

SECTION V – SUPPLEMENTAL DISCLOSURE INFORMATION

1. The following supplemental disclosure information is provided for informational purposes only. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED PARTICIPANTS
AS OF JUNE 30, 2020**

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	1,585
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	0
Inactive Participants	0
Active Participants	<u>0</u>
Total	1,585



2. The actuarial accrued liability is as follows:

ACTUARIAL ACCRUED LIABILITY

Municipality	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio
Biloxi	\$19,440,227	\$8,224,050	\$11,216,177	42.30%
Clarksdale	5,429,949	1,126,232	4,303,717	20.74
Clinton	10,208,468	8,884,415	1,324,053	87.03
Columbus	9,236,237	1,048,111	8,188,126	11.35
Greenville	7,816,051	2,573,549	5,242,502	32.93
Greenwood	6,442,969	2,615,760	3,827,209	40.60
Gulfport	17,550,526	8,223,887	9,326,639	46.86
Hattiesburg	33,711,846	19,645,392	14,066,454	58.27
Jackson	95,735,228	47,759,051	47,976,177	49.89
Laurel	8,985,165	4,362,923	4,622,242	48.56
McComb	2,938,012	965,213	1,972,799	32.85
Meridian	19,218,934	11,906,902	7,312,032	61.95
Natchez	5,847,357	1,753,132	4,094,225	29.98
Pascagoula	10,640,668	7,247,209	3,393,459	68.11
Tupelo	12,966,043	4,860,556	8,105,487	37.49
Vicksburg	18,334,370	9,206,868	9,127,502	50.22
Yazoo City	1,934,389	327,784	1,606,605	16.95
Totals	\$286,436,439	\$140,731,034	\$145,705,405	49.13%

During the year ended June 30, 2020, the Systems experienced a net decrease of \$9,569,579 in the actuarial accrued liability.



3. Another such item is the schedule of funding progress as shown below. As can be seen in column 3 of the table below, the funded ratio decreased over the first two years of the 10-year period but the funded ratio has begun to slowly improve in recent years, though it is down for 2019 and 2020 due to the investment experience. As this is a closed plan, the funded ratio should continue to increase to 100% when all the cities reach a pay-as-you-go status.

**SCHEDULE OF FUNDING PROGRESS
(\$ Thousands)**

Plan Year Ended	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL) Entry Age	(3) Percent Funded (1)/(2)	(4) Unfunded AAL (2) – (1)	(5) Annual Covered Payroll	(6) Unfunded AAL as a Percentage of Covered Payroll (4)/(5)
09/30/11	\$167,604	\$363,604	46.1%	\$196,000	\$1,357	14,443.6%
09/30/12	155,484	356,571	43.6	201,087	1,131	17,779.6
06/30/13	153,241	349,588	43.8	196,347	794	24,728.8
06/30/14	157,970	340,385	46.4	182,415	727	25,091.5
06/30/15	162,616	341,525	47.6	178,909	579	30,899.7
06/30/16	159,160	330,663	48.1	171,503	419	40,931.5
06/30/17	157,674	321,747	49.0	164,073	321	51,113.1
06/30/18	154,749	307,457	50.3	152,707	200	76,354.0
06/30/19	147,671	296,006	49.9	148,335	95	156,142.1
06/30/20	140,731	286,436	49.1	145,705	N/A	N/A

Numbers shown above reflect all changes in benefit provisions, actuarial assumptions, and/or actuarial methods, if any.



