October 16, 2018

Chatham County

2017 Actuarial Valuation of the Chatham County Employees' Retirement Plan

HayGroup

Prepared by:

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October 16, 2018

Personal & Confidential

Chatham County Retirement Board
P.O. Box 9297
Savannah, GA 31412

Dear Ladies and Gentleman:

This report presents the results of our actuarial valuation of the Chatham County Employees' Retirement Plan as of July 1, 2017.

Highlights of the valuation are presented on Page 1, followed by a general discussion and comments on the various schedules included in the report. These schedules summarize the underlying calculations, asset information, participant data, plan benefits and actuarial assumptions and should be considered an integral part of the report.

Purpose
The main purposes of this report are

- To indicate the recommended employer contribution for the 2018-2019 fiscal year, from July 1, 2018 to June 30, 2019;
- To disclose the financial condition of the Plan; and
- To provide information relating to the disclosure and reporting requirements of:
    - The Public Retirement Systems Standards Law of Georgia,
    - Statement No. 35 of the Financial Accounting Standards Board, and
    - Statements No. 25 and No. 27 of the Governmental Accounting Standards Board,

Certification
To the best of our knowledge, this report is complete and accurate and all costs and liabilities have been determined in conformance with generally accepted actuarial principles and on the basis of actuarial assumptions and methods which are reasonable (taking into account past experience and reasonable expectations) and which in combination represent our best estimate of anticipated experience under the plan.

The results shown in this report are reasonable actuarial results. However, a different set of results could also be considered reasonable actuarial results. The reason for this is that actuarial standards of practice describe a "best-estimate range" for each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions.

The actuaries certifying to this valuation are members of the Society of Actuaries or other professional actuarial organizations, and meet the General Qualification Standards of the American Academy of Actuaries for purposes of issuing Statements of Actuarial Opinion.

Respectfully submitted,

KORN FERRY HAY GROUP

By ______________________

Craig R. Graby
Member of the American Academy of Actuaries
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Enrolled Actuary No. 17-7319

By ______________________

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Valuation Highlights

	July 1, 2017	July 1, 2016
Plan Costs		
Employer Cost	$13,365,767	$14,343,924
(Percent of Participants' Compensation)	(20.32%)	(21.85%)
Employee Cost	$2,301,857	$2,297,848
(Percent of Participants' Compensation)	(3.50%)	(3.50%)
Actuarial Value of Assets (with receivable)	$236,866,024	$218,405,666
Total Present Value of Benefits	$332,408,036	$322,839,177
Actuarial Present Value of Accumulated Plan Benefits (FASB 35 Basis)		
Vested Benefits	$261,710,734	$251,238,384
Non-Vested Benefits	$1,742,972	$1,533,418
Total	$263,453,706	$252,771,802
Active Participants		
Number	1,435	1,462
Average Annual Compensation	$46,279	$45,431
Total Annual Compensation	$66,409,754	$66,419,898
Pensioners and Beneficiaries		
Number	798	745
Average Annual Pension	$19,878	$19,723
Total Annual Pension	$15,862,994	$14,693,317
Disabled Retirees		
Number	14	14
Average Annual Pension	$13,453	$13,453
Total Annual Pension	$188,341	$188,341
Terminated Vested Participants		
Number	65	46
Average Annual Pension	$9,047	$8,980
Total Annual Pension	$588,045	$413,091

Comments on Schedule

General
This report presents the results of the July 1, 2017 valuation of the Chatham County Employees' Retirement Plan. The report includes the determination of the recommended employer pension contribution for the fiscal year beginning July 1, 2018 and other information needed for various reporting requirements.

The recommended employer contribution decreased from 21.85 percent of Participants' Annual Compensation to 20.32 percent. The primary reasons for the decrease were higher than expected investment performance plus another drop off of a COLA amortization.

Plan Assets
Schedule A provides a statement of the Plan's assets as of June 30, 2017. A reconciliation of assets during the prior year is also provided. In addition, the schedule discloses the determination of the actuarial value of assets used for the valuation. To avoid undue variation in costs from changes in market value of assets from year to year, the assets were valued using a five-year smoothing method. In the current year, 20 percent of the asset gain or loss is recognized; in the next four years, the remaining 80 percent is evenly recognized (20 percent per year). By spreading the gains and losses over a five-year period, sharp fluctuations in assets are dampened.

The overall rate of return achieved for the 12-month period ending June 30, 2017 was a positive 14.5 percent. The asset information used for the valuation was taken from the annual reports prepared by the County. Although we have not audited such information, we have checked it for reasonableness and consistency.

Plan Contribution
Schedule B shows the development of the Plan's normal cost, unfunded liability, and minimum contribution requirement. The total cost at the beginning of the year as a percent of payroll decreased from 19.57 percent of payroll in 2016 to 18.21 percent of payroll in 2017. The total cost for fiscal 2018-2019 is 20.32 percent of payroll.

Schedule B also divides the total plan costs between the two major groups of employees. Schedule C is an actuarial certificate, stating that the plan is being funded in accordance to the Public Retirement Systems Standards Law of Georgia.

Funding Status
Schedule D contains an actuarial balance sheet. It shows that the actuarial present value of plan benefits (total liabilities) will be funded by present assets and future

contributions. These future contributions consist of the County's normal cost payments and the employee's required contributions.

