liability for previously granted benefit increases is included in the retiree reserve. Louisiana law pertaining to TRSL retiree benefit increases provides for the funding of future increases by requiring the automatic transfer of a portion of excess investment earning to the Experience Account. The law does not provide for automatic benefit increases. Many conditions must be met before an increase can be granted, as described in the Post Retirement Increases section of the Summary of Plan Provisions in Exhibit 5 of this report. The legislature has the ultimate authority as to whether or not a future increase will be granted. Since a portion of investment earnings will be used to fund these benefits, which are not accrued benefits of the plan, the accrued benefits are discounted using a net discount rate. The net discount rate is determined as the gross expected long-term return less the expected return used to provide for future retiree benefit increases, investment expenses, and administrative expenses. The expected return used to determine the value of gain-sharing reflects TRSL specific gain sharing provisions: 50% of investment gains, determined using the actuarial value of assets, above the statutory hurdle of \$200 million. While the liabilities in this report do not explicitly include liabilities for future retiree benefit increases, the assumptions recognize that investment earnings will be diverted to fund benefits other than plan accrued benefits. Therefore, the employer contributions include the value of TRSL provisions for future retiree benefit increases. This disclosure is provided in accordance with Actuarial Standards of Practice No. 4.

# Future Funding as a Percentage of Payroll

The employer pays a percentage of the normal cost, excluding administrative expenses, plus a dollar amount sufficient to amortize the unfunded liability. Per constitutional provisions, the employer contribution rate cannot drop below 11.8%, without regard to employer credits, and without a corresponding adjustment to the employee contribution rate. Per statutory provisions, the employer contribution rate cannot drop below 15.5%.

# **Normal Cost**

Act 992 of 2010 revised benefits for TRSL members (excluding Lunch Plan members) whose first employment makes them eligible for membership in a Louisiana State retirement system on or after January 1, 2011. These members are eligible for regular retirement after attaining age sixty with at least five years of service credit and eligible for disability retirement after accruing ten years of service credit, a change from the five year requirement for all other members. Final average compensation is based on the highest sixty months, versus thirty-six months for all other member. Membership in this plan will gradually increase as current members retire or terminate service and new members enroll. The ultimate expected normal cost rate reduction, once all members are enrolled in the new plan, is 1.30% of pay. The savings will be realized gradually as the membership in this plan increases.

# **UAL Payments**

Future payments to amortize the Original Amortization Base (which includes the Initial Unfunded Accrued Liability), the Experience Account Amortization Base will increase as shown in the following table, as required by Act 497 of 2010. All other schedules will have level payments.

	Original	Experience Account
Plan Year	Amortization Base	Amortization Base
2013/2014	7.0%	7.0%
2014/2015 - 2017/2018	6.5%	6.5%
2018/2019 +	2.0%	Level Payments
	2013/2014 2014/2015 – 2017/2018	Plan Year         Amortization Base           2013/2014         7.0%           2014/2015 - 2017/2018         6.5%

If aggregate payroll increases at the same rate as the increase in amortization payments, this would allow the employer contribution rate attributable to the amortization payments to maintain a level percentage of payroll. The aggregate UAL payments for all schedules is shown in exhibit 7-C.

# **EXHIBIT 1**

# **DEVELOPMENT OF** COSTS, LIABILITIES AND CONTRIBUTIONS

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

	June 30, 2013		Prior Yea June 30, 20	
	Dollar Amount	% of Salary	Dollar Amount	% of Salary
I. Normal Costs (annual pension accruals)				
Active Members with Complete Data				
a) Retirement Benefits	376,149,702	10.09%	400,168,156	10.51%
b) Disability Benefits	12,346,039	0.33%	13,636,985	0.36%
c) Survivor Benefits	9,953,472	0.27%	11,373,584	0.30%
d) Voluntary Termination	86,691,214	2.33%	77,565,043	2.04%
e) Expenses	17,300,000	0.46%	18,400,000	0.48%
TOTAL	502,440,427	13.48%	521,143,768	13.68%
II. Actuarial Accrued Liability				
a) Active Members				
1) Retirement Benefits	6,089,231,315		6,196,601,462	
2) Disability Benefits	142,775,895		166,406,007	
3) Survivor Benefits	117,858,857		136,903,174	
4) Voluntary Termination	593,646,964		529,779,407	
	6,943,513,031		7,029,690,050	
b) Retired and Inactive Members				
1) Regular Retirees	14,316,669,060		12,579,520,901	
2) Disability Benefits	381,873,693		362,653,262	
3) Survivors	880,416,660		789,779,038	
4) Vested Deferred <sup>1</sup>	257,044,615		417,025,887	
5) Contributions Refunded <sup>2</sup>	118,843,083		119,287,734	
6) DROP Deferred Benefits	1,970,606,145		2,083,175,860	
<ol> <li>DROP Account Balances</li> </ol>	1,148,742,017		1,158,947,138	
	19,074,195,273		17,510,389,821	
c) Total	26,017,708,304		24,540,079,871	

Includes pending Retirement/Drop applications.
 Includes terminated employee and rehired retiree contributions to be refunded.

# Exhibit 1 (Continued) Costs, Liabilities & Contributions

ts, Liabilities & Contributions		D 1 17
	June 30, 2013	Prior Year June 30, 2012
II. Actuarial Accrued Liability	26,017,708,304	24,540,079,871
III. Valuation Assets	14,677,798,360	13,584,408,961
IV. Unfunded Actuarial Accrued		
Liabilities - Projected Unit Credit <sup>1</sup>	11,339,909,944	10,955,670,910
a) Change over prior year	384,239,034	145,212,013
b) Funded Percentage	56.4%	55.4%
V. Employer Contributions To Fund Current Plan Year <sup>1</sup>		
a) Employer Portion of Normal Cost	190,977,962	204,246,255
b) Amortization Payments	910,388,641	858,114,105
c) Prior Contribution Variance	53,588,666	25,937,890
Total Required Contribution	1,154,955,269	1,088,298,250
Total Contribution Rate	27.3%	25.0%
PERSAC Approved rate <sup>1</sup>	27.1%	24.5%
Aggregate Employer Normal Cost Rate	5.0355%	5.2166%
VI. Projected Employer Contributions To Fund Next Plan Year <sup>1</sup>		
a) Employer Portion of Normal Cost	196,882,998	230,715,099
b) Amortization Payments	943,582,715	923,067,377
c) Prior Contribution Variance	67,509,204	57,288,938
Total Required Contribution	1,207,974,917	1,211,071,414
Total Contribution Rate	27.7%	27.1%
ProjectedAggregate Employer Normal Cost	5.0355%	5.7423%
VII. Current Payroll	3,726,325,750	3,808,760,594
Projected Payroll - Mid Year	3,791,250,659	3,915,342,521
Projected Payroll - Next Year	3,908,476,069	4,017,843,743
ORP - Salary Adjustment Factor <sup>2</sup>	1.14051	1.14345

Dollar Amounts reflect estimated payments due mid-year on January 1st per Act 81. Constitutional Minimum is Il.8% without regard to the statutory minimum of 15.5%.

<sup>&</sup>lt;sup>2</sup> The ORP salary adjustment factor is used to convert amortization payments to percentage of payroll.

# **EXHIBIT 2**

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

		<b>Prior Years</b>					S
			June 30, 2013		June 30, 2012		June 30, 2011
<u>OF</u>	PERATING REVENUES:						
1.	<b>Contribution Income</b>						
	Member	\$	327,767,936	\$	333,908,454	\$	342,323,329
	Employer		980,403,146		974,089,064		850,730,025
	Legis Appropriations		0		0		0
	Other Appropriations		43,000		44,944		42,351
	ORP - Unfunded		111,013,985		107,420,377		89,760,676
	LSU Coop/Ext		2,059,554		1,903,781		1,761,453
	Miscellaneous		1,963,081		1,179,565		1,384,436
	TOTAL CONTRIBUTIONS		1,423,250,702		1,418,546,185		1,286,002,270
2.	<b>Investment Income</b>						
	Investments		1,787,459,766		-25,752,161		2,975,945,440
	Less Advisor Fees		-32,476,075		-30,488,685		-29,952,344
	TOTAL INVESTMENT INCOME		1,754,983,691		-56,240,846		2,945,993,096
3.	Total Revenues		3,178,234,393		1,362,305,339		4,231,995,366
<u>OI</u>	PERATING EXPENSES:						
1.	General Administration <sup>1</sup>		17,284,820		18,424,626		17,652,431
	Other Expenses		377,149		440,291		537,060
2.	Benefits Paid						
	a) Pension Benefits		1,800,166,804		1,682,528,254		1,615,778,191
	b) Return of Contrib.		59,152,481		49,139,028		42,248,487
	TOTAL BENEFITS PAID		1,859,319,285		1,731,667,282		1,658,026,678
3.	Total Expenses		1,876,981,254		1,750,532,199		1,676,216,169
<u>NE</u>	T MARKET VALUE INCREASE:		1,301,253,139		-388,226,860		2,555,779,197

<sup>&</sup>lt;sup>1</sup> The 2011, 2012, and 2013 General Administration operating expense includes \$1,477,395, \$1,050,097, and \$974,146 respectively for Other Post-Employment Benefits (OPEB).

# EXHIBIT 2 (Continued) Financial Summary

# FINANCIAL SUMMARY STATEMENT OF ASSETS FOR FISCAL YEAR ENDING

			Prior Years			
ASSETS:		June 30, 2013		June 30, 2012		une 30, 2011
1. Short Term Assets						
Cash in Banks	\$	199,799,910	\$	198,662,009	\$	195,123,547
Short Term Secutities		1,005,978,360		884,290,767		738,220,668
2. Bonds						
Domestic issues		1,611,411,082		1,477,406,933		1,374,952,322
Foreign Issues		1,162,848,924		972,447,063		669,538,563
3. Equities (at market)						
Domestic		4,322,095,263		3,794,815,270		3,975,570,172
International		3,148,691,961		2,904,306,050		4,094,745,522
Private Equity		3,927,445,271		3,874,754,802		3,371,913,438
4. Other Assets						
Fixtures/Properties		4,027,869		4,148,693		4,298,781
Receivables less Payables		107,938,220		78,152,134		152,847,568
TOTAL ASSETS - Market Value		15,490,236,860		14,188,983,721	1	4,577,210,581
Cost Value		14,874,504,768		14,323,159,913	1	3,973,613,138

# **ACTUARIAL VALUE OF ASSETS**

The Board of Trustees adopted a new asset valuation method, effective June 30, 2013. The prior method of determining the actuarial value of assets was the market value of assets adjusted for a four year weighted average of the unrealized gain or loss in the value of all assets. Realized gains and losses were immediately recognized. The adjusted asset value was subject to Corridor Limits of 80% to 120% of the Market Value of Assets. Due to this method's differing treatment of realized and unrealized gains and losses, an increase in asset turnover may cause a significant change in the actuarial value of assets.

The recently adopted method adjusts the market value of assets to gradually recognize investment gains and losses relative to the net assumed investment return, over a 5 year period in 20% increments. The adjusted asset value is subject to Corridor Limits of 80% to 120% of the Market Value of Assets.

# EXHIBIT 2 (Continued) Financial Summary

# **ACTUARIAL VALUE OF ASSETS (Prior Method):**

ASSETS	June 30, 2013		June 30, 2012	June 30, 2011
Market Value of Assets	\$ 15,490,236,860	\$	14,188,983,721	\$14,577,210,581
Change in Unrealized Appreciation:				
Current Year -2	1,840,353,873		948,357,108	(2,255,233,815)
Current Year -1	(737,773,635)		1,840,353,873	948,357,108
Current Year	749,908,284		(737,773,635)	1,840,353,873
Preliminary Actuarial Value of Assets	\$ 14,836,603,996	\$	13,585,047,734	\$13,286,575,076
CORRIDOR LIMITS				
Minimum = 80% of Market Value	12,392,189,488		11,351,186,977	11,661,768,465
Maximum = 120% of Market Value	18,588,284,232		17,026,780,465	17,492,652,697
Actuarial Value of Assets	\$ 14,836,603,996	\$	13,585,047,734	\$13,286,575,076

# ACTUARIAL VALUE OF ASSETS (New Method, Effective 6/30/2013):

Plan Year		Asset G/L	Deferred %		Deferred \$
2010	\$	382,530,364	20%	\$	76,506,073
2011		1,970,321,330	40%		788,128,532
2012		(1,245,166,296)	60%		(747,099,778)
2013		603,108,919	80%		482,487,135
				\$	600,021,962
Market Value of	Asse	ets		\$	15,490,236,860
Deferred Asset G/	L				600,021,962
Preliminary Actua	rial V	alue of Assets		\$	14,890,214,898
CORRIDOR LIM	ITS				
Minimum = 80%	of M	arket Value		\$	12,392,189,488
Maximum = 12	0% c	of Market Value			18,588,284,232
Actuarial Value of	f Asse	ts		\$	14,890,214,898
Actuarial Value of	Asse	ts - Prior Method		\$	14,836,603,996
Actuarial Value of Assets - New Method					14,890,214,898
Change in AVA de	ue to	Change in Method		\$	53,610,902

INVESTMENT YIELD	June 30, 2013	June 30, 2012	June 30, 2011
Yield to Actuarial Value <sup>1</sup>	13.41%	5.05%	6.44%
Five Year Actuarial Value 1	1.96%	0.43%	2.30%
Yield to Market Value	12.79%	-0.32%	25.55%
DROP Account Yield	12.91%	4.55%	5.94%

Yield values exclude DROP account assets invested in Money Market accounts.

# EXHIBIT 2 (Continued) Financial Summary

# FINANCIAL SUMMARY STATEMENT OF ASSETS FOR FISCAL YEAR ENDING

---- Prior Years ----

				1 1101	1 cars -	
	Jun	e 30, 2013	June	e 30, 2012	June	30, 2011
EMPLOYER CREDIT ACCOUNT 1:						
Prior Year Ending Balance	\$	_	\$	-	\$	_
+ Contributions		-		-		-
- Disbursements		_		_		_
+ Accumulated Interest		-		-		-
Account Balance - Year End		-		-	-	-
LSU AG/EXT SERVICE:						
Prior Year Ending Balance	\$	638,773	\$	280,197	\$	107,621
+ Contributions		2,059,554		1,903,781		1,761,453
- Benefit Disbursements		1,632,154		1,615,226		1,656,739
+ Accumulated Interest		255,869		70,021		67,862
Account Balance - Year End		1,322,042		638,773		280,197
EXPERIENCE ACCOUNT FUND:						
Prior Year Ending Balance	\$	-	\$	_	\$	-
+ Experience Account Allocation		211,094,496		-		-
- Benefit Disbursements		_		-		-
+ Accumulated Interest		-		-		-
Fund Balance - Year End		211,094,496		-		-
DEVELOPMENT OF						
<b>VALUATION ASSETS:</b>						
Actuarial Value of Assets	-	14,890,214,898	\$ 1	3,585,047,734	\$ 12	2,868,591,177
- Employer Credit Account		-		-		-
- LSU Ag/Ext Service Account		1,322,042		638,773		107,621
- Experience Account Fund		211,094,496		-		-
Valuation Assets	1	4,677,798,360	1	3,584,408,961	12	2,868,483,556

<sup>&</sup>lt;sup>1</sup> The Employer Credit Account was created by Act 588 of 2004.

### **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 Accrued	Unfunded			UAAL as a
Actuarial	Actuarial	Liability	AAL		Covered	Percentage of
Valuation	Value of	(AAL)	$(UAAL)^2$	Funded Ratio	Payroll	Payroll
Date	Assets <sup>1</sup> (a)	(b)	(b-a)	(a/b)	(c)	(b-a)/(c)
2004	11,409,404	18,067,486	6,658,082	63.1%	3,017,087	220.7%
2005	12,082,682	18,699,765	6,617,083	64.6%	3,132,169	211.3%
2006	13,088,358	19,390,781	6,302,423	67.5%	2,892,959	217.9%
2007	14,812,298	20,772,330	5,960,032	71.3%	3,224,566	184.8%
2008	15,507,834	22,090,516	6,582,683	70.2%	3,675,014	179.1%
2009	13,500,766	22,839,411	9,338,645	59.1%	3,912,326	238.7%
2010	12,868,484	23,674,842	10,806,358	54.4%	3,977,819	271.7%
2011	13,286,295	24,096,754	10,810,459	55.1%	3,902,647	277.0%
2012	13,584,409	24,540,080	10,955,671	55.4%	3,808,761	287.6%
2013	14,677,798	26,017,708	11,339,910	56.4%	3,726,326	304.3%

The total actuarial accrued liability, determined using the Projected Unit Credit cost method, increased by \$1,477,628,433 from June 30, 2012, to June 30, 2013. There was a net experience gain to the fund from all sources of \$693,984,286. This includes the increase in assets due to the change in asset valuation method. A portion of the increase in assets due to investment earnings was allocated to the Experience Account rather than to reduce the unfunded actuarial accrued liability. See page 4 for complete allocation of change in UAAL.

<sup>&</sup>lt;sup>1</sup> The Actuarial Value of Assets for GASB reporting includes the Employer Credit Account Assets, if any, in the Valuation Assets (see page 12).

<sup>&</sup>lt;sup>2</sup> UAAL differs from the UFAL for funding purposes. UFAL for funding purposes excludes the Initial UAL Amortization Fund Assets and the Employer Credit Account Assets (see page 12).

# **EXHIBIT 3 (Continued)**

# Pension Accounting & Financial Disclosure

# SCHEDULE OF EMPLOYER CONTRIBUTIONS

	Actuarial	Percentage of	Annual		Percentage	
Fiscal	Required	ARC	Pension Cost	Actual	of APC	Net Pension
Year	Contribution	Contributed	(APC)	Contribution	Contributed	Obligation
2004	527,899,270	94.4%	554,174,817	498,236,803	89.9%	-1,688,806
2005	555,169,630	105.6%	568,930,106	586,216,595	103.0%	-18,975,295
2006	555,342,400	103.1%	567,282,575	572,773,243	101.0%	-24,465,963
2007	578,895,501	106.5%	584,362,449	616,429,526	105.5%	-56,533,040
2008	637,097,695	116.2%	644,186,660	740,511,169	115.0%	-152,857,540
2009	697,190,561	106.4%	724,857,452	741,595,487	102.3%	-169,595,575
2010	904,382,657	83.5%	949,341,710	755,446,587	79.6%	24,299,548
2011	1,086,319,774	90.2%	1,101,899,846	980,393,924	89.0%	145,805,469
2012	1,127,265,199	100.0%	1,121,770,185	1,127,265,199	100.5%	140,310,456
2013	1,149,134,132	99.0%	1,133,723,118	1,137,733,532	100.4%	136,300,044

The percentage of ARC contributed provides a general indication of the funding progress for the liabilities of the Teachers' Retirement System of Louisiana. However, it should be noted that employers pay 100% of the required contribution based on a percentage of pay, which is determined following statutory requirements. The employer contribution rate is projected one year beyond the rate for which the ARC is determined. The resulting contribution variance between the ARC and the required employer rate can be either a credit or deficit. If it is a deficit, the deficit is amortized with level dollar payments over a five year period and paid through future employer contributions. If it is a surplus, the surplus is used to reduce and re-amortize the existing UAL schedules.

The Actuarial Required Contribution and the Annual Pension Cost are interest adjusted at the valuation rate to the end of the fiscal year. Calculations are in accordance with GASB's Statement No 27, paragraph 21. Amortization of the Net Pension Obligation is shown in Exhibit A-1.

# **DEVELOPMENT OF NET PENSION OBLIGATION:**

(1) Actuarial Required Contribution	1,149,134,132
(2) Interest on Net Pension Obligation	11,575,614
(3) Amortization of Net Pension Obligation	26,986,626
(4) Annual Pension Cost (1)+(2)-(3)	1,133,723,120
(5) Employer Contribution	1,137,733,532
(6) Increase (decrease) in Net Pension Obligation	-4,010,412
(7) Net Pension Obligation Beginning of Year	140,310,456
(8) Net Pension Obligation End of Year (6)+(7)	136,300,044

# **EXHIBIT 3 (Continued)**

# **Pension Accounting & Financial Disclosure**

STATISTICAL DATA

# COMPARATIVE SUMMARY OF REVENUES BY SOURCE AND EXPENSES BY TYPE

Revenues by Source						
Fiscal	Members	Employer	Investment			
Year	Contribution	Contribution <sup>1</sup>	Income	Total		
2004	264,999,131	479,348,663	1,741,769,825	2,486,117,619		
2005	270,619,181	564,922,509	1,138,249,695	1,973,791,385		
2006	258,412,024	579,277,431 <sup>2</sup>	1,740,872,434	2,578,561,889		
2007	282,326,101	593,819,853	2,622,473,864	3,498,619,818		
2008	323,678,452	753,661,042 <sup>3</sup>	-793,655,054	283,684,440		
2009	344,547,871	714,703,222	-3,287,852,517	-2,228,601,424		
2010	347,114,632	726,567,699	1,289,304,693	2,362,987,024		
2011	342,323,329	943,678,941	2,945,993,096	4,231,995,366		
2012	333,908,454	1,084,637,731	-56,240,846	1,362,305,339		
2013	327,767,936	1,095,482,766	1,754,983,691	3,178,234,393		

Expenses by Type								
Fiscal Administrative								
Year	Benefits	Refunds	Expenses	Total				
2004	1,075,298,667	26,714,645	11,385,025	1,113,398,337				
2005	1,139,814,334	30,391,992	12,717,185	1,182,923,511				
2006	1,204,472,977	38,556,907	13,831,845	1,256,861,729				
2007	1,295,552,338	47,579,251	14,370,760	1,357,502,349				
2008	1,383,381,577	34,285,358	18,498,003 4	1,436,164,938				
2009	1,464,106,312	33,939,436	19,321,250	1,517,366,998				
2010	1,532,526,141	40,210,177	19,100,619	1,591,836,937				
2011	1,615,778,191	42,248,487	18,189,491	1,676,216,169				
2012	1,682,528,254	49,139,028	18,864,917	1,750,532,199				
2013	1,800,166,804	59,152,481	17,661,969	1,876,981,254				

<sup>&</sup>lt;sup>1</sup> Includes Miscellaneous Contribution/Income in addition to direct employer contributions.