History of Funding Progress

Actuarial Value of Assets as Percentage of AAL										
Municipality	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Biloxi	43.06%	39.41%	38.18%	39.49%	39.55%	40.41%	41.27%	44.17%	44.50%	42.30%
Clarksdale	19.43	19.99	23.82	23.18	26.51	27.32	26.80	26.10	22.74	20.74
Clinton	79.26	75.02	74.38	79.09	82.74	84.38	87.19	87.20	87.00	87.03
Columbus	11.80	10.74	11.29	13.10	10.54	9.82	9.49	9.76	10.09	11.35
Greenville	36.89	34.25	34.11	36.12	36.64	35.56	35.41	34.58	34.19	32.93
Greenwood	36.63	34.72	35.05	36.61	38.27	39.47	40.56	41.40	41.18	40.60
Gulfport	49.00	46.37	45.03	46.99	47.63	47.01	47.60	48.56	49.64	46.86
Hattiesburg	57.32	54.17	53.82	56.90	58.53	58.29	58.68	59.86	58.67	58.27
Jackson	51.61	48.80	48.35	50.83	51.49	50.95	51.24	52.25	51.17	49.89
Laurel	27.31	26.79	29.51	33.03	36.20	40.17	40.07	43.23	45.54	48.56
McComb	32.26	27.48	25.52	24.99	25.49	25.94	27.40	30.28	31.83	32.85
Meridian	31.34	31.22	33.90	38.17	42.40	48.51	55.76	59.84	62.08	61.95
Natchez	28.24	28.55	30.03	30.21	29.61	30.24	29.45	27.79	30.54	29.98
Pascagoula	53.47	50.75	52.53	57.57	59.64	60.57	62.75	66.07	67.89	68.11
Tupelo	45.59	42.81	42.51	44.96	44.31	43.82	43.26	42.41	39.79	37.49
Vicksburg	52.28	47.83	49.26	52.08	53.82	53.77	53.02	53.64	49.63	50.22
Yazoo City	21.98	22.32	21.96	16.66	20.20	18.42	17.25	19.12	17.49	16.95



4. In determining the actuarially determined employer contribution for GASB purposes, the accrued liability amount is based on the amortization of the unfunded actuarial accrued liability over a closed period from the valuation date. The period as of June 30, 2020 is 14 years. The calculation of this amount is shown below.

**2020/2021 FISCAL YEAR
ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC)
BASED ON THE VALUATION AS OF JUNE 30, 2020**

ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC)	
Normal	\$ 0
Accrued liability	<u>17,118,242</u>
Total	\$ 17,118,242

5. Additional information as of June 30, 2020 follows.

Valuation date	6/30/20
Actuarial cost method	Entry age
Amortization method	Level dollar, closed
Remaining amortization period	14 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases#	3.00% - 4.50%
*Includes price inflation at	2.75%
#Includes wage inflation at	3.00%
Cost of living adjustments	2.00% - 3.75% depending upon municipality



Schedule of Employer Contributions

Fiscal Year 10/1-9/30	Valuation date	Actuarially Determined Contribution	Percentage Contributed
2011-12	9/30/2011	\$18,751,144	127.0%
2012-13	9/30/2012	19,511,877	102.6
2013-14	6/30/2013	19,343,836	105.4
2014-15	6/30/2014	18,337,572	105.5
2015-16	6/30/2015	18,034,182	102.8
2016-17	6/30/2016	17,693,519	100.2
2017-18	6/30/2017	17,393,028	101.2
2018-19	6/30/2018	16,694,899	102.5
2019-20	6/30/2019	16,777,608	N/A
2020-21	6/30/2020	17,118,242	N/A

Contributions Required and Contributions Made

Municipality	Actuarially Determined Contribution	Actual 2018 – 2019 Contribution	Percentage Contributed
Biloxi	\$1,234,819	\$1,366,963	110.7%
Clarksdale	452,199	368,321	81.5
Clinton	152,534	222,032	145.6
Columbus	990,461	1,105,871	111.7
Greenville	627,070	557,823	89.0
Greenwood	454,791	446,779	98.2
Gulfport	1,072,021	1,060,100	98.9
Hattiesburg	1,549,927	1,407,181	90.8
Jackson	5,407,384	5,569,717	103.0
Laurel	612,499	787,708	128.6
McComb	232,212	301,580	129.9
Meridian	939,209	1,331,318	141.8
Natchez	534,172	546,000	102.2
Pascagoula	417,908	762,066	182.4
Tupelo	821,864	807,577	98.3
Vicksburg	1,001,544	294,277	29.4
Yazoo City	194,285	178,623	91.9
Total	\$ 16,694,899	\$ 17,113,936	102.5%



Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Active Members			
		Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
9/30/11	17	25	\$1,356,858	\$54,274	2.9%
9/30/12	17	21	1,131,252	53,869	(0.7)
6/30/13	17	16	793,841	49,615	(7.9)
6/30/14	17	14	727,347	51,953	4.7
6/30/15	17	11	579,267	52,661	1.4
6/30/16	17	8	419,000	52,375	(0.5)
6/30/17	17	6	321,243	53,541	2.2
6/30/18	17	4	199,742	49,936	(6.7)
6/30/19	17	2	94,871	47,436	(5.0)
6/30/20	17	0	0	0	N/A