Schedule E provides information required under Statement No. 35 of the Financial Accounting Standards Board (FASB) as modified by FASB Statement No. 36.

Part A of Schedule E provides information regarding the funding status of vested and non-vested accumulated plan benefits as of the current valuation date. A comparison of the market value of assets with the actuarial present value of accumulated plan benefits provides a measure of the Plan's funded status. As of July 1, 2017, the accumulated plan benefits exceeded the market value of assets by $24.2 million. Part B provides information regarding the County's general funding policy and pension expense.

Schedule F provides the necessary information for the disclosure requirements under Statement No. 25 of the Governmental Accounting Standards Board (GASB). The schedule of funding progress shows that the unfunded liability decreased from 93.3 percent to 78.7 percent of payroll mainly due to the assumption changes and investment return during the year. The funding method in place will continue to move the funding levels toward full funding through higher contribution levels.

Schedule G provides the necessary information for the disclosure requirements under Statement No. 27 of the Governmental Accounting Standards Board (GASB).

Projected Cash Flow

Schedule H shows the emerging cash flow from the Chatham County Retirement Plan for benefits payable over the next ten years, assuming the actuarial assumptions are all met. This table indicates that Chatham County can expect benefit payments, excluding lump sums, of $17.9 million for fiscal year 2017-2018, increasing to $26.0 million in fiscal year 2026-2027.

Participant Data

Schedule I provides a distribution of the active participants as of July 1, 2017 by age and length of service. It also shows the average salary by age and service brackets. Schedule I includes a reconciliation of plan participants through June 30, 2017. Schedule I also includes a breakdown of the inactive participants, by age and benefit amounts.

Although we have made tests to check for the reasonableness and consistency of the participant data, we have not audited the data but have relied on it as submitted by the County.

Plan Provisions
Schedule J contains a summary of the principal provisions of the plan in effect as of July 1, 2017.

Actuarial Assumptions and Methods
Schedule J presents the actuarial assumptions and cost methods used for the valuation. Tables of actuarial assumptions can be found in Schedule K.

Schedule A - Analysis of Plan Assets

A.1. Schedule of Receipts and Disbursements

		Market Value
(1) Balance at July 1, 2016		$208,906,513
(2) Receipts		
a.	County Contributions	$14,795,858
b.	Employee Contributions	2,415,907
c.	Interest Income	2,341,302
d.	Dividend Income	1,536,419
e.	Increase in Fair Market Value	26,373,992
f.	Miscellaneous	0
g.	Adjustment	0
h.	Total Receipts	$47,463,477
(3) Disbursements		
a.	Benefit Payments	$15,458,419
b.	Lump Sum Payments	557,303
c.	Investment Expenses	879,114
d.	Non-Investment Expenses	215,848
e.	Total Disbursements	$17,110,684
(4) Balance at June 30, 2017 [(1) + (2) - (3)]		$239,259,306

A.2 Calculations of the Actuarial Value of Assets

1. Development of June 30, 2017 Expected Actuarial Value of Assets:	
(a) Actuarial value of assets July 1, 2016	$218,405,666
(b) Contributions for the 2016-17 plan year	
(1) Employed Contribution	2,415,907
(2) Employer Receivable	0
(3) Employer Contributions	14,795,858
(c) Benefit payments and expenses for the 2016-17 plan year	17,110,684
(d) Interest on (a), (b) and (c) at 7.6 percent [((a) x 7.6%) + ((b1 + b3 - c) x 3.8%)	16,602,672
(e) Expected actuarial value of assets June 30, 2017 (a) + (b) - (c) + (d)	$235,109,418
2. Development of Amount of Difference to be Amortized	
(a) Difference between expected actuarial value and market value as of June 30, 2013	$1,330,474
(b) Unrecognized amount of June 30, 2013 difference: 20 percent of (2a)	266,095
(c) Difference between expected actuarial value and market value as of June 30, 2014	15,637,336
(d) Unrecognized amount of June 30, 2014 difference: 40 percent of (2c)	6,254,934
(e) Difference between expected actuarial value and market value as of June 30, 2015	(7,234,387)
(f) Unrecognized amount of June 30, 2015 difference: 60 percent of (2e)	(4,340,632)
(g) Difference between expected actuarial value and market value June 30, 2016	(14,599,437)
(h) Unrecognized amount of June 30, 2016 difference: 80 percent of (2g)	(11,679,550)
(i) Market value as of June 30, 2017	239,259,306
(j) Difference between expected actuarial value and market value as of June 30, 2017: (2i) - (1e) - (2b) - (2d) - (2f) - (2h)	$ 13,649,041
3. Development of Actuarial Value of Assets June 30, 2017	
(a) 20 percent of June 30, 2013 difference: 20 percent of (2a)	266,095
(b) 20 percent of June 30, 2014 difference: 20 percent of (2c)	3,127,467
(c) 20 percent of June 30, 2015 difference: 20 percent of (2e)	(1,446,877)
(d) 20 percent of June 30, 2016 difference: 20 percent of (2g)	(2,919,887)
(e) 20 percent of June 30, 2017 difference: 20 percent of (2j)	2,729,808
(f) Actuarial value of assets June 30, 2017: (1e) + (3a) + (3b) + (3c) + (3d) + (3e):	$236,866,024
4. Unrecognized market value June 30, 2017: (2-i) - (3f)	$ 2,393,282
5. Contribution Receivable	$ 0
6. Actuarial Value of Assets (3f) + (5)	$236,866,024