Includes \$26,400,000 legislative appropriation from Act 642 of 2006.

Includes \$40,000,000 legislative appropriation from Act 7 of 2008 (2<sup>nd</sup> Extraordinary Session).

<sup>&</sup>lt;sup>4</sup> Includes OPEB expense, beginning in 2008.

### **EXHIBIT 4**

### **CENSUS DATA**

### GENERAL COMMENTS

TRSL provides the data for individual members of the system as of the valuation date. The validity of the results of any actuarial valuation is dependent upon the accuracy of the data base. Our review of submitted information is limited to validation of reasonableness and consistency in several areas, such as age, service, salary, and current benefits. In order to minimize coverage errors (i.e., missing or duplicated individual records) the records are checked for duplicates, and a comparison of the current year's records to those submitted in prior years is made. Records identified as containing suspicious data were assumed to possess the same characteristics of "good data" in the same cohort. Suspicious data are not necessarily errors, but data which fall outside the parameters of the editing process for further checking. The assigned values are based on information from similar records or based on historical averages for similarly situated members. Notwithstanding our efforts to review both census and financial data for apparent errors, we must rely upon the system's administrative staff and accountants to provide accurate information.

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 June 30, 2012 Terminated Vested status is overstated. It contains a number of retirement and DROP applications awaiting final certification.

Disability retirees who have reached normal retirement eligibility requirements are considered regular retirees by TRSL but are classified as disability retirees for purposes of the actuarial valuation. Liabilities are calculated accordingly.

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 in the first year of employment annualizes the salary.

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

	2	013	2012		
Active Members	Census	Avg. Salary	Census	Avg. Salary	
Regular Teachers <sup>1</sup>	69,832	43,158	70,816	43,196	
Higher Education <sup>1</sup>	8,807	58,669	8,980	58,671	
Lunch Plan A	22	22,442	46	22,616	
Lunch Plan B	1,187	18,534	1,220	18,906	
Post DROP	3,062	56,613	3,451	57,615	
Total	82,910	44,945	84,513	45,067	

<sup>&</sup>lt;sup>1</sup> Members employed by Lab Schools were reclassified as Regular Teachers for purposes of the actuarial valuation beginning in 2013. These members were previously included with Higher Education.

# EXHIBIT 4 (Continued)

# **Census Data**

	2013	2012
Retired and Inactive Members	Census	Census
Regular Retirees <sup>1</sup>	60,714	57,619
Disability Retirees	4,049	3,993
Survivors	6,268	6,045
DROP Participants	2,451	2,637
Vested & Reciprocals	5,991	6,439
Inactive Non-Vested (Due Refunds)	18,355	18,069
Total Retired and Inactive	97,828	94,802
Total Members	180,738	179,315
Less Inactive Non-Vested (Due Refunds)	-18,355	-18,069
Total Active and Vested Inactive Members	162,383	161,246

# MEMBER RECONCILIATION

	Active	Active after	Terminated		Retired, Disabled,	
	(Pre-DROP)	DROP	Vested	In DROP	Survivor	Total
June 30, 2012 Valuation	81,062	3,451	6,439	2,637	67,657	161,246
Adjustment for 2012 Pending						
Status <sup>1</sup>	(386)	(16)	(990)	691	695	(6)
June 30, 2012 Adjusted	80,676	3,435	5,449	3,328	68,352	161,240
Additions to Census						
Newly Hired Members	7,127		69			7,196
Change in Status						
New Regular Retirees	(2,049)	(930)	(183)	(723)	3,885	0
New Disability Retirees	(171)		(21)		192	0
New Survivors	(40)	(4)	(9)	(1)	54	0
Active to Terminated Vested	(1,509)		1,509			0
Active to DROP	(421)			421		0
Terminated Vested to Active	395		(395)			0
Disability to Active	1				(1)	0
Disability to Term Vested			2		(2)	0
DROP to Active After DROP		568		(568)		0
Eliminated from Census						
Refunded or Due Refund	(4,073)		(409)			(4,482)
Deceased	(30)	(9)	(20)	(5)	(1,466)	(1,530)
Data Revisions	(58)	2	(1)	(1)	17	(41)
June 30, 2013 Valuation	79,848	3,062	5,991	2,451	71,031	162,383

<sup>&</sup>lt;sup>1</sup> June 30, 2013 census data included members pending retirement on June 30, 2013 with a retirement date prior to June 30, 2013. June 30, 2012 data did not include members pending retirement on June 30, 2012.

TRS RETIREMENT SYSTEM ALL ACTIVE MEMBERS

CELLS DEPICT - MEMBER COUNT TOTAL SALARY VALUATION DATE 6/30/2013

: :										:
:Age/Years:	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	: Total
: :										:
: [ 0 - 19): : :	1	0	0	0	0	0	0	0	0	: 1 : 18318
: :	18318	0	0	0	0	0	0	0	0	: 18318 :
: :[20 - 24):	002	001	0	0	0	0	0	0	0	: : 1632
: [20 - 24):	35086746	32585093	199177	0	0	0	0	0		: 67871016
: :										:
:[25 - 29): : :	1137	4327	1577	2	0	0	0			: 7043
: :	48832351	1//332121	6/5661/0	41326	0	0	0	0	0	:293771968
: : : : : : : : : : : : : : : : : : : :	898	3166	4831	1242	2	0	0	0	0	: : 10139
:[30 - 34): : :	38024353	125198095	212602698	60086061	50041	0	0	0		:435961248
: :										:
:[35 - 39): : :	698	2324	3370	3577	834	1	0			: 10804 :487814390
: :	3000/900	92310073	142/40391	1/024433/	44100902	40299	U	U	U	:48/814390
: :[40 - 44):	562	2053	2898	2579	3172	850	2.	0	0	: 12116
: [40 - 44): : :	22886034	79477422	114789280	121988817	168547710	47662881	70645	0	0	: 12116 :555422789
: :										:
:[45 - 49): : :	400	1630	2477	2077	1997	2294	851 48077704	2	0	: 11728
: :	10032730	02430033	71331731	03377304	33323400	120013202	10077701	02230	· ·	:
: : [50 - 54): : : :	347	1179	1981	1935	2127	1788	1891	94	1	: : 11343
: :	14230112	44044193	72560307	75632456	90884805	89100360	108184586	5760965	45038	:500442822
: :										:
:[55 - 59): :										: 8436 :363446280
:	3011230	01070071	03000200	00702003	,0100031		19,13,190	1231,013	1220130	:
: :[60 - 64):	119	492	935	667	841	990	282	152	70	: 4548
: :	5419384	21997392	37899247	29769748	37238531	48244231	16878132	11911857	5427932	:214786455
:										:
:[65 - 69): : :										: 1550 : 79451296
: :										:
: :[70 - 74):										
: :	302898	2303605	3133278	2968177	2141543	3667371	4466366	4146839	4722974	: 27853051 :
: : : : : : : : : : : : : : : : : : :	5227	17101	20003	13935	11090	8015	3659	584	234	: 79848
: ::	221975110	679216742	813999165	628316077	526326829	410439799	209674945	43317001	19711532	:3552977200

AVERAGES --- Attained Age 44.36 Service Years 10.85 Active Salary 44,497

TRS RETIREMENT SYSTEM ACTIVE - REGULAR TEACHERS

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2013

: Total	[35- )	[30-35]	[25=30)	[20-25]	[15-20)	[10-15)	[5-10)	ſ1 <b>-</b> 5)	(0-1)	: : Age/Years:
: : 1 : 18318						0	0	0	1 18318	: :[ 0 - 19): :
: 1500 : 63032752		0	0	0		0	8 199177	773 30991859	719	: [20 - 24): : [ 20 - 24) :
: 6274 : 261927417		0	0	0	0	1 18987	1507 64821246	3873 159181202	893 37905982	: :[25 - 29): :
: 8888 :377569654		0	0	0	2 50041	1203 58074254	4415 193662073	2600 99338723	668	: [30 - 34): : [30 - 34):
: 9599 :424106299		0	0	1 48299	819 43316313	3408 169219018	2975 121986571	1874 69779919	522 19756179	: :[35 - 39): :
: : 10866 :487544740	0	0	2 70645	829 46438213	3065 162294291	2369 109334288	2516 94812426	1656 59038511	429 15556366	: [40 - 44): : [30 - 44]:
: 10468 :461952167	0	2 82236	831 46910699	2208 121377020	1857 88264991	1877 75906416	2120 73963127	1267 44108400	306 : 11339278	: : :[45 - 49): : :
: 9974 :429563592	1 45038	82 5269343	1789 102053401	1665 82275656	1976 83836873	1700 63557617	1627 53845066	889 29818752	245 8861846	: : : : : : : : : : : : : : : : : : :
: 7151 :292037609	48 3767462	123 8117522	269 14191355	1636 74492851	1658 69289828	1374 53207726	1251 42922904	628 19930490	164 6117471	: : :[55 - 59): : :
: 3664 :156371455	42 2900954	88 5432425	199 10000901	897 42328220	744 31728266	550 22427266	739 26892176	328 11789762	77 2871485	: [60 - 64): : [60 - 64): : :
: 1144 : 48498128		49 2635953	168 8226771	211 9661553	211 8924925	166 6256807	208 7662462	103 3593348	14 518178	: :[65 - 69): :
: 303 : 11167204 :	15 594159	26 1112625	36 1580728	41 1920888	46 1690946	41 1533283	56 1516513	37 1047306	5 170756	: : :[70 - 74): : :
: 69832 :301378933										

AVERAGES --- Attained Age 44.05 Service Years 11.15

Active Salary 43,158

TRS RETIREMENT SYSTEM ACTIVE - HIGHER EDUCATION

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2013

: :										
:Age/Years:										: Total :
: :	: :	0			0	0	0			: : : : : : : : : : : : : : : : : : :
: [20 - 24): : : : :	83 3224024	47 1577299	0	0		0	0		0	: : 130 : : 4801323 : :
: :[25 - 29): :	: 242 : 10893448 :	445 17996102	69 2728251	1 22339	0	0	0	0	0	: 757 : 31640140 :
:[30 - 34):	218 11354167	547 25541625	402 18689020	38 1983127	0	0	0	0	0	: 1205 : : 57567939 : :
: :[35 - 39): :	165 10138868	421 22314588	369 20276155	164 8932326	14 837512	0	0	0	0	: 1133 : : 62499449 : :
: :	7194832 :	19913272	19223314	12393196	6114430	1207425	0	0		: 1149 : : 66046469 : :
: :[45 - 49): :	84 4585722	301 17314218	288 16105388	138 8476412	111 7018221	81 5128211	15 1038493	0	0	: : 1018 : : 59666665 : :
: :[50 - 54): :	85 5075285	232 13313351	291 17639923	173 10940346	96 5924474	94 6179756	82 5658417	5 332824	0	: 1058 : : 65064376 : :
: :[55 - 59): :	55 3406411	220 14107683	240 15022514	160 9886795	99 5620539	116 7965221	55 4760889	49 4733635	6 461036	: 1000 : : 65964723 : :
: :[60 - 64): :	39 2502307	146 9911892	163 10429878	109 7185902	83 5161731	86 5698323	80 6816380	60 6389752	27 2494299	: 793 : 56590464 : :
: :[65 - 69): :	: 11 : 794361 :	45 2753406	65 4242209	52 3933721	35 2290415	38 2362010	40 4040951	52 5813046	39 4201118	: 377 : 30431237 : :
: [70 - 74): : : : :	3 132142	14 1204469	28 1569300	25 1434894	8 450597	20 1746483	28 2868469	29 2987189	32 4027527	: 187 : : 16421070 : :
									11183980	: 8807 : :516693853 :

AVERAGES --- Attained Age 45.85 Service Years 8.51 Active Salary 58,669

TRS RETIREMENT SYSTEM LUNCH PLAN A

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2013

Age/Cycles: (0-1)	: :										
	:Age/Years:	(0-1)	-	-	-	-	-	-	-	-	
1	: :	•••••					• • • • • • • • • • • • • • • • • • • •				: :
			0	0	0	0	0	0	0	0	: :
	: :	0									
											: :
	:[20 - 24):	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				-				-			
130 - 34	:		· ·		· ·			ŭ	ŭ	· ·	: :
: : : : : : : : : : : : : : : : : : :			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	: :										
:[35 - 39): 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	:[35 - 39):										
: (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 :
[45 - 49]	: :										:
E (45 - 49) : 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	:[40 - 44):										
:: (45 - 49):       0       <			· ·	O	O	O	0	· ·	O	V	: :
: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0	٥	0	0	٥	0	0	Λ	: :
: [50 - 54]: 0 0 0 0 0 0 0 0 0 2 3 0 1 3701 : : [55 - 59]: 0 0 0 0 0 0 0 0 0 0 0 0 0 1 2 0 3 0 133701 : : : [55 - 59]: 0 0 0 0 0 0 0 0 0 0 0 14498 46472 0 0 60970 : : : : : : : : : : : : : : : : : : :											
[50 - 54]: 0 0 0 0 0 0 0 0 0 2 3 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5											: :
: : : : : : : : : : : : : : : : : : :	:[50 - 54):										
: [55 - 59]: 0 0 0 0 0 0 0 0 1 2 0 : 3 : 3 : 3 : 3 : 3 : 3 : 3 : 3 : 3 :			0	0	0	0	0	61622	72079	0	
: 0 0 0 0 0 0 14498 46472 0 : 60970 : : : : : : : : : : : : : : : : : : :	: :										: :
: [60 - 64): 0 0 0 0 0 0 0 1 0 2 1 : 4 : 60 - 64): 0 0 0 0 0 0 25937 0 54986 32679 : 113602 : 655 - 69): 0 0 0 0 0 0 0 0 0 0 0 0 2 1 : 3 : 655 - 69): 0 0 0 0 0 0 0 0 0 0 0 48256 33691 : 81947 : 655 - 69): 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-										
:[60 - 64]:       0       0       0       0       0       1       0       2       1       : 4       :         :       :       0       0       0       0       0       54986       32679       : 113602       :         :		O	U	U	0	U	U	14490	40472	U	: 60970 :
: : 0 0 0 0 0 0 25937 0 54986 32679 : 113602 : : : : : : : : : : : : : : : : : : :		0	0	0	0	0	1	0	2	1	: :
: [65 - 69]: 0 0 0 0 0 0 0 0 0 2 1 3 3 11 7 22 : Total : 0 0 0 0 0 0 25937 76120 258618 133053 : 493728 :											
:[65 - 69):       0       0       0       0       0       0       0       2       1 : 3 : 3 : 81947 :											
: : : : : : : : : : : : : : : : : : :	:[65 - 69):			0	0					1	: 3:
<pre>: : : : : : : : : : : : : : : : : : :</pre>		0	0	0	0	0	0	0	48256	33691	
: : 0 0 0 0 0 0 0 0 0 36825 66683 : 103508 : : : : : : : : : : : : : : : : : : :	: :										: :
: : : : : : : : : : : : : : : : : : :	:[70 - 74):			-							
: : : : : : : : : : : : : : : : : : :	: :	U	U	U	U	0	U	0	30023		
: Total : 0 0 0 0 0 25937 76120 258618 133053 : 493728 :											
	: Total :										
			0	0	0	0	25937	76120	258618	133053	

AVERAGES --- Attained Age 63.38 Service Years 32.90 Active Salary 22,442

TRS RETIREMENT SYSTEM LUNCH PLAN B

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2013

Total	) :										Age/Years:
	:										:
	0 :		0	0	0	0	0	0	0	0	[ 0 - 19):
. 0	0 :		0	0	0	0	0	0	0	0	:
	:										:
36942			0	0	0	0	0	0	1 15935	21007	[20 - 24):
30942	:		U	U	U	U	U	U	13933	21007	:
12	:		0	0	0	0	0	1	9	2	: [25 - 29):
204411	0 :		0	0	0	0	0	16673	9 154817		:
	:										:
46	0 :		0	0	0			14	19		: :[30 - 34):
823655	0 :		0	0	0	0	28680	251605	317747	225623	:
	:										:
72			0	0	0	1	5	26	29	11	[35 - 39):
1208643	0 :		0	0	0	15157	93193	483865	423568	192860	
	:										:
101 1831580			0	0	1 17243	6 138989	14 261333	41 753540	31 525639	8 134836	[40 - 44):
1031300	:		Ŭ	0	17213	130303	201000	733310	323033	131030	:
242	:		0	5	5	29	62	69	62	1.0	: [45 - 49):
4518736				128512		646274					: :
	:										:
306 5681153	0 :		4	18	29	55	62	63	58	17	: [50 - 54): : :
5681153	0:		86719	411146	644948	1123458	1134493	1075318	912090	292981	:
	:										:
282				35 763048	29	60	34	64	51	8	[55 - 59): :
5382979	0 :		20220	763048	600534	1240024	638368	1139870	840501	120414	:
87	:		•					2.2	18	2	:
1710934			34694	3 60851	6 191751	14 348534	156580	577193	18 295738	3 45593	[60 - 64):
	:										:
26	1:		0	0	1	0	4	11	7	2	: :[65 - 69):
439985				0	19206	0	64234		104423	37445	:
	:										:
11 161269	2:		1	1	0	0	0	3	4 51830	0	[70 - 74):
161269	605 :	34	10200	17169	0	0	0	47465	51830	0	:
: 1127	٦ :		ρ	62	71	165	190	325	289	74	Total :
22000285	755 <b>:</b>	68	151833	1380726	1583733	3512436	3591357	5789472	4650565	1271408	Total :
											:

AVERAGES --- Attained Age 51.12 Service Years 10.07 Active Salary 18,534

TRS RETIREMENT SYSTEM ACTIVE AFTER DROP

CELLS DEPICT - MEMBER COUNT TOTAL SALARY DROP BENEFITS

VALUATION DATE 6/30/2013

:		[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	0	0	:
35 - 39):	0	0	0	0	0	0	0	0	0	: 0
:	-	0	0	0	0	0	0	0	-	: 0
:	U	U	U	U	U	U	U	U	U	: 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
	•	•	-	-	-	-	-	•	•	:
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
:										:
50 - 54):	28	10	3	0	1	0	0	0	0	: 42
	1033646	351447	111211	0	20551	0	0	0		: 1516855
:	981300	232104	69576	0	13104	0	0	0	0	: 1296084
:										:
		279	160		81		0	0		: 1007
:	13949804 12246240	17383772			5363897		0	0		: 57023934
:	12246240	11158752	6300708	4812156	3023220	1098288	0	0	0	: 38639364
:	190	160	161	1.50	165	252	1	0	0	: 1180
60 - 64):	19U 5080175	7617874	9560766		10437435			0		: 67002093
:	4360416	3545292	5347548		5503944			0		: 35968392
:	4300410	3343232	3347340	4/312/0	3303944	12440904	39012	O	O	: 33900392
65 - 69):	9	1.5	80	78	54	273	83	2	0	: 594
:	147311	15 691860	3365412			17046835		148861		: 34060598
		138276	1219152	1165848		7156212		56352		: 13740060
:										:
70 - 74):	2	7	4	6	5	93	84	38	0	: 239
:	77329	210117	166254	266297	130297	4064363	5323585	3506829	0	: 13745071
:		36852								: 4462980
:										:
		471					168			: 3062
	21188265									:173348551
Total :	17663496	15111276	13006992	10752600	9642444	21872844	4751724	1305504	0	: 94106880

AVERAGES --- Attained Age 62.49
Post Drop Years 4.02
Active Salary 56,613
Annual Benefit 30,734

TRS RETIREMENT SYSTEM REGULAR RETIREES

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2013

: Total	[20- )	[15-20)	[10-15)	[5-10)	[4-5)	[3-4)	[2-3)	[1-2)	(0-1)	Age/Years:
:										:
	0	0	0	0	0	0	0	0	0	[ 0 - 39):
:	0	0	0	0	0	0	0	0	0	:
:										:
: 9 : 174694		0	0	0	1 7944	10968	200556	28 533280	994200	[40 - 44):
:										:
: : 44	0	0	3	66	42	38	46	105 2450496	149	: [45 - 49):
: 875300·	0	0	35880	1041372	823404	784500	971928	2450496	2645424	:
:										:
: 129 : 2711785	0	1 8028	121 1591224	368 6693648	73 1492128	77 1742064	95 2555364	173 4798872	388 8236524	[50 - 54):
:										:
: 529!	6	168	573	926	380	565	587	911 33281148	1179	: [55 - 59):
:15443919	39636	2066076	8508144	22808364	12957828	20005152	20702328	33281148	34070520	:
:										:
: 1231:	234 3035556	660 9423360	914 19885932	4544 146507508	1010	1082 30425988	1152 31559076	1347 36078240	1369 31056996	[60 - 64): :
:										:
: 1319	734	636	3162	5585	600	635	599	637	608	: :(65 - 69)
:33388706	10740768	12373488	91117584	137984676	14934276	16859604	17207712	17543988	15124968	:
:										:
				2396 56977944				205	122 3263064	[70 - 74):
:	221/1101	37330072	00723344	30377344	3303332	0204900	3437700	3000324	3203004	:
: 772	2571	2472	1761	713	47	56	45	35	26	: [75 - 79]:
:17879965	56340756	57007980		19801440				1198476	741504	:
:										:
				169				10 605796		[80 - 84):
:	00039390	29039212	11/31024	3340990	603096	124044	360336	003790	223000	:
: 284	2461	256	82	29	2	6	2	1	1	: [85 - 89):
				851928		132444	192480	1 36420	9108	:
:										:
: 154	1503	27	11	5	0	0	0	1 4212	0	[90 - 99):
: 2436/01	23404128	001012	296952	T 2 0 \ 0 A	0	0	0	4212	0	:
								3453		Total :
1488831324	7168340 :	75327044 22	2888788 17	98194584 26	57785204 3	78119868	80760276	102219252		:

AVERAGES --- Attained Age 70.15 Years Retired 12.01

Annual Benefit 24,522

REGULAR RETIREES

TRS RETIREMENT SYSTEM DISABILITY RETIREES

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2013

: :Age/Years:										: : Total :
: : : : : : : : : : : : : : : : : : : :	7		7	5	5	8	0	0	0	: : : : : : : : : : : : : : : : : : :
: [40 - 44): : : : :	9 172500	11 205560	14 306336	5 67968	3 50616	23 279024	7 74064	1 9252	0	: : 73 : : 1165320 : :
: [45 - 49): : [45 - 49]: : :	28 501444	22 522108	18 353520	14 216900	15 208812	55 714708	21 215280	7 66072	1 8748	: 181 : 2807592 : :
		40 622200								: 349 : : 4618104 : : :
: : [55 - 59): : : : : :	35 613008	36 492720	43 621516	33 524268	35 415044	170 2075220	133 1529292	62 603780	53 500904	: 600 : 7375752 : :
: [60 - 64): : : : :										: 804 : : 9663048 : : :
: [65 - 69): : : :										: 769 : : 8278176 : : :
: [70 - 74]: : : : :	2 20628		4 64488	0	0	23 290988	138 1328988	156 1375404	249 2619492	: 573 : 5710824 : :
: [75 - 79]: : : :			1 12648	-	0	9 73764	22 191052	66 578460	259 2648448	: 357 : 3504372 : :
: [80 - 84): : : : : : :	0	0	0	0	0	31548	3564			: 185 : 1832568 : :
: [85 - 89): : : : : :	0	0	0	0	0	0	1 8568			: 82 : 82 : 894636 : :
: [90 - 99): : :		0	0	0	0	0	0	0	35 363012	: 35 : : 363012 :

AVERAGES --- Attained Age 64.97 Years Retired 14.48

Annual Benefit 11,560

TRS RETIREMENT SYSTEM SURVIVOR BENEFITS

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS VALUATION DATE 6/30/2013

: :			• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •				· · · · · · · · · · · · · · · · · · ·
:Age/Years:										: Total :
: : : : : : : : : : : : : : : : : : :	45 492864	35 371964	36 302124	38 369552	40 370128	112 978828	38 301032	19 152868	2 7776	: 365 : 3347136 :
: [40 - 44): : [30 - 44]: : : :	9 127764	12 205512	10 113628	9 110544	6 86352	40 507360	21 225876	14 157824	5 38460	: 126 : 1573320 :
: : (45 - 49): : : : : :	11 302868	11 158208	11 139440	13 195420	8 61236	48 445116	37 514320	17 191784	12 156876	: 168 : 2165268 :
: : [50 - 54): : : : : :	13 203736	20 338112	21 219348	14 262260	20 166164	66 843804	54 650148	22 337428	15 185544	: 245 : 3206544 :
: : [55 - 59): : : : :	28 529728	35 648420	28 532224	37 487128	32 409572	106 1890384	57 686292	47 550788	27 270288	: 397 : 6004824
: : [60 - 64): : : : : :	37 943344	44 1090992	48 1154832	45 1070700	39 845760	132 2728704	103 1795632	60 860376	73 861240	: 581 : 11351580 :
: : [65 - 69): : : : :	53 1050336	58 1233132	59 1260336	43 958068	42 963768	213 4558152	148 2999952	94 1534464	97 1212948	: 807 : 15771156 :
: [70 - 74): : [30 - 74]: : : :	58 1376244	59 1415028	62 1627788	46 755532	46 1007220	217 4614720	154 3285168	110 2048568	157 2504688	: 909 : 18634956 :
: : [75 - 79): : : : : :	47 868872	74 1579548	61 1184196	43 1034388	57 1244172	263 5115924	178 3582708	113 2015400		: 1043 : 19935612 :
: : [80 - 84): : : : : :	44 986724	55 966324	41 608652	47 720564	47 836760	163 3232284	140 2509836	102 1934688	176 2774016	: 815 : 14569848 :
: : [85 - 89): : : : : :	27 393504	29 441120	28 503244	25 371376	25 390672	102 1495056	89 1309068	67 998796	140 2199420	: 532 : 8102256 :
: : : : : : : : : : : : : : : : : : :	9 124548	5 94980	6 79344	12 205584	5 74796	56 798588	48 680772	40 491592	99 1386900	: 280 : 3937104 :
	381 7400532									: 6268 :108599604 :

Attained Age 69.37 Years Retired 10.94 AVERAGES --- Attained Age

Annual Benefit 17,326

TRS RETIREMENT SYSTEM DROP PARTICIPANTS

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2013

Age/rears:         (0-1)         [1-2)         [2-3)         [3-4)         [4-5)         [5-10)         [10-15)         [15-20)         [20-]         : Total           [0-39]:         0 <th></th> <th></th> <th> </th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>			 								
[0 - 39] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0										(0-1)	:Age/Years:
[40 - 39]	 :	:	 								: :
[40 - 44]	: 0	0 :	0	0	0	0	0	0	0		
[40 - 44]	: 0	0 :	0	0	0	0	0	0		. 0	: :
[45 - 49]	<b>:</b>	:									: :
[45 - 49] 2 0 0 0 0 0 0 0 0 0 0 0 0 0 37092  [50 - 54] 127 246 159 9 0 0 0 0 0 0 0 0 0 0 541 5455284 10425228 6543192 370968  [55 - 59] 264 478 519 26 0 0 0 0 0 0 0 0 1271160  [60 - 64] 137 242 205 13 0 0 0 0 0 0 0 0 1192016  [60 - 64] 2490300 4733628 4272084 424164  [65 - 69] 3 6 10 0 0 0 0 0 0 0 0 1991 10068 33012 60588 0 0 0 0 0 0 0 0 0 19860  [70 - 74] 0 2 2 0 0 0 0 0 0 0 0 0 19860  [75 - 79] 0 13500 6360 0 0 0 0 0 0 0 0 0 10866  [75 - 79] 0 10320 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 :	: :
[50 - 54]	:	:									: :
[50 - 54]			-	-				-	0		-
: 5455284 10425228 6543192 370968 0 0 0 0 0 0 2 22794672  [55 - 59] : 264			O	Ü	0	V	Ü	· ·	O		
: 5455284 10425228 6543192 370968 0 0 0 0 0 0 2 22794672  [55 - 59] : 264	: • 541	0 :	0	0	0	0	9	159	246	127	: :[50 - 54):
[55 - 59]; 264	: 22794672	0 :									
[55 - 59]: 264											: :
[60 - 64)			0	0	0	0	26	519	478	2.64	:[55 - 59):
[60 - 64)			0	0	0	0	1216356	19618320	17193024		
[60 - 64):       137       242       205       13       0       0       0       0       0       1997         [65 - 69]:       3       6       10       0       0       0       0       0       0       1920176         [65 - 69]:       3       6       10       0       0       0       0       0       0       193668         [70 - 74]:       0       2       2       0       0       0       0       0       0       0       0       0       0       133668         [70 - 74]:       0       2       2       0											
[65 - 69]: 3											:[60 - 64):
[65 - 69]: 3			0	0	0	0	424164	4272084	4733628		
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[70 - 74] : 0 2 2 2 0 0 0 0 0 0 0 0 4 : 0 13500 6360 0 0 0 0 0 0 0 0 19860 : 175 - 79] : 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1320 : 80 - 84] : 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	: 103000	• :	O	Ü	O	O	O	00300	33012	: 10000	: :
: 0 13500 6360 0 0 0 0 0 0 0 19860 : 175 - 79): 0 1 0 1 0 0 0 0 0 0 0 0 0 0 10320 : 180 - 84): 0 10320 0 0 0 0 0 0 0 0 0 0 0 0 10320 : 185 - 89): 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	2	2		
[75 - 79]	19860						-	6360	13500	. 0	
: 0 10320 0 0 0 0 0 0 0 0 0 0 10320	:	:									: :
[80 - 84): 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	: : 1	0 :	0	0	0	0	0	0	1	. 0	: :[75 - 79):
[80 - 84): 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	: 10320	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	:	:									: :
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: : : : : : : : : : : : : : : : : : :								-			
Total : 17082204 32408712 30500544 2011488 0 0 0 0 0 : 82002948	:	:									: :
Total : 17082204 32408712 30500544 2011488 0 0 0 0 0 : 82002948	 :		 							• • • • • • • • • • • • • • • • • • •	
					0	0	48	895	975	533	: Total :
			0	0	0	0	2011488	30500544	32408712		: Total :

AVERAGES --- Attained Age 57.46 Years Retired 1.60 Annual Benefit 33,457

TRS RETIREMENT SYSTEM TERM-VESTED/RECIPROCAL

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2013

Total	) :										Age/Years:
	:										:
0	0 :		0	0	0	0	0	0	0	0	: [ 0 - 19):
	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	:
	:										:
71	0 :		0	0	0	0	0	71	0	0	: [25 - 29):
	0 :		0	0	0	0	0	396193	0	0	:
	:										:
527	0 :		0	0	0	0	28	499	0	0	[30 - 34):
3850059			0	0	0		336817		0	0	:
	:										:
793	0 :		0	0	0	4	175	612	2	0	[35 - 39):
6531692			0	0	0	62832	2274677		5916	0	:
	:										:
1012	0 :		0	0	2	58	284 3120067	660	7	1	: [40 - 44):
8083740			0	0	44301	948634	3120067	3945739	24462	537	:
	:										:
961	0 :		0	2	17	113	282	542	5	0	[45 - 49):
8276517			0	79044	17 410727	1809089	2876800	3090404	10453	0	:
	:										:
1116	0 :		0	16	43	166	359	527	5	0	: [50 - 54):
10067012							3267965	2948702	17941	0	:
	:										:
1069	0 :		1	1.0	31	170	399	455	2	1	: [55 - 59):
9740794			20023					2689947	1251	102	:
	:										:
302	0 :		2	6	19	3.4	84	150	6	1	[60 - 64):
2772859				123805			688375		7906	388	:
	:										:
79	1 :		1	2	3	13	26	31	2	0	[65 - 69):
901476		152	20151	75633				134039	6445	0	:
	:										:
61	1:		3	3	8	11	14	21	0	0	[70 - 74):
726888	145 :	47	66313	3 81518	213469	108314	60565	149564	0	0	:
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				39	123	569	1651	3568	29	3	Total :
51347230	396 :	199	176527	1121706	2909690	8438978	16533112	21892420	74374	1027	Total :

AVERAGES --- Attained Age 47.83 Service Years 9.83 Annual Benefit 8,571

### **EXHIBIT 5**

### SUMMARY OF PLAN PROVISIONS

### **EFFECTIVE DATE:**

August 1, 1936

### **EMPLOYER:**

The State of Louisiana, the parish school board, the city school board, the State Board of Education, the State Board of Supervisors, University or any other agency of and within the State by which a teacher is paid.

# **ELIGIBILITY FOR PARTICIPATION:**

Condition of employment for all teachers

### **CREDITABLE SERVICE:**

Service as a teacher while member of the system.

### ADDITIONAL SERVICE:

- 1. Credit for service canceled by withdrawal of accumulated contributions may be restored by member by paying the amount withdrawn plus interest.
- 2. Service rendered in public school system of another state may be purchased at the actuarial cost of the additional retirement benefit, or at the member's option receive service credit based on the funds actually transferred.
- 3. Credit for service in non-public or parochial schools may be purchased at the actuarial cost of the additional retirement benefit, or at the member's option receive service credit based on the funds actually transferred.
- 4. Maximum of 4 years of credit for military service may be obtained for each member, contingent on payment of actuarial cost.
- 5. Credit for legislative service of former teacher, now legislator, may be purchased at the actuarial cost.
- 6. Conversion of Sick Leave to Membership Service: At retirement, or at death before retirement of member with surviving spouse or dependent or both who are entitled to benefits, unused accumulated sick leave will be added to membership service. Conversion of unused sick and annual leave cannot be used to obtain retirement eligibility. Leave accumulated after January 30, 1990, can be converted to a maximum one year service credit. Leave is converted on the following basis:

# EXHIBIT 5 (Continued) Plan Provisions

Leave Earned Pr	ior to 6/30/88
Accumulated Sick	Fraction of
Days	Year Credit
25-45	0.25 year
46-90	0.50 year
91-135	0.75 year
136-180	1.00 year
181-225	1.25 years
226-270	1.50 years
271-315	1.75 years
316-360	2.00 years

Leave Earned After 6/29/88								
Accumula	Fraction of Year							
9 Month	10 Month	11 Month	12 Month	Credit				
10-18	11-20	12-22	13-24	0.1				
19-36	21-40	23-44	25-48	0.2				
37-54	41-60	45-66	49-72	0.3				
55-72	61-80	67-88	73-96	0.4				
73-90	81-100	89-110	97-120	0.5				
91-108	101-120	111-132	121-144	0.6				
109-126	121-140	133-14	145-168	0.7				
127-144	141-160	155-176	169-192	0.8				
145-162	161-180	177-198	193-216	0.9				
163-180	181-200	199-220	217-240	1.0				

### **EARNABLE COMPENSATION:**

The compensation earned by a member for qualifying service.

# FINAL AVERAGE COMPENSATION

For members whose first employment makes them eligible for membership in a Louisiana state retirement system on or after January 1, 2011, the average annual earnable compensation is the highest 60 successive months of employment. The average compensation for purposes of computing benefits cannot increase more than 15% per year.

For all other members, the average annual earnable compensation is the highest 36 successive months of employment; the average compensation for purposes of computing benefits cannot increase more than 10% per year.

Per R.S.11:892, if the maximum benefit accrual (100%) is reached, employee contributions are discontinued, average final compensation is not limited to the years for which employee contributions were made. Compensation is limited by the Internal Revenue Code Section 401a(17) compensation limit.

# **EXHIBIT 5 (Continued)**

# Plan Provisions

Includes workmen's compensation, and PIP's program in accordance with the following:

	% of Earnings to		
Years of Participation	be Included		
3	60%		
4	80%		
5	100%		

However, if member completed at least two years and subsequently becomes disabled, he shall receive 40% of such earnings. If he has completed one year and becomes disabled, he shall receive 20% of such earnings.

### **ACCUMULATED CONTRIBUTIONS:**

Sum of all amounts deducted from compensation of members.

### **EMPLOYEE CONTRIBUTIONS:**

8% of earnable compensation. Prior to July 1, 1989, 7% of earnable compensation.

# **EMPLOYER CONTRIBUTIONS:**

Determined in accordance with Act 81 of the 1988 Legislative Session based on the Public Retirement Systems' Actuarial Committee's recommendation to the Legislature.

### **NORMAL RETIREMENT BENEFIT:**

# Eligibility and Benefit:

After submitting written application to the Board, members are eligible for the following:

1. Members whose first employment makes them eligible for membership in a Louisiana state retirement system on or after January 1, 2011 may retire with a 2.5% accrual rate after attaining age 60 with at least 5 years of service credit. Members are eligible for an actuarially reduced benefit with 20 years of service at any age.

### 2. For all other members:

If hired on or after July 1, 1999, members are eligible for a 2.5% accrual rate at the earliest of age 60 with five years of service, age 55 with 25 years of service, or at any age with 30 years of service. Members may retire with an actuarially reduced benefit with 20 years of service at any age.

# **EXHIBIT 5 (Continued)**

# Plan Provisions

If hired before July 1, 1999, members are eligible for a 2% accrual rate at the earliest of age 60 with five years of service, or at any age with 20 years of service and are eligible for a 2.5% accrual rate at the earliest of age 65 with 20 years of service, age 55 with 25 years of service, or at any age with 30 years of service.

# Benefit:

Annuity which shall be the actuarial equivalent of accumulated employee contributions at retirement date, and Annual pension, which, together with annuity, provides total allowance equal to the applicable accrual rate times final average compensation times years of creditable service (including unused sick leave). Members hired before June 30, 1986 receive an additional \$300 annual supplemental benefit (Act 608 of 1986).

- A. Annual benefit may not exceed 100% of average earnable compensation.
- B. Legislator's benefit is calculated based on either Teacher's or Legislator's salary but not both for new legislators (their option to choose); employee contribution to be 12% of either salary and expense allowance as legislator, not both.
- C. For Members employed on or after July 1, 1999, the annual pension cannot exceed the maximum benefit provided under Section 415(b) of the Internal Revenue Service Code and related Federal Regulations as adjusted for inflation and form of benefit other than life annuity or qualified joint and survivor annuity for retirement ages as follows:

Age	Maximum	Age	Maximum	Age	Maximum
48	\$ 57,561	56	\$ 116,851	64	205,000
49	62,755	57	128,059	65	205,000
50	68,455	58	140,456	66	205,000
51	74,715	59	154,182	67	205,000
52	81,593	60	169,395	68	205,000
53	89,163	61	186,271	69	205,000
54	97,502	62	205,000	70	205,000
55	106,700	63	205,000		

# **POST RETIREMENT INCREASES:**

Permanent benefit increases, previously referred to as cost of living adjustments, may be granted, with legislative approval, provided there are sufficient funds in the Experience Account to fully fund the increase on an actuarial basis. Beginning July 1, 2009, the Experience Account is credited with fifty percent of excess investment income above \$200,000,000. Excess investment income is investment income in excess of the actuarial valuation rate of 8.25% (8.00% beginning July 1, 2013). Balances in the experience account accrue interest at the average actuarial yield for the System portfolio. The Employee Experience Account balance is limited to the funds necessary to fund two such increases. The Experience Account is debited for the increase in actuarial accrued liability resulting from the increases.

# **EXHIBIT 5 (Continued)**

### **Plan Provisions**

If the actuarial rate of return for the prior plan year is at least 8.25%, regardless of the actuarial valuation rate, the benefit increase is limited to the lesser of 3% or the increase in the CPI-U for the calendar year immediately preceding the increase. If the actuarial rate of return for the prior plan year is less than 8.25%, regardless of the actuarial valuation rate, the increase is limited to the lesser of 2% or the increase in the CPI-U for the calendar year immediately preceding the increase, provided the System is at least 80% funded. If the actuarial rate of return for the prior plan year is less than the actuarial valuation rate and the System is not at least 80% funded, no increase can be granted.

Benefits are restricted to those retirees who have attained the age of 60 and have been retired for at least one year. The minimum age 60 for the receipt of a benefit increase does not apply to disability retirees. The increase shall be based on the first seventy thousand dollars of the retiree's annual benefit, indexed annually for years after 2001.

#### **DISABILITY RETIREMENT:**

# Eligibility:

Members whose first employment makes them eligible for membership in a Louisiana state retirement system on or after January 1, 2011 are eligible with 10 years of service credit. All other members are eligible with 5 years of service; certification of disability by medical board (medical examination required once in every year for the first 5 years of disability retirement, and once in every 3 years thereafter, until age 60).

### Benefit: Act 572 of 1995

- 1. If ineligible for service retirement at disability, disability pension will be 2.5% of average compensation multiplied by years of service. Benefit is limited to 50% of average compensation, but will not be less than the lesser of 40% of the state minimum salary for a beginning teacher with a bachelor's degree or 75% of average compensation.
- 2. Additional 50% of member's benefit payable if minor child is present, but total amount to family limited to 75% of final average compensation.
- 3. Member will become a regular retiree upon attainment of the earliest age for retirement eligibility as if the member continued in service, without further change in compensation. Benefit is based on years of creditable service but not less than the disability benefit. Benefit for minor children continue as long as the retiree has a minor child.
- 4. Upon death of a disability retiree, surviving spouse, married to retiree at least two years prior to death of the disability retiree, shall receive 75% of disability benefit. Upon death of an unmarried retiree with minor children, the benefit shall equal 50% of disability benefit.
- 5. Upon recovery of disability as determined by the board of trustees, upon advice of the medical board, and returns to active membership for at least three years starting no later than one year after recovery, then he shall be credited with one year of service for each year disabled for purposes of establishing benefit eligibility, but not for computation of benefits.

**Plan Provisions** 

#### **SURVIVOR'S BENEFITS (Effective July 13, 1978):**

#### Eligibility and Benefit:

1. Surviving Spouse with minor children of an active member with 5 years of creditable service with at least 2 years earned immediately prior to death; or a member with 20 years of creditable service regardless of when earned or whether in active service at time of death will receive:

The greater of:

- A.) \$600 per month, or
- B.) 50% of benefit that would have been payable upon service retirement at age 60 had member continued in service to age 60 without change in compensation. 50% of spouse's benefit payable for each minor child (not greater than two), with total benefit to family at least equal to the Option 2, accrued Benefit based on actual service credit. Benefits to spouse cease upon remarriage, but resumes upon subsequent divorce or death of new spouse; however, if the member was eligible to retire or had reached age 55 on the date of his death, benefits shall not cease upon remarriage. When minor children are no longer present, spouse's benefit reverts to benefit in B, for eligible spouse.
- 2. Surviving Spouse without minor children of either an active member with 10 years of creditable service with at least 2 years earned immediately prior to death, or a member with 20 years of creditable service regardless of when earned or whether in active service at time of death will receive:

The greater of:

- A.) \$600 per month, or
- B.) Option 2 equivalent of accrued benefit based on actual service. Spouse's benefit payable for life. Benefits to spouse cease upon remarriage, but resumes upon subsequent divorce or death of new spouse; however, if the member was eligible to retire on the date of his death, benefits shall not cease upon remarriage.
- 3. Beneficiary not eligible for 1 or 2 will receive return of member's accumulated contributions.

#### **REFUND OF CONTRIBUTIONS:**

Death prior to retirement - accumulated contributions credited to individual account in annuity savings fund are returnable to designated beneficiary, if any; otherwise, to his estate.

#### **TERMINATION WITH VESTED SERVICE:**

Any member with credit for 5 years of service who withdraws from service may elect to leave accumulated contributions in system until age 60, when he may apply for retirement and begin receiving a retirement benefit based on the credits he had at date of withdrawal.