**Schedule of Retirants Added to and Removed From Rolls
Last Ten Fiscal Years**

Item	Fiscal Year Ended September 30									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Beginning of Year	2,056	2,016	1,978	1,941	1,890	1,849	1,798	1,754	1,694	1,634
Added	46	39	40	29	40	46	34	36	37	34
Removed	(86)	(77)	(77)	(80)	(81)	(97)	(78)	(96)	(97)	(83)
End of Year	2,016	1,978	1,941	1,890	1,849	1,798	1,754	1,694	1,634	1,585

*See Schedule D for a breakdown by type of retirement.



**Schedule of Benefit Payments Added to and Removed From Rolls
Last Six Fiscal Years**

Year Ending	2015	2016	2017	2018	2019	2020
Beginning of Year	\$34,723,473	\$34,478,364	\$34,088,404	\$33,751,528	\$32,997,690	\$32,423,308
Added	731,337	842,966	712,490	674,428	736,820	654,407
Removed	(1,119,680)	(1,365,194)	(1,174,872)	(1,530,600)	(1,441,224)	(1,386,860)
Benefit increase due to annual COLA	143,234	132,268	125,506	102,334	130,022	128,512
Benefit increase due to plan amendments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
End of Year	\$34,478,364	\$34,088,404	\$33,751,528	\$32,997,690	\$32,423,308	\$31,819,367



Schedule of Average Benefit Payments

	Years of Credited Service								TOTAL
	0-9	10-14	15-19	20-24	25	26-29	30	31+	
July 1, 2019 to June 30, 2020									
Average Monthly Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,024	\$3,024
Average Final Salary	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$47,435	\$47,435
Number of Active Retirants	0	0	0	0	0	0	0	2	2
July 1, 2018 to June 30, 2019									
Average Monthly Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,427	\$3,427
Average Final Salary	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,998	\$53,998
Number of Active Retirants	0	0	0	0	0	0	0	2	2
July 1, 2017 to June 30, 2018									
Average Monthly Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,738	\$3,738
Average Final Salary	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67,277	\$67,277
Number of Active Retirants	0	0	0	0	0	0	0	2	2
July 1, 2016 to June 30, 2017									
Average Monthly Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,424	\$2,424
Average Final Salary	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,631	\$43,631
Number of Active Retirants	0	0	0	0	0	0	0	2	2
July 1, 2015 to June 30, 2016									
Average Monthly Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,479	\$3,479
Average Final Salary	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44,155	\$44,155
Number of Active Retirants	0	0	0	0	0	0	0	3	3
July 1, 2014 to June 30, 2015									
Average Monthly Benefit	\$0	\$0	\$0	\$0	\$0	\$0	\$2,898	\$2,912	\$2,907
Average Final Salary	\$0	\$0	\$0	\$0	\$0	\$0	\$51,253	\$56,520	\$54,764
Number of Active Retirants	0	0	0	0	0	0	1	2	3



SCHEDULE A
Development of Actuarial Value of Assets

	6/30/2019	6/30/2020	6/30/2021	6/30/2022	6/30/2023	6/30/2024
A. Actuarial Value Beginning of Year	\$154,748,504	\$147,670,934				
B. Market Value End of Year	148,463,405	136,780,881				
C. Market Value Beginning of Year	154,277,003	148,463,405				
D. Cash Flow						
D1. Contributions	17,129,032	16,621,094				
D2. Other Revenue	0	0				
D3. Benefit Payments	(32,934,847)	(32,169,935)				
D4. Administrative Expenses	(342,279)	(331,418)				
D5. Net	(16,148,094)	(15,880,259)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	10,334,496	4,197,735				
E2. Assumed Rate	7.75%	7.75%				
E3. Amount for Immediate Recognition	11,330,729	10,890,554				
E4. Amount for Phased-In Recognition	(996,233)	(6,692,819)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	(199,247)	(1,338,564)	0	0	0	0
F2. First Prior Year	74,382	(199,247)	(1,338,564)	0	0	0
F3. Second Prior Year	1,853,071	74,382	(199,247)	(1,338,564)	0	0
F4. Third Prior Year	(2,339,837)	1,853,071	74,382	(199,247)	(1,338,564)	0
F5. Fourth Prior Year	<u>(1,648,574)</u>	<u>(2,339,837)</u>	<u>1,853,071</u>	<u>74,382</u>	<u>(199,247)</u>	<u>(1,338,564)</u>
F6. Total Recognized Investment Gain	(2,260,205)	(1,950,195)	389,642	(1,463,429)	(1,537,811)	(1,338,564)
G. Adjustment:	0	0				
H. Actuarial Value End of Year:						
A.+D5.+E3.+F6.+G.	\$147,670,934	\$140,731,034				
I. Difference Between Market & Actuarial Values	792,471	(3,950,153)	(4,339,795)	(2,876,366)	(1,338,555)	9