A. 3 Trust Investment Yield for 12 Months Ending June 30, 2017

Asset Market Value at July 1, 2016	$208,906,513
Contributions during 2016/2017	17,211,764
Benefits and Expenses Paid during 2016/2017	17,110,684
Non-Investment Increment	101,080
Asset Market Value at June 30, 2017	239,259,306
Investment Increment	30,251,713
Approximate Average Asset Market Value	208,957,053
Approximate Yield Rate	14.5%

A. 4 -Division of Asset Classes at June 30, 2017

	Amount	Percent*
Cash Equivalents	$7,183,041	3.0%
Fixed Income	60,188,845	25.2
Equities – Domestic	139,167,371	58.2
Equities – Foreign	32,424,997	13.6
Net Payables	(999,147)	-0.4
Net Receivables	1,294,199	0.5
Total Assets	$239,259,306	100.0%

*May not add to 100 percent due to rounding

A.5 Historical Annualized Investment Yield on Market Value of Assets

July 2016 to June 2017	14.5%
July 2015 to June 2016	0.5%
July 2014 to June 2015	3.6%
July 2013 to June 2014	16.9%
July 2012 to June 2013	8.8%

5-Year Compound Yield	8.7%
10-Year Compound Yield	6.2%
15-Year Compound Yield	7.3%
20-Year Compound Yield	7.7%

Schedule B - Determination of County Cost

B.1 Actuarial Cost Determination

(1) Actuarial Present Value of Projected Benefits	
▪ Active Participants (1,435)	$164,140,863
▪ Retired Participants and Beneficiaries (798)	162,179,963
▪ Disabled Participants (14)	1,479,820
▪ Terminated Vested Participants (65)	4,607,390
▪ Total (2,312)	332,408,036
(2) Present Value of Future Normal Cost Payments	43,301,248
(3) Actuarial Accrued Liability	289,106,788
(4) Actuarial Value of Assets	236,866,024
(5) Unfunded Actuarial Accrued Liability	52,240,764
(6) Total Entry-Age Normal Cost At Beginning of Year	4,053,097
(7) Total Entry-Age Normal Cost As Percentage of Eligible Payroll	6.16%
(8) Expense Load	300,000
(9) Minimum Amortization Payments of Unfunded Actuarial Accrued Liability (See Section B of this Schedule)	7,621,902
(10) Payroll for Employees below the maximum retirement age	65,767,331
(11) Employer Total Cost At July 1, 2017 [(6) + (8) + (9)]	11,974,999
(12) July 1, 2017 Total Cost As Percentage of Payroll [(11) / (10)]	18.21%
(13) Employer Total Cost for Fiscal 2018-2019 [(11) x $1.076^{1\frac{1}{2}}$]	13,365,767
(14) Fiscal 2018-2019 Total Cost As Percentage of Payroll [(13) / (10)]	20.32%

B.2 Minimum Amortization Schedule Under Title 47-20 of the Georgia Annotated Code

Item	Remaining Period (Years)	Outstanding Balance	Amortization Payment
1) Charges			
• Initial Unfunded Actuarial Liability	16	$10,239,097	$1,047,739
• Plan Changes	7	$478,249	$84,206
• 2003 Actuarial Loss	2	$1,500,560	$777,747
• 2004 Actuarial Loss	3	$2,691,427	$963,601
• 2005 Actuarial Loss	4	$2,159,263	$600,494
• 2006 Actuarial Loss	5	$837,110	$192,801
• Assumption Change	21	$8,041,410	$723,316
• Retiree Cost-of -Living Increase	1	$455,206	$455,206
• 2007 Actuarial Loss	6	$410,990	$81,624
• 2008 Actuarial Loss	7	$2,787,768	$490,846
• 2009 Actuarial Loss	8	$4,212,981	$671,032
• 2010/11 Assumption Change	24	$6,483,847	$553,359
• 2010 Actuarial Loss	9	$2,486,259	$363,759
• 2011/2012 Actuarial Loss	10	$2,535,806	$344,907
• 2012/2013 Assumption Change	26	$4,413,752	$366,291
• 2014/2015 Assumption Change	28	$10,957,612	$888,182
• 2015/2016 Actuarial Loss	14	$4,397,331	$484,252
Total Charges		$65,088,668	$9,089,362
2) Credits			
• 2012/2013 Actuarial Gain	11	$1,613,441	$205,984
• 2013/2014 Actuarial Gain	12	$2,906,636	$351,060
• 2014/2015 Actuarial Gain	13	$3,104,763	$357,083
• 2016/2017 Actuarial Gain	15	$5,223,064	$553,333
Total Credits		$12,847,904	$1,467,460
Difference between Credits and Charges		$52,240,764	$7,621,902
Unfunded Actuarial Accrued Liability (from Section B.1)		$52,240,764	