#### **Plan Provisions**

#### **OPTIONAL FORMS OF BENEFIT:**

In lieu of receiving normal retirement benefit, member may elect to receive actuarial equivalent of retirement allowance in a reduced form as follows:

- Option 1 If a member dies before receiving present value of annuity in monthly payments, balance paid to designated beneficiary.
- Option 2 Reduced retirement allowance, if member dies, to be continued to designated beneficiary for his lifetime.
- Option 3 -One-half of reduced retirement allowance, if member dies, to be continued to designated beneficiary for his lifetime.
- Option 4 Other benefits of equal actuarial value may be elected with approval of board.

Options 2A, 3A, 4A - Same as Options 2, 3, and 4, except that reduced benefit reverts back to maximum if beneficiary predeceases retiree.

<u>Automatic COLA Option</u> – Members may choose an irrevocable election at retirement to receive an actuarially reduced benefit which increases 2.5% annually. The increase begins on the first 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 can be chosen in combination with the above options. (Per Act 270 of 2009, effective July 1, 2009)

<u>Initial Lump Sum Benefit Option</u> - Members who did not participate in DROP may elect an actuarially reduced pension and receive a lump-sum equal to not more than 36 months of the maximum monthly pension.

#### **DEFERRED RETIREMENT OPTION PLAN:**

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

#### Normal Eligibility:

Any member who is eligible to receive a 2.5% service retirement allowance, or who has 10 years of service credit, exclusive of military service, at age 60 may begin participation on the first retirement eligibility date for a period not to exceed the third anniversary of retirement eligibility.

#### Benefit:

Upon termination of employment, 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) other methods of payment approved by the board of trustees.

#### **Plan Provisions**

If a participant dies during the period of participation in the program, his account balance shall be paid to the beneficiary, or if none, to his estate in any form approved by the Board of Trustees.

If employment is not terminated at the end of DROP participation, payments into the account ceases and account earns interest. The participant resumes active contributing membership and earns an additional retirement benefit based on additional service rendered. The method of computation of the additional benefit is subject to the following:

- (1) If additional service was less than the period used to determine Final Average Compensation, average compensation figure to calculate the additional benefit will be the same as used to calculate initial benefit.
- (2) If additional service was earned for a period greater the number of months used to determine Final Average Compensation, the average compensation figure used to calculate the additional benefit will be based on compensation during the period of additional service.

DROP Accounts established prior to January 1, 2004, earn interest following termination of DROP at a rate 0.5% below the actuarial rate of the System's investment portfolio.

DROP accounts established on or after January 1, 2004 are credited with Money Market rates.

#### **Exhibit 5 (Continued)**

**Plan Provisions** 

#### DESCRIPTION OF BENEFITS FOR MERGED LSU EMPLOYEES

#### **GENERAL:**

Eligibility for benefits based on the eligibility requirements of the Teachers' plan, except for deaths and disabilities before 1984. All service, funded and non-funded, is used in determining eligibility.

Final Average Salary was the average of the three highest years, except for academic year employees who retired within three years after January 1, 1979. For this group, any salary used in the Final Average Salary calculation, which was earned before January 1, 1979, was increased by 2/9ths.

The Social Security breakpoint average, for service under the funded LSU plan, was frozen at the December 31, 1978, level. That is, the breakpoint average for funded service was calculated as of December 31, 1978, and kept constant. This produced the following breakpoint averages:

## Social Security Breakpoint Average (for LSU funded service)

Calendar Year of Entry	<b>Breakpoint Average</b>
1971 or before	13,400
1972	13,800
1973	14,600
1974	15,360
1975	15,900
1976	16,500
1977	17,100
1978	17,700

#### **RETIREMENT BENEFITS:**

Retirement benefits calculated using LSU funded service with the LSU formula and service after December 31, 1978, with the Teacher's formula. Thus, the "funded" benefit is (1) 1.33% of final average salary under the Social Security breakpoint average plus 2.5% of final average salary over the Social Security breakpoint average, times years of "funded" service with LSU before December 31, 1978, plus (2) 2.5% (or 2% if total service less than 20 years) times final average salary times years since January 1, 1979, plus \$300.

#### **SURVIVOR'S BENEFITS:**

For deaths after 1983, the provisions of the Teachers' plan apply. However, the benefit is calculated using all service, funded and non-funded, then prorated by service between the funded and non-funded portions. Children's benefits are also prorated into the funded and non-funded portions.

#### **DISABILITY BENEFITS:**

For disabilities after 1983, the provisions of the Teachers' plan apply. However, the benefit is calculated using all service, then prorating by service between the funded and non-funded portions. Children's benefits are also prorated.

#### **Exhibit 5 (Continued)**

#### **Plan Provisions**

#### **VESTING BENEFITS:**

Benefits for terminated vested members was determined as outlined under "Retirement Benefits."

#### REFUND OF CONTRIBUTIONS:

Terminated members are allowed a refund of accumulated contributions as described by the Teachers' plan.

#### **COOPERATIVE EXTENSION PERSONNEL:**

The LSU employees are eligible for the supplemental benefit described in Section 700.2 of Act 643 of 1978. The benefit is equal to 1% for the first five years of service, 3/4% for the next five years, and 1/2% thereafter. The funded benefit is the benefit based on service after September 12, 1975.

#### **OPTIONAL FORMS OF BENEFITS:**

Retiring members may elect options as described by the Teachers' plan.

#### **DEFERRED RETIREMENT OPTION PLAN:**

Eligible members may participate under same requirements as described by the Teachers' plan.

Plan Provisions

#### DESCRIPTION OF BENEFITS FOR MERGED SCHOOL LUNCH EMPLOYEES

#### **EFFECTIVE DATE:**

The School Lunch Employees' Retirement System was originally established on January 1, 1953.

On July 1, 1980, the School Lunch Employees' Retirement System was restructured. All individuals who become employed after July 1, 1980, shall become members of Plan A or Plan B as determined by the agreement in effect for each employer.

Plan A: Parishes which had withdrawn from Social Security coverage became known as Plan A parishes.

Those participating in both the regular and the supplemental plan or only in the supplemental plan shall become members of Plan A.

Plan B: Parishes which had not withdrawn from Social Security coverage became known as Plan B parishes. Those participating only in the regular plan shall become members of Plan B.

Effective July 1, 1983 Plan A and Plan B were merged into TRSL.

**CREDITABLE SERVICE:** Service as an employee while member of the system.

MILITARY SERVICE: Maximum of 4 years of credit may be purchased.

#### ADDITIONAL CREDITABLE SERVICE:

Credit for service canceled by withdrawal of accumulated contributions may be restored by paying into system the amount withdrawn plus regular interest.

#### **EMPLOYEE CONTRIBUTIONS:**

Plan A: 9.10% of monthly earnings Plan B: 5% of monthly earnings

#### **EMPLOYER CONTRIBUTIONS:**

Plan A and Plan B: Actuarial Required Amount (Effective July 1, 1989)

#### Plan Provisions

#### SCHOOL LUNCH PLAN A

#### **RETIREMENT BENEFIT:**

Members hired after June 30, 1983 earn Regular Teachers Benefits. Benefits description below applies to members hired prior to July 1, 1983.

#### **NORMAL RETIREMENT:**

#### Eligibility:

- 1. Age 60 and 5 years of creditable service.
- 2. Age 55 and 25 years of creditable service.
- 3. 30 years of creditable service, regardless of age.

#### Benefit:

3% of average final compensation times years of creditable service.

Members of only the supplemental plan prior to July 1, 1980 who were age 60 or older at the time the member's employer terminated its agreement with the Department of Health, Education and Welfare, and who became a member of the retirement system because of this termination earned 1% of average final compensation plus \$2 per month for each year of service credited prior to July 1, 1980, plus 3% of average final compensation for each year of service credited after July 1, 1980.

\*These members are eligible to retire upon reaching age 70, with less than 10 years of creditable service.

Members hired before June 30, 1986 receive an additional \$300 annual supplemental benefit.

Benefits are limited to 100% of average final compensation.

#### **DISABILITY RETIREMENT:**

#### Eligibility:

Five years of creditable service; certification of disability by the State Medical Disability Board.

#### Benefit:

Normal retirement allowance if eligible; otherwise, an amount equal to the normal retirement allowance to which the member would have been entitled had he met eligibility requirements; provided the amount is subject to a minimum of 60% and a maximum of 100% of average final compensation, in the event no optional selection is chosen.

#### **Plan Provisions**

#### **SURVIVOR'S BENEFITS:**

#### Eligibility:

- 1. Surviving spouse with minor children of a member with 5 years of service credit with at least 2 years earned immediately prior to death, or 20 years of service credit regardless of when earned or whether the deceased member was in active service at the time of death.
- 2. Surviving spouse with no minor children of member with 10 or more years of service credit with at least 2 years earned immediately prior to death, or 20 years of service credit regardless of when earned or whether the deceased member was in active service at the time of death.
- 3. Beneficiary not eligible for 1 or 2.

#### Benefit:

- 1. Greater of:
  - A. \$600 per month, or
  - B. 50% of benefit that would have been payable upon retirement at age 60 had member continued in service to age 60 without change in compensation. 50% of spouse's benefit payable for each minor child (maximum two children), with total benefit to family at least equal to the Option 2 benefit. Accrued Benefit based on actual service credit. Benefits to spouse cease upon remarriage, but will resume upon subsequent death or divorce. When minor children are no longer present, spouse's benefit reverts to benefit in (2), if spouse is eligible for such benefit.
- 2. Greater of:
  - A. \$600 per month, or
  - B. Option 2 equivalent of accrued benefit based on actual service. Surviving spouse must have been married to the deceased member at least one year prior to death. If the member had not been eligible for retirement upon date of death, benefits to spouse cease upon remarriage, but resume upon subsequent death or divorce of new spouse.
- 3. Return of member's accumulated contributions.

#### Plan Provisions

#### SCHOOL LUNCH PLAN B

#### **NORMAL RETIREMENT:**

#### **Eligibility**:

- 1. Age 60 and 5 years of creditable service.
- 2. Age 55 and 30 years of creditable service.

#### Benefit:

Annual pension which provides total allowance equal to 2% of average final compensation times years of creditable service. Members hired before June 30, 1986 receive an additional \$300 annual supplemental benefit.

#### NOTE:

Benefit reduced by 3% for each year under age 62, unless member has 25 years of creditable service.

#### **DISABILITY RETIREMENT:**

#### Eligibility:

Five years of creditable service; certification of disability by the State Medical Disability Board.

#### Benefit:

Normal retirement allowance if eligible therefore; otherwise 2% of average final compensation times years of creditable service; provided amount not less than 30%, nor more than 75% of average final compensation, in the event no optional selection is made.

#### **SURVIVOR'S BENEFITS:**

Eligibility: Twenty or more years of creditable service.

Benefit: Option 2 benefit.

**Plan Provisions** 

#### SCHOOL LUNCH PLAN A and PLAN B

#### **OPTIONAL FORMS OF BENEFIT:**

Retiring members may elect options as described by the Teachers' plan.

#### **RETURN OF CONTRIBUTIONS:**

Should a member not eligible to retire cease to be an employee, he shall be paid the amount of his accumulated contributions upon demand. Should a members death occur prior to retirement with no survivors eligible for benefits, his accumulated contributions are returnable to a designated beneficiary, if any; otherwise, to his estate.

#### TERMINATION WITH VESTED SERVICE:

Any member with credit for 5 years of service who withdraws from service may elect to leave accumulated contributions in system until his earliest normal retirement date, when he may apply for retirement and begin receiving a retirement benefit based on average final compensation and creditable service at date of withdrawal.

#### **DEFERRED RETIREMENT OPTION PLAN:**

Retiring members may elect options as described by the Teachers' plan.

#### **EXHIBIT 6**

#### ACTUARIAL COST METHODS AND ASSUMPTIONS

#### **COST METHOD:**

The "Projected Unit Credit" cost method was used to calculate the funding requirements of the retirement system, as required by Louisiana Statutes, R. S. 11:22. Under this cost method, the actuarial present value of projected benefits of each individual included in the valuation is accumulated from the participant's attained age to the anticipated retirement date(s). That portion of the actuarial present value attributable to the current year's projected benefit accruals is called the normal cost. The actuarial present value of future projected benefits in proportion to service accrued on the date of valuation is called the actuarial accrued liability.

#### **ASSET VALUATION:**

For the Plan Year Ending June 30, 1999 through June 30, 2012, the computation of the Actuarial Value of Assets is the market value of assets adjusted for a four year weighted average of the unrealized gain or loss in the value of all assets, subject to Corridor Limits of 80% to 120% of the Market Value of Assets.

Beginning June 30, 2013, the market value of assets is adjusted to gradually recognize investment gains and losses relative to the net assumed investment return, over a 5 year period in 20% increments. The adjusted asset 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 the disclosure of "Credited Projected Benefits" for Public Employee Retirement Systems. The disclosures illustrated in Exhibit 3 were developed using the Projected Unit Credit cost method. The statement of assets provided by the audit staff was 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 contribution rate or the yield to the Actuarial Value of Assets.

#### **ACTUARIAL ASSUMPTIONS:**

Assumptions used in the valuation were adopted by the Board of Trustees following the most recent experience study. 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. An experience study was recently completed for the observation period of 2008-2012. The recommended rates were adopted by the Board, effective July 1, 2013. The experience was reviewed separately for Regular Teachers, Higher Education, School Lunch Plan A, and School Lunch Plan B. The prior and recently adopted rate tables are illustrated at the end of this exhibit.

#### **MORTALITY ASSUMPTIONS:**

Pre-retirement deaths and post-retirement life expectancies were previously based upon the RP-2000 table with no projection of mortality improvement. The table recently adopted by the Board, in accordance with the most recent Experience Study, is based upon the RP-2000 table with mortality projected through 2025 using scale AA.

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

#### **DISABILITY ASSUMPTION:**

Rates for total and permanent disability were projected by age in accordance with the most recent Experience Study. The rates are based upon attained age at occurrence. For mortality after disability, rates are based upon the RP-2000 disability table with no projection of mortality improvement. This table did not change as a result of the most recent Experience Study.

#### RETIREMENT/DROP ASSUMPTION:

Eligibility for normal retirement benefits and DROP participation is based on age and service requirements that vary by plan. Previously, retirement and DROP rates were each determined for all plans and were age based. The most recent experience study developed the Retirement and DROP rates in combination and added a service component to the assumptions. Prior and recently adopted tables are shown at the end of this exhibit.

#### **TERMINATION ASSUMPTIONS:**

Voluntary termination or withdrawal rates are based on the most recent experience study. Rates for Regular Teachers and Higher Education members are based on select and ultimate age and service-based tables. Rate for Lunch Plan A and Lunch Plan B are service-based tables. For members terminating with vested benefits, it is assumed that 80% will not withdraw their accumulated employee contribution, and will receive a benefit beginning at age 60.

#### **SALARY GROWTH:**

The rates of annual salary growth are base upon the member's years of service. Rates were recently revised, in accordance with the recent Experience Study. The inflation component was changed from 3.0% to 2.5%. Prior and recently adopted tables are illustrated in the rate tables at the end of this exhibit. Current salaries and projected future salaries are limited to the Section 401(a)17 limit of the Internal Revenue Code, with no future indexed increases.

#### **FAMILY STATISTICS:**

The composition of the family is based on Current Population Reports published by the United States Census Bureau. Seventy-five percent of the membership is assumed to be married with the wife assumed to be three (3) years younger than the husband. These assumptions did not change as a result of the most recent Experience Study. Sample rates are as follows:

	Number of	
Age of	Minor	Years for Youngest Child
Member	Children	to Attain Majority
25	1.2	15
30	1.4	13
35	1.7	11
40	1.7	9
45	1.4	6
50	1.1	4

### 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:**

The Board of Trustees adopted a discount rate of 8.00%, net of investment and administrative expenses and net of expected investment gains to be deferred to the experience account, following an analysis to determine an appropriate discount rate. This rate is effective July 1, 2013. The prior discount rate through June 30, 2013, was 8.25%.

The analysis that resulted in the recommended 8.00% rate was originally based upon capital market assumptions using a 3.0% inflation assumption. With the adoption of the revised actuarial assumptions following the recent experience study, the inflation assumption was changed from 3.0% to 2.5%. The discount rate analysis was revised and adjusted based on the revised inflation assumption. The 8.0% rate was determined to continue to be reasonable.

#### **CONVERTED LEAVE:**

Converted Leave is assumed to increase the accrued benefit at retirement as follows according to the following table, based on the most recent experience study. The reduction from the prior rates to current rates shown below is due to statutory limits placed on the amount of leave earned after June 30, 1990 that can be converted to service credit.

	Prior Rates	Current Rates
Regular Teachers	2.5%	1.5%
Higher Education	2.8%	1.5%
Lunch Plan A	1.5%	1.0%
Lunch Plan B	1.5%	1.0%

# TEACHERS ACTUARIAL TABLES AND RATES (\* Retirement and DROP rates applicable to members hired prior to January 1, 2011) Rates effective 6/30/08-6/30/13

	DEATH	RATES	DISABILITY	TERMINATION	RETIREMENT	DROP		SALARY
AGE	MALE	FEMALE	RATES	RATES	RATES *	RATES*	DUR	SCALE
18	0.00032	0.00019	0.0000	0.05	0.000	0.00	1	1.055
19	0.00033	0.00019	0.0000	0.05	0.000	0.00	2	1.069
20	0.00034	0.00019	0.0000	0.10	0.000	0.00	3	1.064
21	0.00036	0.00019	0.0000	0.09	0.000	0.00	4	1.063
22	0.00037	0.00019	0.0000	0.04	0.000	0.00	5	1.062
23	0.00037	0.00020	0.0001	0.07	0.000	0.00	6	1.062
24	0.00038	0.00020	0.0001	0.13	0.000	0.00	7	1.061
25	0.00038	0.00021	0.0001	0.13	0.000	0.00	8	1.061
26	0.00038	0.00021	0.0001	0.13	0.000	0.00	9	1.060
27	0.00038	0.00022	0.0001	0.13	0.000	0.00	10	1.060
28	0.00039	0.00024	0.0001	0.13	0.000	0.00	11	1.059
29	0.00041	0.00025	0.0001	0.13	0.000	0.00	12	1.059
30	0.00044	0.00026	0.0001	0.13	0.000	0.00	13	1.057
31	0.00050	0.00031	0.0003	0.11	0.000	0.00	14	1.053
32	0.00056	0.00035	0.0003	0.11	0.000	0.00	15	1.051
33	0.00063	0.00039	0.0003	0.10	0.000	0.00	16	1.051
34	0.00070	0.00043	0.0003	0.10	0.000	0.00	17	1.051
35	0.00077	0.00047	0.0006	0.09	0.000	0.00	18	1.051
36	0.00084	0.00051	0.0010	0.08	0.000	0.00	19	1.051
37	0.00090	0.00055	0.0007	0.07	0.000	0.00	20	1.051
38	0.00096	0.00060	0.0007	0.06	0.020	0.00	21	1.048
39	0.00102	0.00065	0.0011 0.0011	0.06	0.040	0.00	22	1.048
40 41	0.00108 0.00114	0.00071 0.00077	0.0011	0.06 0.05	0.040 0.030	0.00 0.00	23 24	1.048 1.048
42	0.00114	0.00077	0.0016	0.05	0.030	0.00	25	1.048
43	0.00121	0.00083	0.0016	0.05	0.030	0.00	26	1.044
44	0.00130	0.00094	0.0016	0.03	0.030	0.00	27	1.044
45	0.00140	0.00103	0.0010	0.04	0.030	0.00	28	1.044
46	0.00151	0.00112	0.0022	0.04	0.030	0.00	29	1.048
47	0.00173	0.00122	0.0022	0.04	0.030	0.00	30	1.048
48	0.00175	0.00133	0.0022	0.03	0.030	0.01	31	1.048
49	0.00200	0.00155	0.0022	0.03	0.028	0.02	32	1.053
50	0.00214	0.00168	0.0025	0.03	0.028	0.03	33	1.053
51	0.00245	0.00185	0.0025	0.03	0.030	0.15	34	1.080
52	0.00267	0.00202	0.0025	0.04	0.035	0.50	35	1.058
53	0.00292	0.00221	0.0030	0.04	0.050	0.40	36	1.058
54	0.00320	0.00242	0.0030	0.04	0.075	0.40	37	1.058
55	0.00362	0.00272	0.0040	0.04	0.200	0.60	38	1.058
56	0.00420	0.00309	0.0050	0.04	0.230	0.15	39	1.058
57	0.00469	0.00348	0.0055	0.04	0.250	0.07	40	1.058
58	0.00527	0.00392	0.0055	0.04	0.365	0.07	41	1.058
59	0.00594	0.00444	0.0055	0.04	0.280	0.07	42	1.058
60	0.00675	0.00505	0.0080	0.04	0.280	0.15	43	1.058
61	0.00768	0.00581	0.0050	0.04	0.280	0.03	44	1.058
62	0.00876	0.00666	0.0035	0.04	0.280	0.01	45	1.058
63	0.01001	0.00765	0.0035	0.04	0.330	0.01	46	1.058
64	0.01128	0.00862	0.0035	0.04	0.330	0.01	47	1.058
65	0.01274	0.00971	0.0035	0.04	0.330	0.01	48	1.058
66	0.01441	0.01095	0.0020	0.04	0.400	0.00	49	1.058
67	0.01607	0.01216	0.0020	0.04	0.340	0.00	50	1.058
68	0.01787	0.01345	0.0020	0.04	0.340	0.00	51	1.058
69 70	0.01980	0.01486	0.0020	0.04	0.340	0.00	52 53	1.058
70	0.02221	0.01674	0.0020	0.04	0.340	0.00	53	1.058
71 72	0.02457	0.01858	0.0020	0.04	0.340	0.00	54	1.058
72 73	0.02728	0.02067	0.0020	0.04	0.500	0.00	55 56	1.058
73	0.03039	0.02297	0.0020	0.04	0.990	0.00	56 57	1.058
74	0.03390	0.02546	0.0020	0.04	0.990	0.00	57	1.058