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.



SCHEDULE B

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: 7.75% per annum, compounded annually (net after investment expenses) for GASB disclosure.

6.25% per annum, compounded annually (net after investment expenses) for employer contribution rate determination.

PRICE INFLATION: 2.75% per annum, compounded annually.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of separation from active service are as follows:

Age	Withdrawal	Death	Disability*
20	10.65%	.06%	.14%
25	8.64	.08	.24
30	6.87	.12	.44
35	4.86	.16	.76
40	2.97	.22	.96
45	1.44	.31	1.18
50	0.24	.48	1.98
55	0.00	.64	2.76
60	0.00	.83	3.50
64	0.00	.99	4.24

* No rates of disability for greater than 20 years of service.

Service Retirement	
Years of Service	Percent
20	45.0%
21-28	17.5
29-33	35.0
34 and over	20.0
Age 65	100.0



SALARY INCREASES: 3.00% for wage inflation plus the following chart.

Ages	Merit and Seniority Salary Increase
Under 43	1.50%
43 – 47	1.00
48 – 52	0.50
53 and Over	0.00

DEATH AFTER RETIREMENT: The mortality table, for post-retirement mortality, used in evaluating allowances to be paid is the PubS.H-2010(B) Retiree Table with the following adjustments:

- For males, 112% of male rates from ages 18 to 75 scaled down to 105% for ages 80 to 119.
- For females, 85% of the female rates from ages 18 to 65 scaled up to 102% for ages 75 to 119.
- Projection scale MP-2018 is used to project future improvements in life expectancy generationally.

The PubT.H-2010 Disabled Retiree Table is used for disabled retirees with the following adjustments - 137% of male rates at all ages and 115% of female rates at all ages. Projection scale MP-2018 is used to project future improvements in life expectancy generationally.

MARRIAGE ASSUMPTION: 85% married with the husband three years older than his wife.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule A. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value. Actuarial assets were allocated to individual cities in the same proportion that their market value of assets was to the total market value of assets for all cities.



SCHEDULE C

SUMMARY OF BENEFIT PROVISIONS EVALUATED

The following summary presents the main provisions of the Systems in effect June 30, 2020, as interpreted in preparing the actuarial valuation. As used in the summary, "average compensation" means the average compensation of a member during the six month period prior to receipt of an allowance.

BENEFITS

Service Retirement

Condition for Retirement

A retirement allowance is payable to any member who retires and has completed at least 20 years of creditable service, regardless of age.

Any general employee member who has attained age 70 and any fireman or policeman who has attained age 65 shall be retired forthwith.

Amount of Allowance

The annual retirement allowance payable to a retired member is equal to:

1. 50% of average compensation, plus
2. 1.7% of average compensation for each year of credited service over 20.

The aggregate amount of (1) and (2) above shall not exceed 66-2/3% (87% for Clinton) of average compensation, regardless of service.

Disability Retirement

Condition for Retirement

A retirement allowance is payable to any member who is not eligible for a service retirement benefit but who becomes totally and permanently disabled, either physically or mentally, regardless of creditable service, if the disability is due to causes in the performance of duty. If the disability is not in the performance of duty, the member must have completed at least 5 years of creditable service to be eligible for retirement.



Amount of Allowance

The annual disability retirement allowance payable is equal to 50% of his salary at the time of retirement, if the disability is due to causes in the performance of duty.