B.3 Estimation of County Cost by Employee Group

	General & Library Employees	EMS, Law Enforcement Personnel
Actuarial Present Value of Future Benefits	$206,108,397	$126,299,639
Actuarial Present Value of Future Normal Cost Payments	30,920,999	12,380,249
Actuarial Accrued Liability	175,187,398	113,919,390
Actuarial Value of Assets	146,867,919	89,998,105
Unfunded Actuarial Accrued Liability	28,319,479	23,921,285
Current Year Normal Cost	2,846,728	1,206,369
Expense Load	162,629	137,371
Minimum Amortization Payment	4,131,798	3,490,104
County Total Cost at July 1, 2017	7,141,155	4,833,844
County Cost as Percentage of Compensation	15.52%	24.47%
Prior Year's Cost as Percentage of Compensation	17.06%	24.97%

May not calculate exactly due to rounding.

Schedule C - Actuarial Certificate

Korn Ferry Hay Group has performed an actuarial valuation of the Chatham County Employees' Retirement Plan as of July 1, 2017. The employee data and financial information utilized in this valuation were provided by Chatham County and were not audited by Korn Ferry Hay Group, but were checked for reasonableness.

I hereby certify, in accordance with Sections 47-20-1 through 47-20-62 of the Georgia Annotated Code, known as the "Public Retirement Systems Standards Law," Chatham County has adopted a policy of funding each year the actuarially computed normal cost, plus the minimum amortization payments computed in accordance with Section 47-20-10 through 47-20-13 of the Georgia Annotated Code. This funding is, however, subject to the waiver of minimum amortization payments if the plan assets exceed 150% of the plan's accumulated liabilities. The funding can also be reduced by prior excess contributions. This policy results in an expense equal to $13,365,767 (thirteen million, three hundred sixty five thousand, seven hundred sixty seven dollars) for the County for the 2018-2019 fiscal year ending June 30, 2019.

The County is expensing and funding at least the minimum required under the "Public Retirement Systems Standards Law" and disclosing those amounts required under Financial Accounting Standards Board Statement No. 36 and Governmental Accounting Standards Board Statement No. 25, in our opinion the Chatham County Employees' Retirement Plan is currently being funded on a sound actuarial basis. In accordance with Code Section 47-20-21 of the Georgia Code, I further certify that there were no plan changes or amendments since the prior valuation.

KORN FERRY HAY GROUP

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October 16, 2018

Schedule D - Actuarial Balance Sheet at July 1, 2017

Assets	
Present Assets	
Trust Fund (Market Value)	$239,259,306
Adjustment to Actuarial Value	(2,393,282)
Contribution Receivable	0
Total Present Assets (Actuarial Value)	$236,866,024
Future Assets	
Actuarial Present Value of Future Employer Contributions	$79,206,606
Actuarial Present Value of Future Employee Contributions	16,335,406
Total Future Assets	95,542,012
Total Assets	$332,408,036

Liabilities	
Actuarial Present Value of Accumulated Plan Benefits	
Vested Benefits	
Active Participants	$93,443,561
Retired Participants	162,179,963
Disabled Participants	1,479,820
Vested Terminations	4,607,390
Total	261,710,734
Non-Vested Benefits	1,742,972
Total Accumulated Benefits	$263,453,706
Actuarial Present Value of Future Benefit Accruals	
Active Participants	$68,954,330
Total Liabilities	$332,408,036

Schedule E - FASB 35 Accounting Information

E.1. Funding Status of Accumulated Plan Benefits at July 1, 2017

(1) Actuarial Present Value of Accumulated Plan Benefits	
(a) Vested (Participants)	
• Active Participants (831)	$91,191,252
• Refund of Employee Contributions to Non-Vested Active Participants (604)	2,252,309
• Retired Participants and Beneficiaries (798)	162,179,963
• Disabled Participants (14)	1,479,820
• Vested Terminated - LWOP Participants (65)	4,607,390
• Total (2,312)	261,710,734
(b) Non-Vested (604)	1,742,972
(c) Total: (a) + (b)	$263,453,706
(2) Market Value of Assets	$239,259,306
(3) Unfunded Actuarial Present Value of:	
(a) Vested Accumulated Benefits: (1a) - (2)	$22,451,428
(b) Total Accumulated Benefits: (1c) - (2)	$24,194,400
(4) Change in Actuarial Present Value of Accumulated Plan Benefits	
(a) Actuarial Present Value of Accumulated Plan Benefits at July 1, 2016	$252,771,802
(b) Changes During the Plan Year:	
(1) Retiree COLA	$0
(2) Assumption Change	$0
(3) Due to Passage of Time	$10,681,904
(c) Actuarial Present Value of Accumulated Plan Benefits at July 1, 2017	$263,453,706

Accumulated benefit liabilities described above have been calculated on accrued benefits as of July 1, 2017. The value of these benefits has been calculated using the assumptions described in Schedule K, in accordance with Interpretation 1 of the Committee on Actuarial Principles and Practices in Connection with Pension Plans of the American Academy of Actuaries. Based on these assumptions, the accumulated benefit liabilities under the Plan as of July 1, 2017 were 91% covered by the market value of plan assets.