# HIGHER EDUCATION ACTUARIAL TABLES AND RATES (\* Retirement and DROP rates applicable to members hired prior to January 1, 2011) Rates effective 6/30/08-6/30/13

AGE	DEATH I	FEMALE	DISABILITY RATES	TERMINATION RATES	RETIREMENT RATES	DROP RATES	DUR	SALARY SCALE
18	0.00032	0.00019	0.0000	0.05	0.00	0.00	1	1.055
19	0.00033	0.00019	0.0000	0.05	0.00	0.00	2	1.071
20	0.00034	0.00019	0.0000	0.05	0.00	0.00	3	1.057
21	0.00036	0.00019	0.0000	0.05	0.00	0.00	4	1.054
22	0.00037	0.00019	0.0000	0.05	0.00	0.00	5	1.054
23	0.00037	0.00020	0.0001	0.05	0.00	0.00	6	1.054
24	0.00038	0.00020	0.0001	0.10	0.00	0.00	7	1.054
25	0.00038	0.00021	0.0001	0.10	0.00	0.00	8	1.052
26	0.00038	0.00021	0.0001	0.16	0.00	0.00	9	1.052
27	0.00038	0.00022	0.0001	0.13	0.00	0.00	10	1.052
28	0.00039	0.00024	0.0001	0.12	0.00	0.00	11	1.050
29	0.00041	0.00025	0.0001	0.12	0.00	0.00	12	1.050
30	0.00044	0.00026	0.0001	0.12	0.00	0.00	13	1.050
31	0.00050	0.00031	0.0001	0.10	0.00	0.00	14	1.050
32	0.00056	0.00035	0.0001	0.12	0.00	0.00	15	1.050
33	0.00063	0.00039	0.0001	0.10	0.00	0.00	16	1.049
34	0.00070	0.00043	0.0001	0.10	0.00	0.00	17	1.049
35	0.00077	0.00047	0.0001	0.10	0.00	0.00	18	1.049
36	0.00084	0.00051	0.0001	0.07	0.00	0.00	19	1.048
37	0.00090	0.00055	0.0001	0.07	0.00	0.00	20	1.048
38	0.00096	0.00060	0.0001	0.08	0.00	0.00	21	1.048
39	0.00102	0.00065	0.0010	0.08	0.00	0.00	22	1.048
40	0.00108	0.00071	0.0010	0.07	0.05	0.00	23	1.045
41	0.00114	0.00077	0.0010	0.06	0.09	0.00	24	1.045
42	0.00121	0.00085	0.0010	0.05	0.09	0.00	25	1.045
43	0.00130	0.00094	0.0010	0.05	0.09	0.00	26	1.045
44	0.00140	0.00103	0.0010	0.05	0.09	0.00	27	1.045
45	0.00151	0.00112	0.0010	0.04	0.09	0.00	28	1.045
46	0.00162	0.00122	0.0010	0.04	0.09	0.00	29	1.045
47	0.00173	0.00133	0.0010	0.04	0.06	0.00	30	1.045
48	0.00186	0.00143	0.0010	0.03	0.06	0.00	31	1.045
49	0.00200	0.00155	0.0010	0.03	0.05	0.00	32	1.045
50	0.00214	0.00168	0.0010	0.02	0.04	0.00	33	1.045
51	0.00245	0.00185	0.0010	0.02	0.03	0.03	34	1.045
52	0.00267	0.00202	0.0040	0.02	0.05	0.07	35	1.045
53	0.00292	0.00221	0.0040	0.02	0.05	0.12	36	1.045
54	0.00320	0.00242	0.0010	0.02	0.09	0.12	37	1.045
55	0.00362	0.00272	0.0010	0.02	0.18	0.55	38	1.045
56	0.00420	0.00309	0.0010	0.02	0.18	0.10	39	1.045
57	0.00469	0.00348	0.0010	0.02	0.18	0.10	40	1.045
58	0.00527	0.00392	0.0010	0.02	0.28	0.07	41	1.045
59	0.00594	0.00444	0.0010	0.02	0.21	0.07	42	1.045
60	0.00675	0.00505	0.0010	0.02	0.28	0.07	43	1.045
61	0.00768	0.00581	0.0010	0.02	0.21	0.02	44	1.045
62	0.00876	0.00666	0.0010	0.02	0.21	0.01	45	1.045
63	0.01001	0.00765	0.0010	0.02	0.21	0.01	46	1.045
64	0.01128	0.00862	0.0010	0.02	0.21	0.01	47	1.045
65	0.01274	0.00971	0.0010	0.02	0.28	0.01	48	1.045
66	0.01441	0.01095	0.0010	0.02	0.28	0.01	49	1.045
67	0.01607	0.01216	0.0010	0.02	0.28	0.01	50	1.045
68	0.01787	0.01345	0.0010	0.02	0.28	0.01	51	1.045
69	0.01980	0.01486	0.0005	0.02	0.20	0.01	52	1.045
70	0.02221	0.01674	0.0005	0.02	0.20	0.01	53	1.045
71	0.02457	0.01858	0.0005	0.02	0.20	0.01	54	1.045
72	0.02728	0.02067	0.0005	0.02	0.50	0.01	55	1.045
73	0.03039	0.02297	0.0005	0.02	0.50	0.01	56	1.045
74	0.03390	0.02546	0.0005	0.02	0.99	0.01	57	1.045

## REGULAR TEACHERS AND HIGHER EDUCATION, HIRED ON OR AFTER 1/1/2011 ACTUARIAL TABLES AND RATES Rates effective 6/30/08-6/30/13

	REGUL	AR	HIGHER EDU	CATION	
	RETIREMENT	DROP	RETIREMENT	DROP	
AGE	RATES	RATES	RATES	RATES	
18	0.00	0.00	0.00	0.00	
19	0.00	0.00	0.00	0.00	
20	0.00	0.00	0.00	0.00	
21	0.00	0.00	0.00	0.00	
22	0.00	0.00	0.00	0.00	
23	0.00	0.00	0.00	0.00	
24	0.00	0.00	0.00	0.00	
25	0.00	0.00	0.00	0.00	
26	0.00	0.00	0.00	0.00	
27	0.00	0.00	0.00	0.00	
28	0.00	0.00	0.00	0.00	
29	0.00	0.00	0.00	0.00	
30	0.00	0.00	0.00	0.00	
31	0.00	0.00	0.00	0.00	
32	0.00	0.00	0.00	0.00	
33	0.00	0.00	0.00	0.00	
34	0.00	0.00	0.00	0.00	
35	0.00	0.00	0.00	0.00	
36	0.00	0.00	0.00	0.00	
37	0.00	0.00	0.00	0.00	
38	0.00	0.00	0.00	0.00	
39	0.00	0.00	0.00	0.00	
40	0.00	0.00	0.00	0.00	
41	0.00	0.00	0.00	0.00	
42	0.00	0.00	0.00	0.00	
43	0.00	0.00	0.00	0.00	
44	0.00	0.00	0.00	0.00	
45	0.00	0.00	0.00	0.00	
46	0.00	0.00	0.00	0.00	
47	0.00	0.00	0.00	0.00	
48	0.00	0.00	0.00	0.00	
49	0.00	0.00	0.00	0.00	
50	0.00	0.00	0.00	0.00	
51	0.00	0.00	0.00	0.00	
52	0.00	0.00	0.00	0.00	
53	0.00	0.00	0.00	0.00	
54	0.00	0.00	0.00	0.00	
55	0.00	0.00	0.00	0.00	
56	0.00	0.00	0.00	0.00	
57	0.00	0.00	0.00	0.00	
58	0.00	0.00	0.00	0.00	
59	0.00	0.00	0.00	0.00	
60	0.75	0.35	0.50	0.25	
61	0.28	0.03	0.21	0.02	
62	0.28	0.01	0.21	0.01	
63	0.33	0.01	0.21	0.01	
64	0.33	0.01	0.21	0.01	
65	0.33	0.01	0.28	0.01	
66	0.40	0.00	0.28	0.01	
67	0.34	0.00	0.28	0.01	
68	0.34	0.00	0.28	0.01	
69	0.34	0.00	0.20	0.01	
70	0.34	0.00	0.20	0.01	
71	0.34	0.00	0.20	0.01	
72	0.50	0.00	0.50	0.01	
73 74	0.99	0.00	0.50	0.01	

## LUNCH PLAN A ACTUARIAL TABLES AND RATES Rates effective 6/30/08-6/30/13

	DEATH I	RATES	DISABILITY	TERMINATION	RETIREMENT	DROP		SALARY
AGE	MALE	FEMALE	RATES	RATES	RATES	RATES	DUR	SCALE
18	0.00032	0.00019	0.0000	0.00	0.00	0.00	1	1.065
19	0.00032	0.00019	0.0000	0.00	0.00	0.00	2	1.075
20	0.00034	0.00019	0.0000	0.00	0.00	0.00	3	1.070
21	0.00036	0.00019	0.0000	0.00	0.00	0.00	4	1.066
22	0.00037	0.00019	0.0000	0.00	0.00	0.00	5	1.066
23	0.00037	0.00020	0.0000	0.00	0.00	0.00	6	1.058
24	0.00038	0.00020	0.0000	0.00	0.00	0.00	7	1.058
25	0.00038	0.00021	0.0000	0.00	0.00	0.00	8	1.058
26	0.00038	0.00021	0.0000	0.00	0.00	0.00	9	1.058
27	0.00038	0.00022	0.0000	0.00	0.00	0.00	10	1.045
28	0.00039	0.00024	0.0000	0.00	0.00	0.00	11	1.045
29	0.00041	0.00025	0.0000	0.00	0.00	0.00	12	1.045
30	0.00044	0.00026	0.0000	0.02	0.00	0.00	13	1.045
31	0.00050	0.00031	0.0001	0.02	0.00	0.00	14	1.045
32	0.00056	0.00035	0.0001	0.02	0.00	0.00	15	1.045
33	0.00063	0.00039	0.0001	0.02	0.00	0.00	16	1.045
34	0.00070	0.00043	0.0001	0.02	0.00	0.00	17	1.045
35	0.00077	0.00047	0.0001	0.02	0.00	0.00	18	1.045
36	0.00084	0.00051	0.0001	0.02	0.00	0.00	19	1.045
37	0.00090	0.00055	0.0001	0.02	0.00	0.00	20	1.052
38	0.00096	0.00060	0.0001	0.02	0.00	0.00	21	1.045
39	0.00102	0.00065	0.0001	0.02	0.00	0.00	22	1.040
40	0.00108	0.00071	0.0001	0.02	0.00	0.00	23	1.040
41	0.00114	0.00077	0.0001	0.02	0.00	0.00	24	1.045
42	0.00121	0.00085	0.0001	0.02	0.00	0.00	25	1.045
43	0.00130	0.00094	0.0001	0.02	0.00	0.00	26	1.048
44	0.00140	0.00103	0.0100	0.02	0.00	0.00	27	1.048
45	0.00151	0.00112	0.0100	0.02	0.00	0.00	28	1.048
46	0.00162	0.00122	0.0100	0.02	0.00	0.00	29	1.048
47	0.00173	0.00133	0.0100	0.02	0.00	0.00	30	1.050
48	0.00186	0.00143	0.0100	0.02	0.00	0.02	31	1.050
49	0.00200	0.00155	0.0150	0.02	0.01	0.02	32	1.060
50	0.00214	0.00168	0.0150	0.02	0.01	0.02	33	1.050
51	0.00245	0.00185	0.0150	0.02	0.01	0.02	34	1.050
52	0.00267	0.00202	0.0150	0.02	0.01	0.02	35	1.050
53	0.00292	0.00221	0.0150	0.02	0.03	0.02	36	1.045
54	0.00320	0.00242	0.0150	0.02	0.03	0.02	37	1.045
55	0.00362	0.00272	0.0300	0.02	0.15	0.50	38	1.045
56	0.00420	0.00309	0.0250	0.02	0.15	0.20	39	1.045
57	0.00469	0.00348	0.0250	0.02	0.15	0.20	40	1.045
58	0.00527	0.00392	0.0250	0.02	0.25	0.20	41	1.045
59	0.00594	0.00444	0.0250	0.02	0.25	0.20	42	1.045
60	0.00675	0.00505	0.0100	0.02	0.35	0.55	43	1.045
61	0.00768	0.00581	0.0002	0.01	0.35	0.20	44	1.045
62	0.00876	0.00666	0.0002	0.01	0.35	0.10	45	1.045
63	0.01001	0.00765	0.0002	0.01	0.50	0.02	46	1.045
64	0.01128	0.00862	0.0002	0.01	0.50	0.02	47	1.045
65	0.01274	0.00971	0.0002	0.01	0.40	0.02	48	1.045
66	0.01441	0.01095	0.0002	0.01	0.40	0.02	49	1.045
67	0.01607	0.01216	0.0002	0.01	0.35	0.02	50	1.045
68	0.01787	0.01345	0.0002	0.01	0.25	0.02	51	1.045
69	0.01980	0.01486	0.0000	0.01	0.20	0.02	52	1.045
70	0.02221	0.01674	0.0000	0.01	0.20	0.02	53	1.045
71	0.02457	0.01858	0.0000	0.01	0.20	0.02	54	1.045
72	0.02728	0.02067	0.0000	0.01	0.50	0.02	55	1.045
73	0.03039	0.02297	0.0000	0.01	0.50	0.02	56	1.045
74	0.03390	0.02546	0.0000	0.01	0.99	0.02	57	1.045