If the disability is not in the performance of duty, the allowance is equal to 2.5% times credited service, not in excess of 20, times his salary at the time of retirement for firemen and policemen, and average compensation for general employees.

Death Benefit

Conditions for Benefit

A benefit is payable upon the death of a member under the following conditions:

- (a) the member has retired,
- (b) the member is eligible to retire,
- (c) the death is in the line of duty, or
- (d) the death is not in the line of duty, but occurs after the member has 5 years of credited service.

The benefit is payable to the surviving spouse until remarriage and to children under age 18, to dependent children through age 23 when full time students, and to dependent children of any age if handicapped. For Clarksdale, Columbus, Gulfport, Hattiesburg, Jackson, McComb, Meridian, Vicksburg and Yazoo City, benefits payable to spouses do not cease upon remarriage.

Amount of Benefit

The annual benefit payable under all conditions in the case of firemen and policemen and under other than condition (c) in the case of general employees is equal to 2.5% of average compensation for each year of credited service up to 20 and 1.7% of average compensation for each year over 20, with a maximum benefit of 66-2/3% (87% for Clinton) of average compensation.

For general employee members under condition (c), the annual benefit payable is equal to 50% of salary at the time of death.

Return of Contributions

Upon a member's termination of employment for any reason before retirement, his accumulated contributions are refunded. Upon the death of a member who is not eligible for any other death benefit, his accumulated contributions are paid to his beneficiary.



Minimum Allowances

The minimum monthly allowance paid to members from the following municipalities, for all retirement and death benefits, are:

Biloxi:	\$600
Columbus:	\$500
Gulfport:	\$500
Hattiesburg:	\$750
Jackson:	\$500
Meridian:	\$600
Tupelo:	\$750
Vicksburg:	\$1,515

**Post-Retirement Adjustments
In Allowances**

The allowances of certain retired members are adjusted annually by a cost-of-living adjustment (COLA) on the basis of the annual percentage change in each fiscal year of the Consumer Price Index.

Those adjustments are limited as follows:

Biloxi: 3% per year for each full fiscal year of retirement after June 30, 2000 for all retirees and beneficiaries with the COLA being compounded beginning with the state fiscal year in which the retired member turns age 55. This is in addition to the previously granted maximum of 3% per year (not to exceed 9%) for all members who retired on or before December 31, 1995.

Clarksdale: Maximum of 2-1/2% per year for all retirees and beneficiaries.

Clinton: Maximum of 2-1/2% per year (not to exceed 10%) for service retirements only.

Columbus: Maximum of 2-1/2% per year (not to exceed 25%) for all retirees and beneficiaries.

Greenville: Maximum of 2-1/2% per year (not to exceed 25%) for all retirees and beneficiaries.

Gulfport: Maximum of 3% per year (not to exceed 27%) for each fiscal year of retirement after June 30, 2002 for all retirees and beneficiaries. This is in addition to the previously granted COLA of 2% per year (not to exceed 6%) for those retired before July 1, 2001. All Gulfport retirees and beneficiaries who were receiving a retirement allowance as of June 30, 2002 were granted a monthly ad-hoc benefit increase of \$2 per month for each year of service plus \$2 per month for each full fiscal year retired.



Hattiesburg: 2-1/2% per year for all retirees and beneficiaries (not to exceed 32%).

Jackson: Maximum aggregate increase of 19.5% for service and disability retirements only.

Laurel: 2% per year, compounded annually (maximum of 3 years) for each fiscal year of retirement after June 30, 2002 for all retirees and beneficiaries. COLA increases begin at the later of age 60 or after one full fiscal year of retirement.

McComb: Maximum of 2-1/2% per year for all retirees and beneficiaries (not to exceed 10%).

Meridian: All retirees and beneficiaries who were receiving a retirement allowance as of June 30, 1999 were granted a 3.9% ad-hoc benefit increase.

Pascagoula: Maximum of 2-1/2% per year for all retirees and beneficiaries (not to exceed 15%).