E.2. Notes

1. The market value of assets, corresponding to the total actuarial present value of accumulated benefits, was $239,259,306 (two hundred thirty nine million, two hundred fifty nine thousand, three hundred six dollars) at June 30, 2017. The market value of assets is equal to the value reported by Chatham County plus any accrued income, less any accrued liabilities.

2. A comparison of the actuarial present value of accumulated benefits with the market value of assets provides a measure under an active plan of the progress which is being made toward the funding of the benefits which are accruing, according to the measurement methods reasonably consistent for all plans. Other actuarial calculations ordinarily are made to determine year-to-year contribution levels.

3. The actuarial values which would apply in the event the plan was terminated would differ from those shown, for many reasons including, but not necessarily limited to, the following:

   (a) Certain plan provisions, which may apply in the event of a partial or complete plan termination, are not reflected in the benefits valued or in the actuarial assumptions employed.

   (b) Vested benefits may be limited with reference to the value of the assets fund.

   (c) Actuarial computations under actuarial assumptions other than those specified herein may be required as a basis for determining plan benefits in the event of a partial or complete termination of the plan.

4. The benefits reflected above have been determined on the basis of the plan provisions in effect on the date shown. Benefits under the plan are based on a participant's average compensation during the highest three consecutive calendar years of his employment. The actuarial present values shown above for active participants are based on estimated average compensation during the years ending on the respective dates of determination. Benefits payable under all circumstances; retirement, death, disability, and vested termination of employment; are included, to the extent that they are deemed to have accrued as of the computation dates. The liability associated with the most recent cost-of-living adjustment is in Schedule E, Part A, (4) (b) (2). The liability associated with other changes in plan benefits since the prior valuation is shown in Schedule E, Part A, (4) (b) (3).

5. The actuarial present value was determined by the actuary on the basis of employee data supplied by the plan sponsor, the provisions of the plan as supplied by the plan sponsor and as described in Schedule J, and actuarial assumptions as described in Schedule K. The plan sponsor has stated that, to the best of his knowledge, the employee data is accurate and complete and that the plan provisions provided to the actuary are accurate and complete as of the valuation date. The actuarial value of assets was determined by the actuary on the basis of information supplied by the plan sponsor and by the Trustee.

E.3 County's Funding Policy and Pension Expense

1. County's Funding Policy

The County had, from 1984 through 1990, followed a policy of funding each year an amount equal to the normal cost plus an amount sufficient to amortize the July 1, 1984 unfunded accrued liability over 40 years from July 1, 1984 plus increases or decreases in accrued liability due to plan amendments over 20 years from the date incurred; actuarial gains/losses were amortized over the future working lifetime of the population from the date they were determined.

In 1990, the County began funding each year an amount equal to the normal cost, determined under the Aggregate Cost Method.

Beginning July 1, 2003, the County began funding each year an amount equal to the normal cost, determined under the Entry Age Normal Cost Method, plus the minimum amortization payments computed in accordance with Section 47-20-10 through 47-20-13 of the Georgia Annotated Code.

2. Pension Expense

In accordance with the funding policy described in (1), the pension expense for the fiscal year ending June 30, 2019 is $13,365,767 (thirteen million, three hundred sixty five thousand, seven hundred sixty seven dollars) assuming payment is spread over the 2018-2019 fiscal year, from July 1, 2018 through June 30, 2019.

Schedule F - GASB 25 Disclosure Information

F.1. Schedule of Funding Progress (dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability(AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
12/31/97	55,238	61,453	6,215	89.9	34,659	17.9
12/31/98	62,822	63,484	662	99.0	36,692	1.8
12/31/99	73,526	80,317	6,791	91.5	40,940	16.6
7/1/01*	85,352	87,146	1,794	97.9	43,134	4.2
7/1/02	90,420	97,293	6,873	92.9	41,078	16.7
7/1/03	93,250	106,259	13,009	87.8	43,760	29.7
7/1/04	94,522	117,585	23,063	80.4	46,320	49.8
7/1/05	97,428	130,304	32,876	74.8	50,935	64.5
7/1/06	102,952	142,973	40,021	72.0	55,437	72.2
7/1/07	113,248	156,624	43,376	72.3	58,929	73.6
7/1/08	125,759	180,456	54,697	69.7	63,973	85.5
7/1/09	133,288	190,218	56,930	70.1	63,436	89.7
7/1/10	140,004	200,505	60,501	69.8	62,754	96.4
7/1/11	149,502	217,191	67,689	68.8	61,180	110.6
7/1/12	157,123	224,438	67,315	70.0	60,251	111.7
7/1/13	168,227	234,175	65,948	71.8	59,873	110.1
7/1/14	187,482	245,759	58,277	76.3	63,511	91.8
7/1/15	204,832	266,651	61,819	76.8	64,568	95.7
7/1/16	218,406	280,398	61,992	77.9	66,420	93.3
7/7/17	236,866	289,107	52,241	81.9	66,410	78.7

* The valuation plan year changed from January 1 to July 1. Due to this change, there is an 18 month period between the December 31, 1999 information and the June 30, 2001 information.

