



SCHEDULE D

Schedule of Retired Members by Type of Benefit

Benefits Payable June 30, 2017

Amount of Monthly Benefit	Number of Rets.	Ret. Type 1*	Ret. Type 2*	Ret. Type 3*
\$1 - \$300	15	1	2	12
301 - 600	96	17	5	74
601 - 900	227	90	22	115
901 - 1,200	352	173	19	160
1,201 - 1,500	220	151	7	62
1,501 - 1,800	235	175	1	59
1,801 - 2,100	159	121		38
2,101 - 2,400	148	114		34
2,401 - 2,700	126	80	3	43
Over 2,700	176	148		28
Totals	1,754	1,070	59	625

***Type of Retirement**

- 1 – Retirement for Age & Service
- 2 – Disability Retirement
- 3 – Survivor Payment



SCHEDULE D

**Retirant and Beneficiary Information June 30, 2017
Tabulated by Attained Ages**

Attained Age	Service Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20								
20 – 24					1	\$18,170	1	\$18,170
25 – 29								
30 – 34								
35 – 39								
40 – 44					1	22,130	1	22,130
45 – 49					2	30,569	2	30,569
50 – 54	6	\$202,550			1	24,554	7	227,104
55 – 59	31	855,530			18	333,309	49	1,188,839
60 – 64	78	2,068,929	5	\$54,652	36	657,314	119	2,780,895
65 – 69	286	6,829,051	13	184,803	68	1,301,048	367	8,314,902
70 – 74	239	5,207,065	9	108,139	117	1,912,847	365	7,228,051
75 – 79	174	3,693,664	17	178,421	143	2,456,317	334	6,328,402
80 – 84	154	2,809,444	5	56,367	116	1,678,086	275	4,543,897
85 – 89	75	1,202,088	6	65,785	84	1,038,833	165	2,306,706
90 – 94	24	334,822	2	16,428	29	292,590	55	643,840
95	2	25,470	1	10,777	1	5,702	4	41,949
96	1	7,950			4	28,441	5	36,391
97			1	5,892	3	26,591	4	32,483
98								
99								
100 & Over					1	7,200	1	7,200
Totals	1,070	\$23,236,563	59	\$681,264	625	\$9,833,701	1,754	\$33,751,528



SCHEDULE D

**Total Active Members as of June 30, 2017
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
Under 20									
20 – 24									
25 – 29									
30 – 34									
35 – 39									
40 – 44									
45 – 49									
50 – 54									
55 – 59							1	1	\$50,886
60 & Over							5	5	270,357
Totals							6	6	\$321,243

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 67.3 years
 Service: 41.8 years
 Annual Pay: \$53,541



SCHEDULE E

ANALYSIS OF FINANCIAL EXPERIENCE

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain/(loss) for the year ended June 30, 2017 is shown below.

		\$ Thousands
(1)	UAAL* as of beginning of year	\$ 171,503.2
(2)	Total normal cost from last valuation	19.6
(3)	Total contributions**	17,407.9
(4)	Interest accrual: $\{[(1) + (2)] \times .0775\} - [(3) \times .03803]$	<u>12,631.0</u>
(5)	Expected UAAL before changes: (1) + (2) – (3) + (4)	\$ 166,745.9
(6)	Change due to plan amendments	889.3
(7)	Change due to new actuarial assumptions or methods	<u>887.2</u>
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 168,522.4
(9)	Actual UAAL as of end of year	\$ 164,072.8
(10)	Gain/(loss): (8) – (9)	\$ 4,449.6

*Unfunded actuarial accrued liability.

**Net of administrative expenses.



**Gains & Losses in Liabilities Resulting from Differences
Between Assumed Experience & Actual Experience
(\$ Thousands)**

Type of Activity	\$ Gain (or Loss) For Year Ending 6/30/17	\$ Gain (or Loss) For Year Ending 6/30/16
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ 401.2	\$ 71.1
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.0	0.0
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.3	1.4
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.0	0.0
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	5.3	19.9
Investment Income. If there is greater investment income than assumed, there is a gain. If less income, a loss.	3,476.1	66.4
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	871.2	2,307.4
Other. Miscellaneous gains and losses resulting from data adjustments, COLAs, etc.	<u>(304.5)</u>	<u>(0.2)</u>
Gain (or Loss) During Year From Financial Experience	\$4,449.6	\$2,466.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes, or method changes.	<u>(1,776.5)</u>	<u>0.0</u>
Composite Gain (or Loss) During Year	\$2,673.1	\$2,466.0



SCHEDULE F

GLOSSARY

Actuarial Accrued Liability. The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability”.

Accrued Service. The service credited under the plan which was rendered before the date of the actuarial valuation.

Actuarial Assumptions. Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method”.

Actuarial Equivalent. A series of payments is called an actuarial equivalent of another series of payments if the two series have the same actuarial present value.

Actuarial Present Value. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Experience Gain (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

Normal Cost. The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as “current service cost”. Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Reserve Account. An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability. The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as “unfunded accrued liability”.

Valuation Assets. The value of current plan assets recognized for valuation purposes. Generally based on a market-related smoothing method.



SCHEDULE G

THE NATURE OF ACTUARIAL PROJECTIONS

Regular actuarial valuations measure the Retirement System's present financial position and contributions adequacy by calculating and financing the liabilities created by the present benefit program. This process involves discounting to present values the future benefit payments on behalf of present active and retired members and their survivors. However, valuations do not produce information regarding future changes in the makeup of the covered group or the amounts of benefits to be paid or investment income to be received – actuarial projections do.

Whereas valuations provide a snapshot of the retirement system as of a given date, projections provide a moving picture. Projected active and retired groups are developed from year to year by the application of assumptions regarding pre-retirement withdrawal from service, retirement, deaths and disabilities. Projected information regarding the retired life group leads to assumed future benefit payout. Combining future benefit payments with assumed contributions and expected investment earnings produces the net cash flow of the System each year, and thus end of year asset levels.

Projections are used for many purposes. Among them are (i) developing cash flow patterns for investment policy and asset mix consideration, (ii) exploring the effect of alternative assumptions about future experience, (iii) analyzing the impact on system funding progress of changes in the workforce, and (iv) examining the potential effect of changes in benefits on system financial activity.

Projection results are useful in demonstrating changing relationships among key elements affecting system financial activity. For example: how benefits payable and system assets will grow in future decades. Projections are not predictions of specific future events and do not provide numeric precision in absolute terms. For instance, cash flow projected to occur 10 years in the future will not be exact (except by coincidence), but understanding the changed relationships between future benefit payout and future investment income can be very useful.



SCHEDULE H

CASH FLOW PROJECTIONS BASED ON CURRENT FUNDING POLICY