#### LUNCH PLAN B ACTUARIAL TABLES AND RATES Rates effective 6/30/08-6/30/13

NACE   MALE   FEMALE   RATES   RATES   RATES   RATES   RATES   NACE   RATES		DEATH		DISABILITY	TERMINATION	RETIREMENT	DROP		SALARY
19	AGE	MALE	FEMALE	RATES	RATES	RATES	RATES	DUR	SCALE
20									
21									
22         0.00037         0.00019         0.00000         0.10         0.00         0.00         5         1.066           24         0.00038         0.00020         0.0000         0.10         0.00         0.00         7         1.058           25         0.00038         0.00021         0.0000         0.20         0.00         0.00         8         1.058           26         0.00038         0.00021         0.0000         0.15         0.00         0.00         9         1.058           27         0.00038         0.00022         0.0000         0.07         0.00         0.00         1.055           28         0.00039         0.00024         0.0000         0.07         0.00         0.00         11         1.055           30         0.00044         0.00025         0.0000         0.07         0.00         0.00         12         1.055           30         0.00044         0.00025         0.0000         0.07         0.00         0.00         13         1.055           31         0.00056         0.00035         0.0000         0.07         0.00         0.00         15         1.050           32         0.0066         0.00									
233 0,00037 0,00020 0,0000 0,10 0,00 0,00 6 1,058 254 0,00038 0,00021 0,0000 0,20 0,00 0,00 0,00 8 1,058 255 0,00038 0,00021 0,0000 0,07 0,00 0,00 0,00 9 1,058 277 0,00038 0,00022 0,0000 0,07 0,00 0,00 0,00 10 1,055 28 0,00038 0,00022 0,0000 0,07 0,00 0,00 11 1,055 29 0,00041 0,00025 0,0000 0,07 0,00 0,00 11 1,055 30 0,00044 0,00025 0,0000 0,07 0,00 0,00 11 1,055 31 0,00050 0,00031 0,00001 0,07 0,00 0,00 12 1,055 31 0,00050 0,00031 0,0000 0,07 0,00 0,00 14 1,055 32 0,00056 0,00031 0,0000 0,07 0,00 0,00 15 1,055 33 0,00063 0,00031 0,0000 0,07 0,00 0,00 15 1,059 33 0,00063 0,00031 0,0000 0,07 0,00 0,00 15 1,059 34 0,00070 0,0004 0,000 0,07 0,00 0,00 15 1,059 35 0,00077 0,0004 7 0,000 0,07 0,00 0,00 15 1,059 35 0,00077 0,00047 0,000 0,07 0,00 0,00 17 1,059 35 0,00077 0,00047 0,000 0,07 0,00 0,00 17 1,059 37 0,00090 0,00055 0,0010 0,07 0,00 0,00 18 1,059 38 0,00056 0,00055 0,0010 0,07 0,00 0,00 19 1,059 38 0,00056 0,00060 0,010 0,07 0,00 0,00 19 1,059 38 0,00056 0,00060 0,010 0,07 0,00 0,00 19 1,059 38 0,00096 0,00055 0,0010 0,07 0,00 0,00 22 1,043 40 0,0012 0,0065 0,0010 0,06 0,00 0,00 22 1,043 41 0,00114 0,00077 0,003 0,06 0,00 0,00 22 1,043 44 0,00114 0,00077 0,003 0,06 0,00 0,00 22 1,043 44 0,00114 0,00077 0,003 0,06 0,00 0,00 22 1,043 44 0,00114 0,00077 0,003 0,06 0,00 0,00 22 1,043 44 0,00114 0,00077 0,003 0,06 0,00 0,00 22 1,043 44 0,00114 0,00077 0,003 0,06 0,00 0,00 22 1,043 45 0,00151 0,00065 0,003 0,06 0,00 0,00 22 1,043 46 0,00162 0,00165 0,003 0,004 0,00 0,00 0,00 22 1,043 47 0,00167 0,00066 0,003 0,004 0,00 0,00 22 1,043 48 0,00168 0,00143 0,0066 0,03 0,00 0,00 0,00 22 1,043 48 0,00168 0,00143 0,0066 0,03 0,00 0,00 0,00 22 1,043 49 0,00162 0,00666 0,000 0,000 0,00 0,00 0,00 0,									
24         0.00038         0.00020         0.0000         0.10         0.00         0.00         7         1.058           26         0.00038         0.00021         0.0000         0.15         0.00         0.00         9         1.058           27         0.00038         0.00022         0.0000         0.07         0.00         0.00         1.01         1.055           28         0.00039         0.00024         0.0000         0.07         0.00         0.00         11         1.055           30         0.00041         0.00025         0.0000         0.07         0.00         0.00         12         1.055           30         0.00044         0.00026         0.0000         0.07         0.00         0.00         12         1.055           31         0.00056         0.00031         0.0000         0.07         0.00         0.00         14         1.059           32         0.0056         0.00033         0.0000         0.07         0.00         0.00         15         1.050           33         0.0067         0.000         0.07         0.00         0.00         17         1.159           33         0.0067         0.000 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
255									
26									
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322 0.00056 0.00035 0.0000 0.07 0.00 0.00 15 1.050 33 0.00063 0.00039 0.0000 0.07 0.00 0.00 16 1.050 34 0.00079 0.00043 0.0000 0.07 0.00 0.00 17 1.050 35 0.00077 0.00047 0.0000 0.07 0.00 0.00 17 1.050 36 0.00084 0.00051 0.0010 0.07 0.00 0.00 19 1.050 37 0.00090 0.00055 0.0010 0.07 0.00 0.00 0.00 19 1.050 38 0.00096 0.00060 0.0010 0.06 0.00 0.00 21 1.043 39 0.00102 0.00065 0.0010 0.06 0.00 0.00 0.00 21 1.043 40 0.00108 0.00071 0.0030 0.06 0.00 0.00 0.02 1.043 41 0.00114 0.00077 0.0030 0.06 0.00 0.00 0.00 22 1.043 42 0.00121 0.00085 0.0030 0.06 0.00 0.00 0.00 24 1.043 43 0.00150 0.00096 0.00050 0.006 0.00 0.00 0.00 25 1.043 44 0.00104 0.00103 0.0050 0.06 0.00 0.00 0.00 25 1.043 44 0.00140 0.00103 0.0050 0.05 0.00 0.00 0.00 25 1.043 45 0.00151 0.00112 0.0030 0.05 0.00 0.00 0.00 25 1.043 46 0.00162 0.00122 0.0030 0.04 0.00 0.00 0.00 27 1.043 47 0.00162 0.00122 0.0030 0.04 0.00 0.00 0.00 28 1.043 48 0.00166 0.00113 0.0050 0.04 0.00 0.00 0.00 28 1.043 48 0.00186 0.00143 0.0060 0.04 0.00 0.00 0.00 28 1.043 49 0.00200 0.0155 0.0066 0.03 0.00 0.00 0.00 25 1.043 48 0.00186 0.00143 0.0060 0.03 0.04 0.00 0.00 29 1.043 49 0.00200 0.0155 0.0066 0.03 0.00 0.00 0.00 31 1.043 49 0.00200 0.0155 0.0066 0.03 0.00 0.00 0.00 32 1.043 55 0.00214 0.00185 0.0150 0.03 0.00 0.00 0.00 32 1.035 51 0.00245 0.00185 0.0150 0.03 0.00 0.00 0.00 33 1.035 51 0.00245 0.00185 0.0150 0.03 0.00 0.00 0.00 33 1.035 55 0.00262 0.00272 0.0255 0.03 0.03 0.00 0.00 33 1.035 56 0.00420 0.00392 0.0255 0.03 0.03 0.00 0.01 45 1.035 57 0.00469 0.00380 0.0255 0.03 0.03 0.04 0.00 0.01 45 1.035 58 0.00577 0.00509 0.0255 0.03 0.03 0.04 0.01 45 1.035 56 0.00427 0.00509 0.0255 0.03 0.03 0.04 1.035 56 0.00427 0.00509 0.0255 0.03 0.03 0.00 0.01 45 1.035 57 0.00666 0.0050 0.03 0.03 0.03 0.01 45 1.035 58 0.00527 0.00509 0.0255 0.03 0.03 0.03 0.01 45 1.035 56 0.00420 0.00509 0.0255 0.03 0.03 0.05 0.01 45 1.035 56 0.01274 0.00765 0.0050 0.03 0.03 0.05 0.01 45 1.035 57 0.00666 0.0066 0.0050 0.03 0.03 0.05 0.01 45 1.035 57 0.00667 0.00666 0.0050 0.03 0.03 0.05 0.01 55 1.035 5									
33									
34         0.00070         0.00043         0.0000         0.07         0.00         0.00         17         1.050           35         0.00077         0.000         0.00         18         1.050           36         0.00084         0.00051         0.0010         0.07         0.00         0.00         19         1.050           37         0.00090         0.00055         0.0010         0.06         0.00         0.00         20         1.050           38         0.00096         0.00060         0.0010         0.06         0.00         0.00         21         1.043           39         0.00102         0.00065         0.0010         0.06         0.00         0.00         0.02         22         1.043           40         0.00118         0.0030         0.06         0.00         0.00         0.00         22         1.043           41         0.00114         0.00077         0.0030         0.06         0.00         0.00         22         1.043           42         0.00121         0.0030         0.05         0.00         0.00         22         1.043           43         0.00130         0.0030         0.05         0.00									
35									
36									
37         0.00090         0.00055         0.0010         0.07         0.00         0.00         20         1.050           38         0.00096         0.00060         0.0010         0.06         0.00         0.00         21         1.043           39         0.00102         0.00065         0.0011         0.06         0.00         0.00         22         1.043           40         0.00118         0.00071         0.0030         0.06         0.00         0.00         24         1.043           41         0.00114         0.00077         0.0030         0.06         0.00         0.00         25         1.043           42         0.0013         0.0030         0.05         0.00         0.00         25         1.043           43         0.00130         0.0030         0.05         0.00         0.00         26         1.043           44         0.00140         0.00103         0.0030         0.04         0.00         0.00         27         1.043           45         0.00151         0.00122         0.0030         0.04         0.00         0.00         28         1.043           47         0.00173         0.00133         0.006<									
38			0.00055		0.07		0.00		
40		0.00096	0.00060	0.0010	0.06				
41         0.00114         0.00077         0.0030         0.06         0.00         0.00         24         1.043           42         0.00130         0.00085         0.0030         0.06         0.00         0.00         25         1.043           43         0.00130         0.00094         0.0030         0.04         0.00         0.00         26         1.043           44         0.00140         0.00121         0.0030         0.04         0.00         0.00         27         1.043           45         0.00151         0.00112         0.0030         0.04         0.00         0.00         29         1.043           46         0.00162         0.00122         0.0030         0.04         0.00         0.00         29         1.043           47         0.00173         0.00133         0.0060         0.04         0.00         0.00         30         1.043           48         0.00186         0.00143         0.0060         0.03         0.00         0.00         31         1.043           49         0.00200         0.00155         0.0060         0.03         0.00         0.00         32         1.035           50         0.002		0.00102	0.00065	0.0010	0.06	0.00	0.00		
42         0.00121         0.00085         0.0030         0.06         0.00         0.00         25         1.043           43         0.00130         0.0094         0.0030         0.05         0.00         0.00         26         1.043           44         0.00140         0.00103         0.0030         0.04         0.00         0.00         27         1.043           45         0.00151         0.00112         0.0030         0.04         0.00         0.00         28         1.043           46         0.00162         0.00123         0.0060         0.04         0.00         0.00         30         1.043           47         0.00173         0.00133         0.0060         0.03         0.00         0.00         30         1.043           48         0.00186         0.00143         0.0060         0.03         0.00         0.00         31         1.043           49         0.00200         0.00155         0.0060         0.03         0.00         0.00         32         1.035           50         0.00214         0.00168         0.0150         0.03         0.00         0.00         33         1.035           51         0.0026	40	0.00108	0.00071	0.0030	0.06	0.00	0.00	23	1.043
43         0.00130         0.00094         0.0030         0.05         0.00         0.00         26         1.043           44         0.00140         0.0013         0.0030         0.04         0.00         0.00         27         1.043           45         0.00151         0.00112         0.0030         0.04         0.00         0.00         28         1.043           46         0.00162         0.00122         0.0030         0.04         0.00         0.00         29         1.043           47         0.00173         0.00133         0.0060         0.03         0.00         0.00         30         1.043           48         0.00186         0.0143         0.0060         0.03         0.00         0.00         31         1.043           49         0.00200         0.00158         0.0150         0.03         0.00         0.00         32         1.035           50         0.00214         0.00188         0.0150         0.03         0.00         0.00         33         1.035           51         0.00245         0.00202         0.0150         0.03         0.00         0.00         34         1.035           52         0.00267	41	0.00114	0.00077	0.0030	0.06	0.00	0.00		1.043
44         0.00140         0.00103         0.0030         0.04         0.00         0.00         27         1.043           45         0.00151         0.00112         0.0030         0.04         0.00         0.00         28         1.043           46         0.00162         0.00133         0.0060         0.04         0.00         0.00         30         1.043           47         0.00173         0.00133         0.0060         0.03         0.00         0.00         30         1.043           48         0.00200         0.00155         0.0060         0.03         0.00         0.00         31         1.043           49         0.00200         0.00155         0.0060         0.03         0.00         0.00         32         1.035           50         0.00214         0.00168         0.0150         0.03         0.00         0.00         33         1.035           51         0.00267         0.00202         0.0150         0.03         0.00         0.00         34         1.035           52         0.00267         0.00202         0.0150         0.03         0.00         0.00         36         1.035           53         0.002	42	0.00121	0.00085	0.0030	0.06	0.00	0.00		1.043
45         0.00151         0.00112         0.0030         0.04         0.00         0.00         28         1.043           46         0.00162         0.00132         0.0030         0.04         0.00         0.00         29         1.043           47         0.00173         0.00133         0.0060         0.03         0.00         0.00         30         1.043           48         0.00200         0.00155         0.0060         0.03         0.00         0.00         32         1.035           50         0.00214         0.00168         0.0150         0.03         0.00         0.00         33         1.035           51         0.00245         0.00185         0.0150         0.03         0.00         0.00         34         1.035           52         0.00267         0.00202         0.0150         0.03         0.00         0.00         35         1.035           53         0.00292         0.00221         0.0150         0.03         0.00         0.00         35         1.035           54         0.00320         0.00242         0.0255         0.03         0.00         0.00         36         1.035           55         0.003									
46         0.00162         0.00122         0.0030         0.04         0.00         0.00         29         1.043           47         0.00173         0.00133         0.0060         0.04         0.00         0.00         30         1.043           48         0.00186         0.00145         0.0060         0.03         0.00         0.00         31         1.043           49         0.00200         0.00155         0.0060         0.03         0.00         0.00         32         1.035           50         0.00214         0.00168         0.0150         0.03         0.00         0.00         33         1.035           51         0.00245         0.00185         0.0150         0.03         0.00         0.00         34         1.035           52         0.00267         0.00202         0.0150         0.03         0.00         0.00         35         1.035           53         0.00292         0.00221         0.0150         0.03         0.00         0.00         36         1.035           54         0.00320         0.00242         0.0255         0.03         0.00         0.00         36         1.035           55         0.003									
47         0.00173         0.00133         0.0060         0.04         0.00         0.00         30         1.043           48         0.00186         0.00143         0.0060         0.03         0.00         0.00         32         1.035           50         0.00214         0.00168         0.0150         0.03         0.00         0.00         32         1.035           51         0.00245         0.00185         0.0150         0.03         0.00         0.00         34         1.035           52         0.00267         0.00202         0.0150         0.03         0.00         0.00         34         1.035           53         0.00292         0.00221         0.0150         0.03         0.00         0.00         36         1.035           54         0.00320         0.00242         0.0255         0.03         0.00         0.00         36         1.035           55         0.00362         0.00272         0.0255         0.03         0.00         0.00         37         1.035           56         0.00420         0.00399         0.0255         0.03         0.33         0.35         0.50         38         1.035           57<									
48         0.00186         0.00143         0.0060         0.03         0.00         0.00         31         1.043           49         0.00200         0.00155         0.0060         0.03         0.00         0.00         32         1.035           50         0.00214         0.00168         0.0150         0.03         0.00         0.00         33         1.035           51         0.00245         0.00185         0.0150         0.03         0.00         0.00         34         1.035           52         0.00267         0.00202         0.0150         0.03         0.00         0.00         35         1.035           53         0.00292         0.00221         0.0150         0.03         0.00         0.00         36         1.035           54         0.00320         0.00242         0.0255         0.03         0.00         0.03         37         1.035           55         0.00362         0.00272         0.0255         0.03         0.33         0.45         39         1.035           56         0.00420         0.00348         0.0255         0.03         0.33         0.45         39         1.035           57         0.004									
49         0.00200         0.00155         0.0060         0.03         0.00         0.00         32         1.035           50         0.00214         0.00168         0.0150         0.03         0.00         0.00         33         1.035           51         0.00245         0.00185         0.0150         0.03         0.00         0.00         34         1.035           52         0.00267         0.00202         0.0150         0.03         0.00         0.00         35         1.035           53         0.00292         0.00221         0.0150         0.03         0.00         0.00         36         1.035           54         0.00320         0.00242         0.0255         0.03         0.00         0.30         37         1.035           55         0.00362         0.00272         0.0255         0.03         0.35         0.50         38         1.035           56         0.00420         0.00309         0.0255         0.03         0.33         0.45         39         1.035           57         0.00469         0.0348         0.0255         0.03         0.30         0.31         0.15         40         1.035           58 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
50         0.00214         0.00168         0.0150         0.03         0.00         0.00         33         1.035           51         0.00245         0.00185         0.0150         0.03         0.00         0.00         34         1.035           52         0.00267         0.00202         0.0150         0.03         0.00         0.00         35         1.035           53         0.00292         0.00221         0.0150         0.03         0.00         0.00         36         1.035           54         0.00320         0.00242         0.0255         0.03         0.00         0.30         37         1.035           55         0.0362         0.00272         0.0255         0.03         0.35         0.50         38         1.035           56         0.00469         0.00348         0.0255         0.03         0.33         0.45         39         1.035           57         0.00469         0.00348         0.0255         0.03         0.30         0.15         40         1.035           58         0.00527         0.00392         0.0255         0.03         0.30         0.15         41         1.035           59         0.0059									
51         0.00245         0.00185         0.0150         0.03         0.00         0.00         34         1.035           52         0.00267         0.00202         0.0150         0.03         0.00         0.00         35         1.035           53         0.00292         0.00221         0.0150         0.03         0.00         0.00         36         1.035           54         0.00320         0.00242         0.0255         0.03         0.00         0.30         37         1.035           55         0.00362         0.00272         0.0255         0.03         0.35         0.50         38         1.035           56         0.00420         0.00309         0.0255         0.03         0.33         0.45         39         1.035           57         0.00469         0.00348         0.0255         0.03         0.30         0.15         40         1.035           58         0.00527         0.00392         0.0255         0.03         0.30         0.15         41         1.035           59         0.00594         0.00444         0.0255         0.03         0.30         0.15         42         1.035           60         0.006									
52         0.00267         0.00202         0.0150         0.03         0.00         0.00         35         1.035           53         0.00292         0.00221         0.0150         0.03         0.00         0.00         36         1.035           54         0.00320         0.00242         0.0255         0.03         0.00         0.30         37         1.035           55         0.00362         0.00272         0.0255         0.03         0.35         0.50         38         1.035           56         0.00420         0.00309         0.0255         0.03         0.33         0.45         39         1.035           57         0.00469         0.00348         0.0255         0.03         0.30         0.15         40         1.035           58         0.00527         0.00392         0.0255         0.03         0.30         0.15         41         1.035           59         0.00594         0.00444         0.0255         0.03         0.30         0.15         42         1.035           60         0.00675         0.00505         0.0050         0.03         0.30         0.015         43         1.035           61         0.00									
53         0.00292         0.00221         0.0150         0.03         0.00         0.00         36         1.035           54         0.00320         0.00242         0.0255         0.03         0.00         0.30         37         1.035           55         0.00362         0.00272         0.0255         0.03         0.35         0.50         38         1.035           56         0.00420         0.00309         0.0255         0.03         0.33         0.45         39         1.035           57         0.00469         0.00348         0.0255         0.03         0.30         0.15         40         1.035           58         0.00527         0.00392         0.0255         0.03         0.30         0.15         41         1.035           59         0.00594         0.00444         0.0255         0.03         0.30         0.15         42         1.035           60         0.00675         0.00505         0.0050         0.03         0.30         0.15         43         1.035           61         0.00768         0.00581         0.0050         0.03         0.30         0.03         44         1.035           62         0.008									
54         0.00320         0.00242         0.0255         0.03         0.00         0.30         37         1.035           55         0.00362         0.00272         0.0255         0.03         0.35         0.50         38         1.035           56         0.00420         0.00309         0.0255         0.03         0.33         0.45         39         1.035           57         0.00469         0.00348         0.0255         0.03         0.30         0.15         40         1.035           58         0.00527         0.00392         0.0255         0.03         0.30         0.15         41         1.035           59         0.00594         0.00444         0.0255         0.03         0.30         0.15         42         1.035           60         0.00675         0.00505         0.0050         0.03         0.30         0.15         42         1.035           61         0.00768         0.00581         0.0050         0.03         0.30         0.01         45         1.035           62         0.00876         0.00666         0.0050         0.03         0.30         0.01         45         1.035           63         0.010									
55         0.00362         0.00272         0.0255         0.03         0.35         0.50         38         1.035           56         0.00420         0.00309         0.0255         0.03         0.33         0.45         39         1.035           57         0.00469         0.00348         0.0255         0.03         0.30         0.15         40         1.035           58         0.00527         0.00392         0.0255         0.03         0.30         0.15         41         1.035           59         0.00594         0.00444         0.0255         0.03         0.30         0.15         42         1.035           60         0.00675         0.00505         0.0050         0.03         0.30         0.15         43         1.035           61         0.00768         0.00501         0.0050         0.03         0.30         0.01         45         1.035           62         0.00876         0.00666         0.0050         0.03         0.30         0.01         45         1.035           63         0.01001         0.00765         0.0050         0.03         0.45         0.01         46         1.035           64         0.011									
56         0.00420         0.00309         0.0255         0.03         0.33         0.45         39         1.035           57         0.00469         0.00348         0.0255         0.03         0.30         0.15         40         1.035           58         0.00527         0.00392         0.0255         0.03         0.30         0.15         41         1.035           59         0.00594         0.00444         0.0255         0.03         0.30         0.15         42         1.035           60         0.00675         0.00505         0.0050         0.03         0.30         0.15         43         1.035           61         0.00768         0.00581         0.0050         0.03         0.30         0.01         45         1.035           62         0.00876         0.00666         0.0050         0.03         0.30         0.01         45         1.035           63         0.01001         0.00765         0.0050         0.03         0.45         0.01         46         1.035           64         0.01128         0.00862         0.0050         0.03         0.45         0.01         47         1.035           65         0.012									
57         0.00469         0.00348         0.0255         0.03         0.30         0.15         40         1.035           58         0.00527         0.00392         0.0255         0.03         0.30         0.15         41         1.035           59         0.00594         0.00444         0.0255         0.03         0.30         0.15         42         1.035           60         0.00675         0.00505         0.0050         0.03         0.30         0.15         43         1.035           61         0.00768         0.00581         0.0050         0.03         0.30         0.03         44         1.035           62         0.00876         0.00666         0.0050         0.03         0.30         0.01         45         1.035           63         0.01001         0.00765         0.0050         0.03         0.45         0.01         46         1.035           64         0.01128         0.00862         0.0050         0.03         0.45         0.01         47         1.035           65         0.01274         0.00971         0.0030         0.03         0.25         0.01         49         1.035           66         0.014									
58         0.00527         0.00392         0.0255         0.03         0.30         0.15         41         1.035           59         0.00594         0.00444         0.0255         0.03         0.30         0.15         42         1.035           60         0.00675         0.00505         0.0050         0.03         0.30         0.15         43         1.035           61         0.00768         0.00581         0.0050         0.03         0.30         0.03         44         1.035           62         0.00876         0.00666         0.0050         0.03         0.30         0.01         45         1.035           63         0.01001         0.00765         0.0050         0.03         0.45         0.01         46         1.035           64         0.01128         0.00862         0.0050         0.03         0.45         0.01         47         1.035           65         0.01274         0.00971         0.0030         0.03         0.25         0.01         49         1.035           66         0.01441         0.01095         0.0030         0.03         0.25         0.01         49         1.035           68         0.017									
59         0.00594         0.00444         0.0255         0.03         0.30         0.15         42         1.035           60         0.00675         0.00505         0.0050         0.03         0.30         0.15         43         1.035           61         0.00768         0.00581         0.0050         0.03         0.30         0.03         44         1.035           62         0.00876         0.00666         0.0050         0.03         0.30         0.01         45         1.035           63         0.01001         0.00765         0.0050         0.03         0.45         0.01         46         1.035           64         0.01128         0.00862         0.0050         0.03         0.45         0.01         47         1.035           65         0.01274         0.00971         0.0030         0.03         0.25         0.01         48         1.035           66         0.01441         0.01095         0.0030         0.03         0.25         0.01         49         1.035           68         0.01787         0.01345         0.0030         0.03         0.25         0.01         51         1.035           69         0.019									
60         0.00675         0.00505         0.0050         0.03         0.30         0.15         43         1.035           61         0.00768         0.00581         0.0050         0.03         0.30         0.03         44         1.035           62         0.00876         0.00666         0.0050         0.03         0.30         0.01         45         1.035           63         0.01001         0.00765         0.0050         0.03         0.45         0.01         46         1.035           64         0.01128         0.00862         0.0050         0.03         0.45         0.01         47         1.035           65         0.01274         0.00971         0.0030         0.03         0.25         0.01         48         1.035           66         0.01441         0.01095         0.0030         0.03         0.25         0.01         49         1.035           67         0.01607         0.01216         0.0030         0.03         0.25         0.01         50         1.035           68         0.01787         0.01345         0.0030         0.03         0.25         0.01         51         1.035           70         0.022									
61         0.00768         0.00581         0.0050         0.03         0.30         0.03         44         1.035           62         0.00876         0.00666         0.0050         0.03         0.30         0.01         45         1.035           63         0.01001         0.00765         0.0050         0.03         0.45         0.01         46         1.035           64         0.01128         0.00862         0.0050         0.03         0.45         0.01         47         1.035           65         0.01274         0.00971         0.0030         0.03         0.30         0.01         48         1.035           66         0.01441         0.01095         0.0030         0.03         0.25         0.01         49         1.035           67         0.01607         0.01216         0.0030         0.03         0.25         0.01         50         1.035           68         0.01787         0.01345         0.0030         0.03         0.25         0.01         51         1.035           69         0.01980         0.01486         0.0000         0.03         0.25         0.01         52         1.035           71         0.024									
62         0.00876         0.00666         0.0050         0.03         0.30         0.01         45         1.035           63         0.01001         0.00765         0.0050         0.03         0.45         0.01         46         1.035           64         0.01128         0.00862         0.0050         0.03         0.45         0.01         47         1.035           65         0.01274         0.00971         0.0030         0.03         0.30         0.01         48         1.035           66         0.01441         0.01095         0.0030         0.03         0.25         0.01         49         1.035           67         0.01607         0.01216         0.0030         0.03         0.25         0.01         50         1.035           68         0.01787         0.01345         0.0030         0.03         0.25         0.01         51         1.035           69         0.01980         0.01486         0.0000         0.03         0.25         0.01         52         1.035           70         0.02221         0.01674         0.0000         0.03         0.50         0.01         54         1.035           72         0.027									
63         0.01001         0.00765         0.0050         0.03         0.45         0.01         46         1.035           64         0.01128         0.00862         0.0050         0.03         0.45         0.01         47         1.035           65         0.01274         0.00971         0.0030         0.03         0.30         0.01         48         1.035           66         0.01441         0.01095         0.0030         0.03         0.25         0.01         49         1.035           67         0.01607         0.01216         0.0030         0.03         0.25         0.01         50         1.035           68         0.01787         0.01345         0.0030         0.03         0.25         0.01         51         1.035           69         0.01980         0.01486         0.0000         0.03         0.25         0.01         52         1.035           70         0.02221         0.01674         0.0000         0.03         0.50         0.01         53         1.035           71         0.02457         0.01858         0.0000         0.03         0.50         0.01         54         1.035           72         0.027									
64         0.01128         0.00862         0.0050         0.03         0.45         0.01         47         1.035           65         0.01274         0.00971         0.0030         0.03         0.30         0.01         48         1.035           66         0.01441         0.01095         0.0030         0.03         0.25         0.01         49         1.035           67         0.01607         0.01216         0.0030         0.03         0.25         0.01         50         1.035           68         0.01787         0.01345         0.0030         0.03         0.25         0.01         51         1.035           69         0.01980         0.01486         0.0000         0.03         0.25         0.01         52         1.035           70         0.02221         0.01674         0.0000         0.03         0.50         0.01         53         1.035           71         0.02457         0.01858         0.0000         0.03         0.50         0.01         54         1.035           72         0.02728         0.02067         0.0000         0.03         0.50         0.01         56         1.035           73         0.030									
65         0.01274         0.00971         0.0030         0.03         0.30         0.01         48         1.035           66         0.01441         0.01095         0.0030         0.03         0.25         0.01         49         1.035           67         0.01607         0.01216         0.0030         0.03         0.25         0.01         50         1.035           68         0.01787         0.01345         0.0030         0.03         0.25         0.01         51         1.035           69         0.01980         0.01486         0.0000         0.03         0.25         0.01         52         1.035           70         0.02221         0.01674         0.0000         0.03         0.50         0.01         53         1.035           71         0.02457         0.01858         0.0000         0.03         0.50         0.01         54         1.035           72         0.02728         0.02067         0.0000         0.03         0.50         0.01         55         1.035           73         0.03039         0.02297         0.0000         0.03         0.50         0.01         56         1.035									
66         0.01441         0.01095         0.0030         0.03         0.25         0.01         49         1.035           67         0.01607         0.01216         0.0030         0.03         0.25         0.01         50         1.035           68         0.01787         0.01345         0.0030         0.03         0.25         0.01         51         1.035           69         0.01980         0.01486         0.0000         0.03         0.25         0.01         52         1.035           70         0.02221         0.01674         0.0000         0.03         0.50         0.01         53         1.035           71         0.02457         0.01858         0.0000         0.03         0.50         0.01         54         1.035           72         0.02728         0.02067         0.0000         0.03         0.50         0.01         55         1.035           73         0.03039         0.02297         0.0000         0.03         0.50         0.01         56         1.035									
67         0.01607         0.01216         0.0030         0.03         0.25         0.01         50         1.035           68         0.01787         0.01345         0.0030         0.03         0.25         0.01         51         1.035           69         0.01980         0.01486         0.0000         0.03         0.25         0.01         52         1.035           70         0.02221         0.01674         0.0000         0.03         0.50         0.01         53         1.035           71         0.02457         0.01858         0.0000         0.03         0.50         0.01         54         1.035           72         0.02728         0.02067         0.0000         0.03         0.50         0.01         55         1.035           73         0.03039         0.02297         0.0000         0.03         0.50         0.01         56         1.035									
68     0.01787     0.01345     0.0030     0.03     0.25     0.01     51     1.035       69     0.01980     0.01486     0.0000     0.03     0.25     0.01     52     1.035       70     0.02221     0.01674     0.0000     0.03     0.50     0.01     53     1.035       71     0.02457     0.01858     0.0000     0.03     0.50     0.01     54     1.035       72     0.02728     0.02067     0.0000     0.03     0.50     0.01     55     1.035       73     0.03039     0.02297     0.0000     0.03     0.50     0.01     56     1.035						0.25			
69     0.01980     0.01486     0.0000     0.03     0.25     0.01     52     1.035       70     0.02221     0.01674     0.0000     0.03     0.50     0.01     53     1.035       71     0.02457     0.01858     0.0000     0.03     0.50     0.01     54     1.035       72     0.02728     0.02067     0.0000     0.03     0.50     0.01     55     1.035       73     0.03039     0.02297     0.0000     0.03     0.50     0.01     56     1.035		0.01787		0.0030				51	1.035
70     0.02221     0.01674     0.0000     0.03     0.50     0.01     53     1.035       71     0.02457     0.01858     0.0000     0.03     0.50     0.01     54     1.035       72     0.02728     0.02067     0.0000     0.03     0.50     0.01     55     1.035       73     0.03039     0.02297     0.0000     0.03     0.50     0.01     56     1.035		0.01980	0.01486	0.0000				52	
72 0.02728 0.02067 0.0000 0.03 0.50 0.01 55 1.035 73 0.03039 0.02297 0.0000 0.03 0.50 0.01 56 1.035									
73 0.03039 0.02297 0.0000 0.03 0.50 0.01 56 1.035									
74 0.03390 0.02546 0.0000 0.03 0.99 0.01 57 1.035									
	74	0.03390	0.02546	0.0000	0.03	0.99	0.01	57	1.035