F.2 Schedule of Employer Contributions

Plan Year Ended	Annual Required Contribution	Percentage Contribution
December 31, 1997	2,538,781	100
December 31, 1998	2,762,307	100
December 31, 1999	2,751,766	100
June 30, 2001 (3)	4,191,588	100
June 30, 2002	2,005,964	139.3 (4)
June 30, 2003	2,781,215	87.7 (4)
June 30, 2004	3,169,496	95.2 (4)
June 30, 2005	3,690,313	83.4
June 30, 2006	4,884,890	100.1
June 30, 2007	6,176,443	105.0
June 30, 2008	7,360,446	102.7
June 30, 2009	7,998,524	102.5
June 30, 2010	9,980,049	116.1
June 30, 2011	10,556,277	100.0
June 30, 2012	11,417,472	100.8
June 30, 2013	13,107,507	104.5
June 30, 2014	13,598,810	104.4
June 30, 2015	13,931,114	102.7
June 30, 2016	13,433,915	107.1
June 30, 2017	14,092,607	105.0

(1) 1995 actuarial required contribution totaled $2,577,036. However, only $2,227,360 was contributed.

(2) The 1996 actuarial required contribution totaled $2,161,248. However, the 1995 required actuarial contribution was unfunded by $379,398. The 1996 total contribution of $2,540,646 consisted of the actuarial required contribution of $2,161,248 plus the 1995 unfunded actuarial contribution of $349,676 plus 8.5 percent actuarial rate of return of $29,722 for a grand total of $379,398.

(3) The valuation plan year changed from January 1 to July 1. Due to this change, there was an 18 month period between the December 31, 1999 information and the June 30, 2001 information.

(4) The excess contribution for the plan year ending June 30, 2002 was sufficient to cover the shortfall for the plan year ending June 30, 2003 and 2004.

F. 3. Notes to Trend Data

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	July 1, 2017
Actuarial cost method	Entry Age Normal Actuarial Cost Method
Amortization method	Level dollar with closed amortization periods.
Remaining amortization period	The equivalent single amortization period, based on all of the current amortizations, is 9 years.
Asset valuation method	Adjusted Market Value
Actuarial assumptions:	
Investment rate of return	7.6 percent Compounded Annually
Projected salary increase (salary progression)	Compensation is assumed to increase as presented in Schedule K.
Cost-of-living adjustments	N/A
Inflation Assumption	3.0 percent

F.4. Notes to Financial Statements for the Months Ending June 30, 2017

1. The June 30, 2017 Chatham County Employees' Retirement Plan membership is 2,312 participants. A breakdown of the total by class of membership and employment is shown below.

Disabled employees, retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits by not yet receiving them.

General and Library	566	
Law Enforcement, EMS[1]	311	
Total		877

Current Employees

Vested		
General and Library	598	
Law Enforcement, EMS	233	
Non-Vested		
General and Library	375	
Law Enforcement, EMS	229	
Total		1,435
Total Participants		2,312

2. Chatham County provides retirement benefits as well as death and disability benefits. For employees hired before July 1, 2013, all benefits vest after 5 years of credited service. Employees who retire at or after age 62 (age 55 for Law Enforcement and Personnel) are entitled to an annual retirement benefit, payable monthly for life, with guaranteed payment for 60 months, in an amount equal to 2 percent of their final average earnings, for each of the first 30 years of credited service, plus 1 percent of final average earnings for the remaining years of credited service. Final average earnings is the employee's average of the highest 3 consecutive years of salary, excluding overtime, over all years of credited service. For employees hired July 1, 2013 and later, vesting requires 10 years of service and normal retirement age is 62 for all employees, including Law Enforcement members.

[1] Emergency Medical Service

General and Library employees with 10 years of credited service may retire at or after age 55 (age 50 with 15 years of service for Law Enforcement and Emergency Medical Service Personnel) and receive a reduced retirement benefit. Employees with 25 or more years of service can retire at any time with an unreduced benefit. For all employees, including Law Enforcement, hired July 1, 2013 and later, early retirement eligibility is age 55 with 10 years of service.

Effective July 1, 2007, covered employees are required to contribute 3.5 percent (previously 2.5 percent) of their salary to the plan. If an employee leaves covered employment or dies before completing 5 years of credited service, accumulated employee contributions plus related investment earnings are refunded to the employee or designated beneficiary. Chatham County is required by statute to contribute the remaining amounts necessary to finance the plan.

Schedule G - GASB 27 Disclosure Information

Development of the Net Pension Obligation (Asset)