Tupelo: All retirees and beneficiaries received an increase of 5% in allowances effective December 1, 1991. Additional 3% ad-hoc benefit increases were granted to members who were retired for at least one full fiscal year as of September 30, 1995, as of September 30, 1997, as of September 30, 1998, and as of September 30, 2000. Furthermore, a 2% ad-hoc benefit increase was granted to members who were retired for at least one full fiscal year as of September 30, 1999 and a 2.34% ad-hoc benefit increase was granted to members who were retired for at least one full fiscal year as of September 30, 2001. Furthermore, a 2% ad-hoc benefit increase was granted to members who were retired for at least one full fiscal year as of September 30, 2010. Furthermore, a 2% ad-hoc benefit increase was granted to members who were retired for at least one full fiscal year as of September 30, 2014. Furthermore, a 3% ad-hoc benefit increase was granted to members who were retired for at least one full fiscal year as of September 30, 2015. Furthermore, a 3% ad-hoc benefit increase was granted to members who were retired for at least one full fiscal year as of September 30, 2016. Furthermore, a 2% ad-hoc benefit increase was granted to members who were retired for at least one full fiscal year as of September 30, 2017. Furthermore, a 3% ad-hoc benefit increase was granted to members who were retired for at least one full fiscal year as of September 30, 2018. Furthermore, a 3% ad-hoc benefit increase was granted to members who were retired for at least one full fiscal year as of September 30, 2019.



Vicksburg: 3% per year for all retirees and beneficiaries.

Yazoo City: Maximum of 2-1/2% per year (not to exceed 25%) for all retirees and beneficiaries.

Post-retirement adjustments are included in System liabilities for future increases for Biloxi, Clinton, Columbus, Greenville, Gulfport, Hattiesburg, Jackson, Laurel, McComb, Pascagoula, Vicksburg, and Yazoo City.



SCHEDULE D

DETAILED TABULATIONS OF THE DATA

RECONCILIATION OF DATA RECEIVED FROM PERS

Reconciliation of Data received from PERS	Active File			Pensioner File			Total
	Active	Inactive NonVested	Inactive Vested	Retirees	Disableds	Survivors	
From PERS	2	0	0	973	51	639	1,665
Refunded Deceased Retired* Added	(2)			(52) 1 1	(5)	(23)	(80) (1) 1
For Valuation	0	0	0	923	46	616	1,585

*1 record also included in Pensioner File, 1 record with retired status but no corresponding record on Pensioner File.

STATUS RECONCILIATION FROM 2019 TO 2020

	Actives	Retirees	Disability	Survivor	Total
As of June 30, 2019	2	974	51	609	1,636
Retirements	(2)	2			0
Disabilities					
Death with Survivors		(26)	(4)	32	2
Deaths with no Survivors		(27)	(1)	(25)	(53)
Benefits Expired					
Data Corrections					
As of June 30, 2020	0	923	46	616	1,585



SCHEDULE D

Retirants & Beneficiaries as of June 30, 2020

Tabulated by Year of Retirement

Year of Retirement	No.	Annual Benefits excluding COLA	COLA	Total Annual Benefits	Average Monthly Benefit
2020	2	\$ 72,566	\$ 0	\$ 72,566	\$ 3,024
2019	3	96,248	0	96,248	2,674
2018	1	43,396	0	43,396	3,616
2017	2	76,266	2,045	78,311	3,263
2016	4	153,667	6,906	160,573	3,345
2015	1	25,335	0	25,335	2,111
2014	3	111,086	7,331	118,417	3,289
2013	9	364,151	42,610	406,761	3,766
2012	4	164,423	27,917	192,340	4,007
2011	1	25,791	0	25,791	2,149
2010	5	156,183	33,421	189,604	3,160
2009	3	79,418	6,048	85,466	2,374
2008	5	132,896	17,889	150,785	2,513
2007	8	250,897	65,643	316,540	3,297
2006	14	371,190	68,648	439,838	2,618
2005	27	708,241	138,081	846,322	2,612
2004	19	440,730	99,760	540,490	2,371
2003	32	838,940	197,327	1,036,267	2,699
2002	41	1,142,239	282,053	1,424,292	2,895
2001	24	680,771	150,969	831,740	2,888
2000	34	860,401	217,921	1,078,322	2,643
1999	33	789,902	165,631	955,533	2,413
1998	41	981,782	206,984	1,188,766	2,416
1997	51	1,103,845	199,301	1,303,146	2,129
1996	56	1,103,234	187,973	1,291,207	1,921
1995	101	1,757,118	281,893	2,039,011	1,682
1994	131	2,268,249	444,109	2,712,358	1,725
1993	93	1,570,536	316,389	1,886,925	1,691
1992	85	1,424,795	273,034	1,697,829	1,665
1991	70	1,183,070	200,062	1,383,132	1,647
1990	62	930,898	150,194	1,081,092	1,453
1989	45	609,344	131,562	740,906	1,372
1988	73	1,066,447	216,165	1,282,612	1,464
1987	41	503,971	120,329	624,300	1,269
1986 & Prior	461	4,404,530	1,068,616	5,473,146	989
Totals	1,585	\$ 26,492,556	\$ 5,326,811	\$ 31,819,367	\$ 1,673