#### Actuarial Assumptions, effective July 1, 2013 Regular Teachers

	DEATH RATES			TERMINATION RATES				RETIREMENT/DROP RATES			
AGE	MALE	FEMALE	DISABILITY RATES	< 1 YEAR	1-2 YEARS	2-3 YEARS	4+ YEARS	< 25 YOS	25-29 YOS	30+ YOS	DU
18	0.00020	0.00013	0.0000	0.200	0.200	0.095	0.180	0.000	0.000	0.000	
19	0.00020	0.00013	0.0000	0.200	0.200	0.095	0.180	0.000	0.000	0.000	1
20	0.00021	0.00013	0.0000	0.200	0.200	0.095	0.180	0.000	0.000	0.000	2
21	0.00023	0.00013	0.0000	0.200	0.200	0.095	0.180	0.000	0.000	0.000	3
22	0.00024	0.00013	0.0000	0.200	0.200	0.095	0.180	0.000	0.000	0.000	4
23	0.00026	0.00013	0.0001	0.200	0.200	0.095	0.180	0.000	0.000	0.000	5
24	0.00027	0.00014	0.0001	0.200	0.200	0.095	0.180	0.000	0.000	0.000	6
25	0.00029	0.00015	0.0001	0.180	0.126	0.095	0.090	0.000	0.000	0.000	7
26	0.00033	0.00016	0.0001	0.180	0.126	0.095	0.060	0.000	0.000	0.000	8
27	0.00034	0.00017	0.0001	0.190	0.126	0.095	0.060	0.000	0.000	0.000	9
28	0.00035	0.00017	0.0001	0.190	0.126	0.095	0.055	0.000	0.000	0.000	10
30	0.00036 0.00039	0.00018 0.00021	0.0001	0.190	0.126 0.120	0.095	0.053 0.053	0.000	0.000	0.000	12
31	0.00039	0.00021	0.0001	0.190	0.120	0.109	0.050	0.000	0.000	0.000	13
32	0.00044	0.00029	0.0003	0.190	0.120	0.109	0.030	0.000	0.000	0.000	14
33	0.00056	0.00029	0.0003	0.190	0.120	0.109	0.045	0.000	0.000	0.000	1:
34	0.00062	0.00034	0.0003	0.190	0.120	0.109	0.045	0.000	0.000	0.000	10
35	0.00068	0.00036	0.0006	0.180	0.117	0.095	0.040	0.000	0.000	0.000	1'
36	0.00074	0.00038	0.0010	0.180	0.117	0.095	0.040	0.000	0.000	0.000	18
37	0.00080	0.00040	0.0007	0.180	0.117	0.095	0.040	0.000	0.000	0.000	19
38	0.00083	0.00042	0.0007	0.180	0.117	0.095	0.040	0.050	0.000	0.000	20
39	0.00086	0.00044	0.0011	0.180	0.117	0.095	0.040	0.040	0.000	0.000	2
40	0.00088	0.00048	0.0011	0.165	0.123	0.090	0.037	0.040	0.000	0.000	22
41	0.00091	0.00053	0.0013	0.165	0.123	0.090	0.037	0.025	0.000	0.000	2.
42	0.00095	0.00058	0.0016	0.165	0.123	0.090	0.037	0.025	0.000	0.000	24
43	0.00099	0.00064	0.0016	0.165	0.123	0.090	0.037	0.025	0.000	0.000	25
44	0.00103 0.00109	0.00071 0.00075	0.0016	0.165	0.123	0.090	0.040	0.025	0.000	0.000	20
45 46	0.00109	0.00075	0.0022 0.0022	0.163	0.099	0.090	0.040	0.025	0.020	0.000	2'
47	0.00114	0.00084	0.0022	0.163	0.099	0.090	0.040	0.025	0.020	0.000	29
48	0.00119	0.00091	0.0022	0.163	0.099	0.090	0.040	0.023	0.020	0.700	30
49	0.00124	0.00098	0.0022	0.163	0.099	0.090	0.040	0.030	0.020	0.600	3
50	0.00136	0.00109	0.0025	0.175	0.112	0.090	0.040	0.030	0.050	0.300	3
51	0.00152	0.00124	0.0025	0.175	0.112	0.090	0.040	0.030	0.170	0.600	3.
52	0.00161	0.00142	0.0025	0.175	0.112	0.090	0.040	0.030	0.280	0.600	34
53	0.00176	0.00163	0.0030	0.175	0.112	0.090	0.040	0.100	0.280	0.500	3:
54	0.00193	0.00189	0.0030	0.175	0.112	0.090	0.040	0.150	0.450	0.400	30
55	0.00224	0.00222	0.0040	0.175	0.106	0.090	0.040	0.150	0.750	0.300	3'
56	0.00267	0.00266	0.0050	0.175	0.106	0.090	0.040	0.150	0.330	0.200	38
57	0.00306	0.00307	0.0055	0.155	0.106	0.090	0.040	0.150	0.250	0.200	39
58	0.00352	0.00346	0.0055	0.200	0.106	0.090	0.040	0.250	0.250	0.200	40
<u>59</u> 60	0.00397 0.00451	0.00392 0.00446	0.0055 0.0055	0.200	0.106 0.106	0.090	0.040	0.250	0.300	0.200	4
61	0.00451	0.00446	0.0055	0.200	0.106	0.090	0.040	0.250	0.300	0.200	43
62	0.00326	0.00515	0.0050	0.200	0.106	0.090	0.040	0.150	0.300	0.250	4.
63	0.00704	0.00587	0.0050	0.200	0.106	0.090	0.040	0.150	0.220	0.250	4:
64	0.00793	0.00760	0.0035	0.200	0.106	0.090	0.040	0.200	0.200	0.300	40
65	0.00895	0.00856	0.0035	0.200	0.106	0.090	0.040	0.200	0.200	0.300	4'
66	0.01039	0.00966	0.0020	0.200	0.106	0.090	0.040	0.200	0.200	0.300	48
67	0.01159	0.01073	0.0020	0.200	0.106	0.090	0.040	0.200	0.200	0.200	49
68	0.01256	0.01186	0.0020	0.200	0.106	0.090	0.040	0.200	0.300	0.300	50
69	0.01392	0.01311	0.0020	0.200	0.106	0.090	0.040	0.200	0.300	0.300	5
70	0.01522	0.01477	0.0020	0.200	0.106	0.090	0.040	0.200	0.300	0.400	52
71	0.01684	0.01598	0.0020	0.200	0.106	0.090	0.040	0.200	0.300	0.200	5.
72	0.01870	0.01778	0.0020	0.200	0.106	0.090	0.040	0.200	0.300	0.250	54
73	0.02083	0.01927	0.0020	0.200	0.106	0.090	0.040	0.200	0.300	0.250	55

	SALARY
DUR	INCREASE
0	0.0575
1	0.0575
2	0.0575
3	0.0575
4	0.0575
5	0.0500
7	0.0500 0.0500
8	0.0500
9	0.0500
10	0.0300
11	0.0475
12	0.0475
13	0.0475
14	0.0475
15	0.0473
16	0.0450
17	0.0450
18	0.0450
19	0.0450
20	0.0400
21	0.0400
22	0.0400
23	0.0400
24	0.0400
25	0.0375
26	0.0375
27	0.0375
28	0.0375
29	0.0375
30	0.0425
31	0.0425
32	0.0425
33	0.0425
34	0.0425
35	0.0425
36	0.0425
37	0.0425
38	0.0425
39	0.0425
40	0.0425
41	0.0425
42	0.0425
43	0.0425
44	0.0425
45	0.0425
46	0.0425
47	0.0425
48	0.0425
49	0.0425
50	0.0425
51	0.0425
52	0.0425
53	0.0425
54	0.0425
55	0.0425
56	0.0425

#### Actuarial Assumptions, effective July 1, 2013 Higher Education

	DEATH RATES			Т	TERMINAT	RETIREMENT/DROP RATES				
			DISABILITY	< 1	1-2	2-3	4+	< 25	25-29	30+
AGE	MALE	FEMALE	RATES	YEAR	YEARS	YEARS	YEARS	YOS	YOS	YOS
18	0.00020	0.00013	0.0000	0.250	0.250	0.170	0.120	0.000	0.000	0.000
19	0.00021	0.00013	0.0000	0.250	0.250	0.170	0.120	0.000	0.000	0.000
20	0.00021	0.00013	0.0000	0.250	0.250	0.170	0.120	0.000	0.000	0.000
21	0.00023	0.00013	0.0000	0.250	0.250	0.170	0.120	0.000	0.000	0.000
22	0.00024	0.00013	0.0000	0.250	0.250	0.170	0.120	0.000	0.000	0.000
23	0.00026 0.00027	0.00013	0.0001	0.250	0.250	0.170	0.120	0.000	0.000	0.000
25	0.00027	0.00014 0.00015	0.0001	0.250 0.250	0.250 0.250	0.170 0.170	0.120 0.120	0.000	0.000	0.000
26	0.00029	0.00015	0.0001	0.230	0.250	0.170	0.120	0.000	0.000	0.000
27	0.00033	0.00017	0.0001	0.210	0.220	0.170	0.120	0.000	0.000	0.000
28	0.00034	0.00017	0.0001	0.210	0.220	0.170	0.120	0.000	0.000	0.000
29	0.00035	0.00017	0.0001	0.240	0.220	0.170	0.120	0.000	0.000	0.000
30	0.00039	0.00018	0.0001	0.240	0.160	0.170	0.120	0.000	0.000	0.000
31	0.00044	0.00025	0.0001	0.220	0.178	0.170	0.100	0.000	0.000	0.000
32	0.00050	0.00029	0.0001	0.220	0.170	0.160	0.100	0.000	0.000	0.000
33	0.00056	0.00023	0.0001	0.190	0.170	0.150	0.120	0.000	0.000	0.000
34	0.00062	0.00034	0.0001	0.230	0.155	0.100	0.120	0.000	0.000	0.000
35	0.00068	0.00036	0.0001	0.220	0.175	0.130	0.120	0.000	0.000	0.000
36	0.00074	0.00038	0.0001	0.220	0.160	0.150	0.120	0.000	0.000	0.000
37	0.00080	0.00040	0.0001	0.220	0.108	0.150	0.120	0.000	0.000	0.000
38	0.00083	0.00042	0.0001	0.190	0.180	0.150	0.100	0.100	0.080	0.600
39	0.00086	0.00044	0.0001	0.190	0.140	0.150	0.100	0.100	0.080	0.600
40	0.00088	0.00048	0.0001	0.230	0.185	0.150	0.100	0.100	0.080	0.600
41	0.00091	0.00053	0.0001	0.165	0.108	0.150	0.100	0.100	0.080	0.600
42	0.00095	0.00058	0.0001	0.230	0.115	0.150	0.100	0.100	0.080	0.400
43	0.00099	0.00064	0.0001	0.155	0.168	0.150	0.100	0.070	0.080	0.200
44	0.00103	0.00071	0.0001	0.195	0.135	0.150	0.100	0.070	0.080	0.050
45	0.00109	0.00075	0.0001	0.190	0.116	0.150	0.100	0.070	0.080	0.050
46	0.00114	0.00080	0.0008	0.162	0.170	0.150	0.080	0.070	0.080	0.050
47	0.00119	0.00084	0.0008	0.210	0.140	0.150	0.090	0.070	0.080	0.050
48	0.00124	0.00091 0.00098	0.0008	0.135	0.180 0.125	0.150 0.150	0.090	0.070	0.080	0.050
50	0.00130	0.00098	0.0008	0.135 0.185	0.123	0.150				0.120
51	0.00136 0.00152	0.00109	0.0008	0.185	0.108	0.060	0.090	0.070	0.080	0.120
52	0.00132	0.00124	0.0008	0.145	0.070	0.030	0.090	0.070	0.160	0.120
53	0.00101	0.00142	0.0008	0.133	0.110	0.093	0.090	0.070	0.160	0.120
54	0.00170	0.00189	0.0008	0.220	0.130	0.123	0.090	0.070	0.100	0.180
55	0.00224	0.00222	0.0008	0.200	0.104	0.140	0.090	0.150	0.350	0.180
56	0.00267	0.00266	0.0020	0.135	0.122	0.100	0.080	0.150	0.200	0.180
57	0.00306	0.00307	0.0020	0.250	0.055	0.140	0.080	0.150	0.130	0.280
58	0.00352	0.00346	0.0020	0.100	0.115	0.200	0.100	0.150	0.130	0.280
59	0.00397	0.00392	0.0005	0.100	0.210	0.125	0.080	0.150	0.130	0.200
60	0.00451	0.00446	0.0005	0.150	0.160	0.090	0.060	0.150	0.130	0.200
61	0.00526	0.00513	0.0005	0.150	0.160	0.090	0.060	0.120	0.120	0.200
62	0.00600	0.00587	0.0005	0.150	0.160	0.090	0.060	0.120	0.120	0.200
63	0.00704	0.00675	0.0005	0.150	0.160	0.090	0.060	0.120	0.120	1.000
64	0.00793	0.00760	0.0005	0.150	0.160	0.090	0.060	0.120	0.120	1.000
65	0.00895	0.00856	0.0005	0.150	0.160	0.090	0.060	0.120	0.160	1.000
66	0.01039	0.00966	0.0005	0.150	0.160	0.090	0.060	0.120	0.160	1.000
67	0.01159	0.01073	0.0005	0.150	0.160	0.090	0.060	0.120	0.160	1.000
68	0.01256	0.01186	0.0005	0.150	0.160	0.090	0.060	0.120	0.160	1.000
69	0.01392	0.01311	0.0005	0.150	0.160	0.090	0.060	0.120	0.160	1.000
70	0.01522	0.01477	0.0005	0.150	0.160	0.090	0.060	0.120	0.160	1.000
71	0.01684	0.01598	0.0000	0.150	0.160	0.090	0.060	0.120	0.160	1.000
72	0.01870	0.01778	0.0000	0.150	0.160	0.090	0.060	0.120	0.160	1.000
73 74	0.02083 0.02323	0.01927 0.02136	0.0000	0.150 0.150	0.160 0.160	0.090	0.060	0.120	0.160 0.160	1.000

DUR	SALARY INCREASE
0	0.100
1	0.100
2	0.090
3	0.080
4	0.040
5	0.070
6	0.050
7	0.070
8	0.070
9	0.070
10	0.045
	0.045
11	
12	0.045
13	0.045
14	0.040
15	0.040
16	0.040
17	0.040
18	0.040
19	0.040
20	0.040
21	0.040
22	0.040
23	0.040
24	0.040
25	0.040
26	0.040
27	0.035
28	0.035
29	0.035
30	0.035
31	0.035
32	0.035
33	0.035
34	0.035
35	0.035
36	0.035
37	0.035
38	0.035
39	0.035
40	0.035
41	0.035
42	0.035
43	0.035
44	0.035
45	0.035
46	0.035
47	0.035
48	0.035
49	0.035
50	0.035
51	0.035
52	0.035
53	0.035
54	0.035
55	0.035
56	0.035
	0.055

#### Actuarial Assumptions, effective July 1, 2013 Lunch Plan A

	DEAT	TH RATES		RETIREMI RAT		
			DISABILITY		>= 30	
AGE	MALE	FEMALE	RATES	< 30 YOS	YOS	
18	0.00020	0.00013	0.0000	0.000	0.000	
19	0.00021	0.00013	0.0000	0.000	0.000	
20	0.00021	0.00013	0.0000	0.000	0.000	
21	0.00023	0.00013	0.0000	0.000	0.000	
22	0.00024	0.00013	0.0000	0.000	0.000	
23	0.00026	0.00013	0.0000	0.000	0.000	
24	0.00027	0.00014	0.0000	0.000	0.000	
25	0.00029	0.00015	0.0000	0.000	0.000	
26	0.00033	0.00016	0.0000	0.000	0.000	
27	0.00034	0.00017	0.0000	0.000	0.000	
28	0.00035	0.00017	0.0000	0.000	0.000	
29	0.00036	0.00018	0.0000	0.000	0.000	
30	0.00039	0.00021	0.0000	0.000	0.000	
31	0.00033	0.00025	0.0001	0.000	0.000	
32	0.00050	0.00029	0.0001	0.000	0.000	
33	0.00056	0.00023	0.0001	0.000	0.000	
34	0.00062	0.00034	0.0001	0.000	0.000	
35	0.00068	0.00034	0.0001	0.000	0.000	
36	0.00074	0.00038	0.0001	0.000	0.000	
37	0.00074	0.00038	0.0001	0.000	0.000	
38	0.00080	0.00040	0.0001	0.600	0.300	
39	0.00085	0.00042	0.0001	0.600	0.300	
40	0.00088	0.00044	0.0001	0.600	0.300	
	0.00088		+			
41		0.00053	0.0001	0.600	0.300	
42	0.00095	0.00058	0.0001	0.600	0.300	
43	0.00099	0.00064	0.0001	0.600	0.300	
	0.00103	0.00071	0.0001	0.600	0.300	
45	0.00109	0.00075	0.0001	0.600	0.300	
46	0.00114	0.00080	0.0001	0.600	0.300	
47	0.00119	0.00084	0.0001	0.600	0.300	
48	0.00124	0.00091	0.0001	0.600	0.300	
49	0.00130	0.00098	0.0100	0.600	0.300	
50	0.00136	0.00109	0.0100	0.600	0.300	
51	0.00152	0.00124	0.0100	0.600	0.300	
52	0.00161	0.00142	0.0150	0.600	0.700	
53	0.00176	0.00163	0.0175	0.600	0.700	
54	0.00193	0.00189	0.0175	0.600	0.700	
55	0.00224	0.00222	0.0175	0.800	0.700	
56	0.00267	0.00266	0.0002	0.350	0.700	
57	0.00306	0.00307	0.0002	0.350	0.700 0.700	
58	0.00352	0.00346		0.0002 0.350		
59	0.00397	0.00392	0.0002	0.600	0.700	
60	0.00451	0.00446	0.0002	0.450	0.700	
61	0.00526	0.00513	0.0002	0.200	0.500	
62	0.00600	0.00587	0.0002	0.200	0.500	
63	0.00704	0.00675	0.0002	0.350	0.500	
64	0.00793	0.00760	0.0002	0.100	0.500	
65	0.00895	0.00856	0.0002	0.100	0.500	
66	0.01039	0.00966	0.0002	0.100	0.250	
67	0.01159	0.01073	0.0002	0.200	0.250	
68	0.01256	0.01186	0.0002	0.200	0.250	
69	0.01392	0.01311	0.0000	0.200	0.250	
70	0.01522	0.01477	0.0000	0.200	0.250	
71	0.01684	0.01598	0.0000	0.200	0.250	
72	0.01870	0.01778	0.0000	0.200	0.250	
73	0.02083	0.01927	0.0000	0.200	0.250	
	0.02323	0.02136	0.0000	0.200	0.250	