The following schedule shows the development of the NPO

Period*	Annual Required Contribution	Interest on NPO	Adjustment to NPO	Annual Pension Cost	Actual Contribution	Increase in NPO	NPO at End of Year
2016 / 2017	14,092,607	(293,936)	526,048	14,324,719	(14,795,858)	(471,139)	(4,338,717)
2015 / 2016	13,433,915	(235,725)	421,870	13,620,060	(14,385,990)	(765,930)	(3,867,578)
2014 / 2015	13,931,114	(225,775)	398,498	14,103,838	(14,310,940)	(207,102)	(3,101,648)
2013 / 2014	13,598,810	(189,394)	324,573	13,733,988	(14,200,405)	(466,416)	(2,894,545)
2012 / 2013	13,107,507	(155,226)	251,336	13,203,618	(13,691,425)	(487,807)	(2,428,129)
2011 / 2012	11,417,472	(154,466)	238,700	11,501,706	(11,511,207)	(9,501)	(1,940,322)
2010 / 2011	10,556,277	(161,316)	247,526	10,642,486	(10,556,852)	85,634	(1,930,821)
2009 / 2010	9,980,049	(34,262)	50,742	9,996,529	(11,584,707)	(1,588,178)	(2,016,455)
2008 / 2009	7,998,524	(19,864)	26,690	8,005,350	(8,199,933)	(194,583)	(428,277)
2007 / 2008	7,360,446	(3,021)	4,160	7,361,585	(7,559,734)	(198,149)	(233,695)
2006 / 2007	6,176,443	23,932	(31,357)	6,169,018	(6,486,117)	(317,099)	(35,546)
2005 / 2006	4,884,890	24,701	(30,765)	4,878,827	(4,887,876)	(9,049)	281,553
2004 / 2005	3,690,313	(27,887)	32,601	3,695,027	(3,076,345)	618,682	290,603
2003 / 2004	3,169,496	(40,817)	41,182	3,169,861	(3,017,742)	152,119	(328,079)
2002 / 2003	2,781,215	(70,013)	67,746	2,778,948	(2,438,356)	340,592	(483,093)
2001 / 2002	2,005,964	(3,171)	5,218	2,008,011	(2,794,392)	(786,381)	(823,685)
2000 / 2001	4,191,588	(4,900)	5,236	4,191,924	(4,191,588)	336	(37,304)

* Period is the calendar year through 1999. The valuation plan year changed from calendar year to fiscal year ending June 30 in 2001. The 2000 to 2001 period is the 18 months from January 1, 2000 to June 30, 2001. Starting July 1, 2001, each period follows the fiscal year of July 1 through June 30 of the following year.

Schedule H - Emerging Cash Flow

The following table discloses the expected benefits to be paid from the Plan over the next ten fiscal years under the current set of actuarial assumptions.

Fiscal Year	Active Population	Inactive Population	Total Population
2017-2018	$1,783,440	$16,114,467	$17,897,907
2018-2019	3,312,201	15,971,245	19,283,446
2019-2020	4,704,448	15,841,269	20,545,717
2020-2021	5,974,437	15,649,564	21,624,001
2021-2022	7,196,373	15,436,917	22,633,290
2022-2023	8,181,651	15,173,999	23,355,650
2023-2024	9,158,212	14,886,791	24,045,003
2024-2025	10,122,210	14,630,730	24,752,940
2025-2026	11,094,192	14,307,847	25,402,039
2026-2027	11,986,733	13,981,945	25,968,678

Schedule I - Profiles Plan Participants

I. 1. Distribution of the Active Population by Age and Service Groups for General and Library Employees

Credited Years of Service as of July 1, 2017

Age as of July 1, 2017	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
Under 25	7	0	0	0	0	0	0	7
25-29	36	1	0	0	0	0	0	37
30-34	64	13	4	0	0	0	0	81
35-39	61	29	15	1	0	0	0	106
40-44	41	24	29	19	7	0	0	120
45-49	54	30	27	32	10	2	0	155
50-54	55	27	22	22	22	5	1	154
55-59	40	27	25	18	18	10	13	151
60-64	31	15	15	10	17	12	11	111
65+	5	9	13	6	8	1	9	51
Total	394	175	150	108	82	30	34	973

I.2. Distribution of the Active Population by Gender for General and Library Employees

	Male		Female		Total	
	2017	2016	2017	2016	2017	2016
Number of Active Employees	398	393	575	587	973	980
Average Attained Age	48.9	49.3	47.7	47.9	48.2	48.5
Average Past Service	9.0	9.6	9.9	10.4	9.6	10.1
Total Salary	$20,430,162	$19,458,880	$25,872,328	$25,645,228	$46,302,490	$45,104,108

I.3. Distribution of the Annual Earnings of the Active Population by Age Groups for General and Library Employees

Age Group	Number of People	Total Annual Earnings	Average Annual Earnings
Under 25	7	$198,434	$28,348
25-29	37	1,240,349	33,523
30-34	81	3,203,118	39,545
35-39	106	4,633,692	43,714
40-44	120	5,690,025	47,417
45-49	155	7,686,780	49,592
50-54	154	7,207,809	46,804
55-59	151	7,545,065	49,967
60-64	111	5,668,470	51,067
65+	51	3,228,748	63,309
Total	973	$46,302,490	$47,587

I.4. Distribution of the Annual Earnings for the Active Population by Service Groups for General and Library Employees

Service Group	Number of People	Total Annual Earnings	Average Annual Earnings
0-4	394	$16,636,017	$42,223
5-9	175	8,166,447	46,665
10-14	150	7,686,981	51,247
15-19	108	5,282,667	48,914
20-24	82	4,652,397	56,737
25-29	30	1,942,592	64,753
30+	34	1,935,389	56,923
Total	973	$46,302,490	$47,587

Increase in average earnings from prior year: 3.4 percent

I.5. Distribution of the Annual Earnings of the Active Population by Age Groups for Law Enforcement and Emergency Medical Service Personnel