SCHEDULE D

Schedule of Retired Members by Type of Benefit

Benefits Payable June 30, 2020

Amount of Monthly Benefit	Number of Rets.	Ret. Type 1*	Ret. Type 2*	Ret. Type 3*
\$1 - \$300	9	1	2	6
301 - 600	71	11	2	58
601 - 900	181	65	14	102
901 - 1,200	317	141	18	158
1,201 - 1,500	200	128	7	65
1,501 - 1,800	230	156	1	73
1,801 - 2,100	142	101		41
2,101 - 2,400	139	103		36
2,401 - 2,700	88	64	1	23
Over 2,700	208	153	1	54
Totals	1,585	923	46	616

***Type of Retirement**

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



SCHEDULE D

**Retirant and Beneficiary Information June 30, 2020
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								
25 – 29								
30 – 34								
35 – 39								
40 – 44					1	22,130	1	22,130
45 – 49								
50 – 54					2	30,569	2	30,569
55 – 59	21	608,471			9	173,187	30	781,658
60 – 64	34	1,078,612			24	470,861	58	1,549,473
65 – 69	149	3,786,157	10	154,274	51	990,208	210	4,930,639
70 – 74	270	6,399,799	10	125,972	119	2,199,514	399	8,725,285
75 – 79	192	4,307,680	13	122,209	131	2,303,879	336	6,733,768
80 – 84	138	2,668,342	9	120,109	129	2,132,722	276	4,921,173
85 – 89	91	1,607,487	3	23,645	95	1,419,644	189	3,050,776
90 – 94	25	406,972			46	556,450	71	963,422
95	1	2,826			5	44,180	6	47,006
96	1	11,027			2	19,435	3	30,462
97					1	7,500	1	7,500
98			1	10,777			1	10,777
99	1	7,950			1	6,779	2	14,729
100 & Over								
Totals	923	\$20,885,323	46	\$556,986	616	\$10,377,058	1,585	\$31,819,367



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, 2020 is shown below.

		\$ Thousands
(1)	UAAL* as of beginning of year	\$ 148,335.1
(2)	Total normal cost from last valuation	7.6
(3)	Total contributions**	16,289.7
(4)	Interest accrual: $\{[(1) + (2)] \times .0775\} - [(3) \times .03803]$	<u>10,877.1</u>
(5)	Expected UAAL before changes: (1) + (2) – (3) + (4)	\$ 142,930.1
(6)	Change due to plan amendments	2,438.7
(7)	Change due to new actuarial assumptions or methods	<u>0.0</u>
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 145,368.8
(9)	Actual UAAL as of end of year	\$ 145,705.4
(10)	Gain/(loss): (8) – (9)	\$ (336.6)

*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 6/30/20	\$ Gain (or Loss) For Year Ending 6/30/19
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (105.1)	\$ (5.4)
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.	0.6	0.6
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.	0.0	1.4
Investment Income. If there is greater investment income than assumed, there is a gain. If less income, a loss.	(1,900.3)	(2,308.4)
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	1,845.0	1,751.7
Other. Miscellaneous gains and losses resulting from data adjustments, COLAs, etc.	<u>(176.8)</u>	<u>(671.1)</u>
Gain (or Loss) During Year From Financial Experience	\$(336.6)	\$(1,231.2)
Non-Recurring Items. Adjustments for plan amendments, assumption changes, or method changes.	<u>(2,438.7)</u>	<u>22.3</u>
Composite Gain (or Loss) During Year	\$(2,775.3)	\$(1,208.9)



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 FUNDING POLICY