	TERMINATION	SALARY
DUR	RATES	INCREASE
0	0.14	0.06
1	0.14	0.06
2	0.14	0.06
3	0.14	0.06
4	0.14	0.06
5	0.14	0.06
6	0.14	0.06
7	0.14	0.06
8	0.14	0.06
9	0.14	0.06
10	0.14	0.06
11	0.14	0.06
12	0.14	0.05
13	0.14	0.05
14	0.14	0.05
15	0.14	0.06
16	0.14	0.06
17	0.14	0.07
18	0.14	0.07
19	0.14	0.04
20	0.14	0.04
21	0.14	0.04
22	0.14	0.04
23	0.14	0.06
24	0.14	0.06
25	0.14	0.04
26	0.14	0.04
27	0.14	0.04
28	0.14	0.04
29	0.14	0.04
30	0.14	0.04
31	0.14	0.04
32	0.14	0.04
33	0.14	0.04
34	0.14	0.04
35	0.14	0.04
36	0.14	0.04
37	0.14	0.04
38	0.14	0.04
39	0.14	0.04
40	0.14	0.04
41	0.14	0.04
42	0.14 0.14	0.04
43	0.14	0.04
45	0.14	0.04
46	0.14	0.04
47	0.14	0.04
48	0.14	0.04
49	0.14	0.04
50	0.14	0.04
51	0.14	0.04
52	0.14	0.04
53	0.14	0.04
54	0.14	0.04
55	0.14	0.04
56	0.14	0.04
	0.17	J.0.0

#### Actuarial Assumptions, effective July 1, 2013 Lunch Plan B

	DEAT	TH RATES	DISABILITY	RETIREMENT/DROP
AGE	MALE	FEMALE	RATES	RATES
18	0.00020	0.00013	0.0000	0.00
19	0.00021	0.00013	0.0000	0.00
20	0.00021	0.00013	0.0000	0.00
21	0.00023	0.00013	0.0000	0.00
22	0.00024	0.00013	0.0000	0.00
23	0.00026	0.00013	0.0000	0.00
24	0.00027	0.00014	0.0000	0.00
25	0.00029	0.00015	0.0000	0.00
26	0.00033	0.00016	0.0000	0.00
27	0.00034	0.00017	0.0000	0.00
28	0.00035	0.00017	0.0000	0.00
29	0.00036	0.00018	0.0000	0.00
30	0.00039	0.00021	0.0000	0.00
31	0.00044	0.00025	0.0000	0.00
32	0.00050	0.00029	0.0000	0.00
33	0.00056	0.00031	0.0000	0.00
34	0.00062	0.00034	0.0000	0.00
35	0.00068	0.00036	0.0000	0.00
36	0.00074	0.00038	0.0010	0.00
37	0.00080	0.00040	0.0010	0.00
38	0.00083	0.00042	0.0010	0.00
39	0.00086	0.00044	0.0010	0.00
40	0.00088	0.00048	0.0050	0.00
41	0.00091	0.00053	0.0050	0.00
42	0.00095	0.00058	0.0050	0.00
43	0.00099	0.00064	0.0050	0.00
44	0.00103	0.00071	0.0050	0.00
45	0.00109	0.00075	0.0050	0.00
46	0.00114	0.00080	0.0050	0.00
47	0.00119	0.00084	0.0050	0.00
48	0.00124	0.00091	0.0050	0.00
49	0.00130	0.00098	0.0050	0.00
50	0.00136	0.00109	0.0130	0.00
51	0.00152	0.00124	0.0130	0.00
52	0.00161	0.00142	0.0130	0.00
53	0.00176	0.00163	0.0130	0.00
54	0.00193	0.00189	0.0130	0.00
55	0.00224	0.00222	0.0175	0.80
56	0.00267	0.00266	0.0175	0.80
57	0.00306	0.00307	0.0225	0.80
58	0.00352	0.00346	0.0225	0.80
59	0.00397	0.00392	0.0150	0.60
60	0.00451	0.00446	0.0050	0.50
61	0.00526	0.00513	0.0050	0.25
62	0.00600	0.00587	0.0050	0.25
63	0.00704	0.00675	0.0050	0.25
64	0.00793	0.00760	0.0010	0.25
65	0.00895	0.00856	0.0010	0.15
66	0.01039	0.00966	0.0010	0.15
67	0.01159	0.01073	0.0010	0.30
68	0.01256	0.01186	0.0010	0.45
69 70	0.01392	0.01311	0.0010	0.20
	0.01522	0.01477	0.0010 0.0010	0.20 0.20
71 72	0.01684	0.01598		
	0.01870	0.01778	0.0010	0.20
73	0.02083	0.01927	0.0010	0.20
74	0.02323	0.02136	0.0010	0.20

	TERMINATION	SALARY
DUR	RATES	INCREASE
0	0.100	0.055
1	0.090	0.055
2	0.080	0.055
3	0.070	0.055
4	0.060	0.055
5	0.050	0.055
6	0.050	0.055
7	0.045	0.055
8	0.045	0.055
9	0.045	0.055
10	0.045	0.055
11	0.045	0.045
12	0.040	0.045
13	0.030	0.045
14	0.030	0.045
15	0.030	0.045
16	0.050	0.050
17	0.050	0.050
18	0.050	0.050
19	0.030	0.040
20	0.040	0.040
21	0.040	0.040
22	0.040	0.040
23	0.040	0.040
24	0.040	0.040
25	0.040	0.040
26	0.040	0.040
27	0.040	0.040
28	0.040	0.040
29	0.040	0.040
30	0.040	0.040
31	0.040	0.040
32	0.040	0.040
33	0.040	0.040
34	0.040	0.040
35	0.040	0.040
36	0.040	0.040
37	0.040	0.040
38	0.040	0.040
39	0.040	0.040
40	0.040	0.040
41	0.040	0.040
42	0.040	0.040
43	0.040	0.040
44	0.040	0.040
45	0.040	0.040
46	0.040	0.040
47	0.040	0.040
48	0.040	0.040
49	0.040	0.040
50	0.040	0.040
51	0.040	0.040
52	0.040	0.040
53	0.040	0.040
54	0.040	0.040
55	0.040	0.040
56	0.040	0.040

Exhibit 7-A

AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
June 30, 2013

		Amtz.	Amtz.		Years		Mid-Year
Date	Description	Method	Period	<b>Initial Liability</b>	Remain	Remaining Balance	Payment
2013	OAB	Note 1	16	2,612,612,675	16	2,612,612,675	219,564,651
2013	EAAB	Note 2,3	27	4,064,252,065	27	4,064,252,065	291,113,415
2013	2009 Change in Liability	L	26	2,866,088,782	26	2,866,088,782	255,124,962
2013	2010 Change in Liability	L	27	1,119,279,127	27	1,119,279,127	98,492,054
2013	2011 Change in Liability	L	28	(172,122,180)	28	(172,122,180)	(14,987,193)
2013	2012 Change in Liability	L	29	124,707,329	29	124,707,329	10,754,196
2013	2013 Change in Liability	L	30	(257,203,191)	30	(257,203,191)	(21,984,247)
2013	2013 Assumption Change	L	30	871,681,891	30	871,681,891	74,506,345
2013	2013 Asset Val Meth Change	L	30	(25,686,598)	30	(25,686,598)	(2,195,542)
	<b>Total Outstanding Balance</b>					\$ 11,203,609,900 \$	910,388,641
Employ	ers Credit Balance						
2013	Contribution Variance	L	1	(10,341,689)	1	(10,341,689)	(10,747,398)
2013	Contribution Variance	L	2	66,729,412	2	66,729,412	36,007,220
2013	Contribution Variance	L	3	68,511,720	3	68,511,720	25,581,278
2013	Contribution Variance	Note 3	0	-	0	=	-
2013	Contribution Variance	L	5	11,400,601	5	11,400,601	2,747,566
	<b>Total Credit Balance</b>					\$ 136,300,044 \$	53,588,666
	Total Unfunded Actuarial Acc	rued Liabi	lity			\$ 11,339,909,944 \$	963,977,307

See Exhibit 7-D for notes and explanations.

Exhibit 7-B

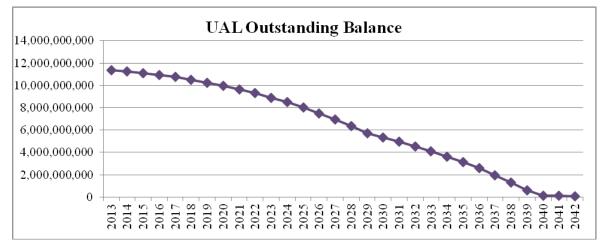
AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
June 30, 2014 - Projected

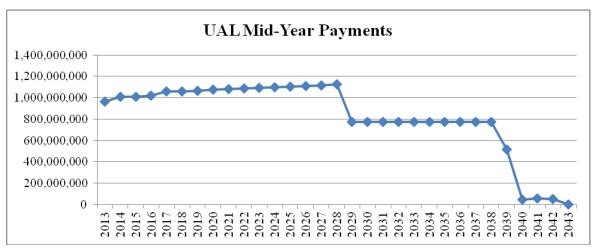
		Amtz.	Amtz.		Years		
Date	Description	Method	Period	<b>Initial Liability</b>	Remain	Remaining Balance	Mid-Year Payment
2013	OAB		16	2,612,612,675	15	2,593,443,410	233,836,353
2013	EAAB		27	4,064,252,065	26	4,086,858,295	310,035,787
2013	2009 Change in Liability	L	26	2,866,088,782	25	2,830,242,246	255,124,962
2013	2010 Change in Liability	L	27	1,119,279,127	26	1,106,465,512	98,492,054
2013	2011 Change in Liability	L	28	(172,122,180)	27	(170,316,807)	(14,987,193)
2013	2012 Change in Liability	L	29	124,707,329	28	123,507,827	10,754,196
2013	2013 Change in Liability	L	30	(257,203,191)	29	(254,932,747)	(21,984,247)
2013	2013 Assumption Change	L	30	871,681,891	29	863,987,177	74,506,345
2013	2013 Asset Val Meth Change	L	30	(25,686,598)	29	(25,459,851)	(2,195,542)
	<b>Total Outstanding Balance</b>					\$ 11,153,795,062	\$ 943,582,715
Employ	ers Credit Balance						
2013	2010 Contribution Variance	L	2	66,729,412	1	34,647,964	36,007,220
2013	2011 Contribution Variance	L	3	68,511,720	2	47,407,814	25,581,278
2013	2012 Contribution Variance	Note 3	0	-	0	-	-
2013	2013 Contribution Variance	L	5	11,400,601	4	9,457,295	2,747,566
2014	2014 Contribution Variance	L	5	13,166,454	5	13,166,454	3,173,140
	Total Credit Balance					\$ 104,679,527	\$ 67,509,204
	Total Unfunded Actuarial Acc	rued Liabi	lity			\$ 11,258,474,589	\$ 1,011,091,919

See Exhibit 7-D for notes and explanations.

Exhibit 7-C
UAL Outstanding Balance and Payment Schedule
Based on June 30, 2013 UAL Schedules

FY Beginning	UAL Outstanding Balance (Millions)	UAL Mid-Year Payments (Millions)	Payment % Change	FY Beginning	UAL Outstanding Balance (Millions)	UAL Mid- Year Payments (Millions)	Payment % Change
2013	11,340	964	<b>g</b> -	2028	6,352	1,125	0.6%
2014	11,245	1,008	4.6%	2029	5,690	774	-31.2%
2015	11,097	1,007	-0.1%	2030	5,341	774	0.0%
2016	10,938	1,019	1.2%	2031	4,964	774	0.0%
2017	10,754	1,059	3.9%	2032	4,556	774	0.0%
2018	10,514	1,062	0.3%	2033	4,116	774	0.0%
2019	10,251	1,068	0.5%	2034	3,641	774	0.0%
2020	9,961	1,074	0.6%	2035	3,128	774	0.0%
2021	9,642	1,080	0.6%	2036	2,573	774	0.0%
2022	9,290	1,086	0.6%	2037	1,974	774	0.0%
2023	8,905	1,092	0.6%	2038	1,328	774	0.0%
2024	8,482	1,099	0.6%	2039	629	519	-33.0%
2025	8,019	1,105	0.6%	2040	140	46	-91.1%
2026	7,512	1,112	0.6%	2041	104	61	32.5%
2027	6,958	1,119	0.6%	2042	48	50	-17.6%
				2043	0	0	0.0%





#### Exhibit 7-D

#### **Amortization Schedule Notes**

Act 497 of 2009 consolidated all schedules established prior to 2009 into two amortization schedules, the Original Amortization Base (OAB) and the Experience Account Amortization Base (EAAB). The OAB consists of the outstanding balance of the Initial Unfunded Accrued Liability and schedules with negative outstanding balances. The outstanding balance of this schedule was credited with funds from the Initial UAL account, excluding the subaccount of this fund, and the balance of the Employer Credit Account. The OAB payment schedule is prescribed by statute, as described in Note 1 below. The EAAB consists of the 2004 schedule and all remaining schedules. The outstanding balance of this schedule was credited with the balance of funds from the Initial UAL subaccount, which were transferred from the Employee Experience Account on June 30, 2009. The EAAB payment schedule is prescribed by statute, as described in Note 2 below.

Act 497 also revised the provisions regarding amortization of contribution variances. Previously, any contribution variance relative to the actuarially required contribution was amortized with level payments for five years. The Act provides that in any year from plan year 2009/2010 through 2039/2040 that the system receives an overpayment of contributions, the surplus will be credited to the EAAB. The EAAB will then be re-amortized according to the payment schedule specified by the Act. Similarly, any overpayment resulting from the statutory minimum contribution of 15.5% exceeding the actuarially calculated contribution until plan year 2039/2040 will be credited to the EAAB and the EAAB will be re-amortized.

All schedules were re-amortized, effective July, 1, 2013, using a rate of 8.00%.

**Note 1:** Act 497 of 2009 created the Original Amortization Base, effective July 1, 2010, which combines the following schedules shown in Exhibit A-1: 1993 (Initial Liability) 1993 (Change in Liability), 1994 - 1996, 1998-2000, 2005-2008. The combined balance was reduced by applying funds from the IUAL Fund, excluding the subaccount of this fund. The OAB was reduced by \$100 Million on June 30, 2013 and reamortized. Annual payments were determined a discount rate of 8.00%. Future payments will increase by 6.5% for 4 years, then by 2.0% until paid off in 2029.

**Note 2:** Act 497 of 2009 created the Experience Account Amortization Base, which combines the following schedules shown in Exhibit A-1: 1997, 2001 – 2003, 2004 (the liability resulting from Act 588 of 2004 which zeroed out the Experience Account), and 2008. The combined balance was reduced by applying funds from the subaccount of the IUAL Fund, which were transferred from the Experience Account on June 30, 2009. The EAAB was reduced by \$100 Million on June 30, 2013 and re-amortized. Annual payments were determined a discount rate of 8.00%. Future payments will increase by 6.5% for 4 years, then will be level until paid off in 2040.

**Note 3:** The 2012 contribution variance surplus of \$7,169,301 was used to reduce and re-amortize the EAAB, per Act 497 of 2009.

Exhibit 7-E

Components of Original Amortization Base
(Dollar amounts in millions)

	Annual Outstanding Balance						Annu	al Paym	ents	
	Employer					Employer				
		Other	IUAL	Credit	Total		Other	IUAL	Credit	Total
	IUAL	Schedules	Acct	Account	OAB	IUAL	Schedules	Acct	Account	OAB
2013	6,789.4	(3,681.6)	(395.9)	(99.2)	2,612.6	570.6	(309.4)	(33.3)	(8.3)	219.6
2014	6,739.6	(3,654.6)	(393.0)	(98.5)	2,593.4	607.7	(329.5)	(35.4)	(8.9)	233.8
2015	6,647.2	(3,604.5)	(387.6)	(97.2)	2,557.9	647.2	(350.9)	(37.7)	(9.5)	249.0
2016	6,506.4	(3,528.2)	(379.4)	(95.1)	2,503.7	689.2	(373.7)	(40.2)	(10.1)	265.2
2017	6,310.7	(3,422.0)	(368.0)	(92.2)	2,428.4	734.0	(398.0)	(42.8)	(10.7)	282.5
2018	6,052.7	(3,282.1)	(353.0)	(88.5)	2,329.1	748.7	(406.0)	(43.7)	(10.9)	288.1
2019	5,758.8	(3,122.8)	(335.8)	(84.2)	2,216.1	763.7	(414.1)	(44.5)	(11.2)	293.9
2020	5,425.9	(2,942.2)	(316.4)	(79.3)	2,087.9	779.0	(422.4)	(45.4)	(11.4)	299.8
2021	5,050.4	(2,738.6)	(294.5)	(73.8)	1,943.5	794.5	(430.8)	(46.3)	(11.6)	305.7
2022	4,628.8	(2,510.0)	(269.9)	(67.7)	1,781.2	810.4	(439.5)	(47.3)	(11.8)	311.9
2023	4,156.8	(2,254.1)	(242.4)	(60.8)	1,599.6	826.6	(448.3)	(48.2)	(12.1)	318.1
2024	3,630.3	(1,968.6)	(211.7)	(53.1)	1,397.0	843.2	(457.2)	(49.2)	(12.3)	324.5
2025	3,044.5	(1,650.9)	(177.5)	(44.5)	1,171.6	860.0	(466.4)	(50.2)	(12.6)	330.9
2026	2,394.3	(1,298.3)	(139.6)	(35.0)	921.3	877.2	(475.7)	(51.2)	(12.8)	337.6
2027	1,674.2	(907.8)	(97.6)	(24.5)	644.2	894.8	(485.2)	(52.2)	(13.1)	344.3
2028	878.2	(476.2)	(51.2)	(12.8)	337.9	912.7	(494.9)	(53.2)	(13.3)	351.2
2029	-	_	-	-	-	-	-	-	-	-

This table has changed from previously published tables. Previous annual payments were determined using the prior discount rate of 8.25%. The Outstanding balance of the OAB was reduced by \$100 Million on June 30, 2013 and re-amortized, according to Act 497 of 2010. All re-amortized payments were based on the 8.00% discount rate.

#### **GLOSSARY**

**Accrued Benefit** – The pension benefit that an individual has earned as of a specific date based on the provisions of the plan and the individual's age, service, and salary as of that date.

**Actuarial Accrued Liability** – Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the actuarial present value of benefits attributable to service credit earned (or accrued) as of the valuation date.

**Actuarial Present Value of Benefits** – Amount which, together with future interest, is expected to be sufficient to pay all benefits to be paid in the future, regardless of when earned, as determined by the application of a particular set of actuarial assumptions; equivalent to the actuarial accrued liability plus the present value of future normal costs attributable to the members.

**Actuarial Assumptions** – Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of investment earnings, changes in compensation, rates of mortality, withdrawal, disablement, and retirement as well as statistics related to marriage and family composition.

**Actuarial Cost Method** – A method of determining the portion of the cost of a pension plan to be allocated to each year; sometimes referred to as the "actuarial funding method." Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs.

**Actuarial Equivalence** – Series of payments with equal actuarial present values on a given date when valued using the same set of actuarial assumptions.

**Actuarial Present Value** - The amount of funds required as of a specified date to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payments between the specified date and the expected date of payment.

Actuarial Value of Assets – The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to market value of assets, or some modification using an asset valuation method to reduce the volatility of asset values.

**Actuarially Reduced** – The method of adjusting a benefit received at an early date, or paid in a form other than the lifetime of the member so that the expected total cost to the retirement system is equivalent to the cost if the benefit did not begin until later, or was paid for the lifetime of the member.

**Asset Gain (Loss)** – That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

**Amortization** – Paying off an interest-discounted amount with periodic payments of interest and (generally) principal, as opposed to paying off with a lump sum payment.

**Amortization Payment** – That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

**Contribution Variance** – The difference between actuarially required contribution and the actual amount received based upon a projected contribution rate. Results in an increase or decrease to future required contributions.

**Discount Rate** – The interest rate used in developing present values to reflect the time value of money.

**Decrements** – Events which result in the termination of membership in the system such as retirement, disability, withdrawal, or death.

**Employer Normal Cost** – Portion of the normal cost, excluding administrative expenses, not paid by employee contributions.

Experience Gain (Loss) – The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities during the period between two valuation dates. It is a measurement of the difference between actual and expected experience, and may be related to investment earnings above (or below) those expected or changes in the liability due to fewer (or greater) than expected numbers of retirements, deaths, disabilities, or withdrawals, or variances in pay increases relative to assumed pay increases. The effect of such gains (or losses) is to decrease (or increase) future costs.

**Funded Ratio** – A measure of the ratio of the actuarial value of assets to liabilities of the system. Typically the assets used in the measure are the actuarial value of assets as determined by the asset valuation method adopted by the Board of Trustees; the liabilities are determined using the actuarial funding method specified by Louisiana statute. Thus the funded ratio depends not only on the financial strength of the plan but also on the asset valuation method used to determine the assets and on the funding method used to determine the liabilities.

Governmental Accounting Standards Board (GASB) – Governmental agency that sets the accounting standards for state and local government operations.

Market Value of Assets (MVA) – The value of assets as they would trade on an open market.

**Normal Cost** – Computed differently under different funding methods, generally that portion of the actuarial present value of benefits allocated to the current plan year.

**Projected Benefits** – The benefits expected to be paid in the future based on the provisions of the plan and the actuarial assumptions. The projected values are based on anticipated future advancement in age and accrual of service as well as increases in salary paid to the participant.

**Projected Unit Credit (PUC) Funding Method** – A standard actuarial funding method whereby the annual cost of benefits is comprised of two components: normal cost plus an amortization payment to reduce the unfunded actuarial accrued liability.

**Side-Fund Assets** – Assets held in the trust for purposes other than for paying the accrued benefits or administrative expenses of the plan.

**Unfunded Actuarial Accrued Liability (UAAL or UAL)** – The excess of the actuarial accrued liability over the valuation assets; sometimes referred to as "unfunded past service liability". UAL increases each time an actuarial loss occurs and when new benefits are added without being fully funded initially and decreases when actuarial gains occur.

**Valuation Assets** – The actuarial value of assets less side-fund assets; represents the portion of the actuarial value of assets available to pay the accrued benefits of the plan.

**Vested Benefit** – Benefits that the members are entitled to regardless of employment status.