Credited Years of Service as of July 1, 2017

Age as of July 1, 2017	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
Under 25	20	0	0	0	0	0	0	20
25-29	58	4	0	0	0	0	0	62
30-34	43	11	1	0	0	0	0	55
35-39	27	15	7	2	0	0	0	51
40-44	21	13	6	7	1	0	0	48
45-49	21	13	7	12	11	2	0	66
50-54	21	8	14	6	12	10	0	71
55-59	17	12	6	5	2	8	6	56
60-64	6	4	3	4	2	5	2	26
65+	2	1	0	0	0	2	2	7
Total	236	81	44	36	28	27	10	462

I.6. Distribution of the Annual Earnings of the Active Population by Service Groups for Law Enforcement and Emergency Medical Service Personnel

	Male		Female		Total	
	2017	2016	2017	2016	2017	2016
Number of Active Employees	285	301	177	181	462	482
Average Attained Age	43.7	43.7	41.8	41.9	43.0	43.0
Average Past Service	8.6	9.9	7.1	7.6	8.0	9.0
Total Salary	$12,792,045	$13,766,016	$7,315,219	$7,549,774	$20,107,264	$21,315,790

I.7. Distribution of the Annual Earnings of the Active Population by Age Groups for Law Enforcement and Emergency Medical Service Personnel

Age Group	Number of People	Total Annual Earnings	Average Annual Earnings
Under 25	20	$704,316	$35,216
25-29	62	2,204,373	35,554
30-34	55	1,995,744	36,286
35-39	51	1,993,817	39,094
40-44	48	1,956,280	40,756
45-49	66	3,264,854	49,467
50-54	71	3,421,991	48,197
55-59	56	2,803,553	50,063
60-64	26	1,336,802	51,415
65+	7	425,534	60,791
Total	462	$20,107,264	$43,522

I.8. Distribution of the Annual Earnings of the Active Population by Service Groups for Law Enforcement and Emergency Medical Service Personnel

Service Group	Number of People	Total Annual Earnings	Average Annual Earnings
0-4	236	$8,552,173	$36,238
5-9	81	3,184,228	39,311
10-14	44	1,968,713	44,743
15-19	36	1,795,537	49,876
20-24	28	1,776,563	63,449
25-29	27	1,919,116	71,078
30+	10	910,934	91,093
Total	462	$20,107,264	$43,522

Decrease in average earnings from prior year: 1.6 percent

I.9. Reconciliation of participants

Active Participants		
Total at July 1, 2016	1,462	
Terminated, non-vested; or received lump sum	(168)	
Terminated, benefit payable	(23)	
Retired	(53)	
Died, benefit payable	(0)	
Disabled, benefit payable	(0)	
New entrants	217	
Total at July 1, 2017		1,435
Retirees and Beneficiaries		
Total at July 1, 2016	745	
Died, no benefit payable; or benefits ceased	(4)	
Died with beneficiary	0	
Return to active	(2)	
New retirees	59	
Total at July 1, 2017		798
Terminated Vested/Leave without Pay		
Total at July 1, 2016	46	
New terminated vested	23	
Retired	(4)	
Refund of contributions	0	
Return to active	0	
Data corrections	0	
Total at July 1, 2017		65
Disabled Retirees		
Total at July 1, 2016	14	
New disabled	0	
Died	0	
Return to Active	0	
Data Corrections	0	
Total at July 1, 2017		14
Total Participants at July 1, 2017		**2,312**
Total Participants at July 1, 2016		**2,267**

I.10 Distribution of Retired and Beneficiary Population

Age as of July 1, 2017	Number	Total Annual Pension	Average Annual Pension
Up to 44	3	$ 43,119	$14,373
45-49	4	106,527	26,632
50-54	30	789,965	26,332
55-59	103	2,310,978	22,437
60-64	147	3,105,046	21,123
65-69	211	4,277,640	20,273
70-74	137	2,721,990	19,869
75-79	77	1,272,664	16,528
80-84	43	730,441	16,987
85-89	27	335,908	12,441
90-94	11	133,257	12,114
95+	5	35,459	7,092
Total	798	$15,862,994	$ 19,878

	2017	2016
Average Age	67.8	67.7
Average Pension	$19,878	$19,723

I.11. Distribution of Disabled Population

Age as of July 1, 2017	Number	Total Annual Pension	Average Annual Pension
30-39	0	$ 0	$ 0
40-44	0	0	0
45-49	0	0	0
50-54	1	19,012	19,012
55-59	0	0	0
60-64	4	24,176	6,044
65-69	4	93,025	23,256
70-74	0	0	0
75+	5	52,128	10,426
Total	14	$ 188,341	$ 13,453

	2017	2016
Average Age	68.4	67.4
Average Pension	$13,453	$13,453

I.12. Distribution of Vested Terminated and Leave Without Pay Population

Age as of July 1, 2017	Number	Total Annual Pension	Average Annual Pension
20-29	0	$ 0	$ 0
30-39	3	15,967	5,322
40-49	17	108,481	6,381
50-54	20	142,670	7,134
55-59	11	107,506	9,773
60+	14	213,421	15,244
Total	65	$ 588,045	$ 9,047

	2017	2016
Average Age	52.3	51.5
Average Pension	$9,047	$8,980

Schedule J - Summary of Significant Plan Benefit Provisions

Effective Date and Plan Year
The Plan was originally effective July 1, 1972, and most recently amended effective in 2013. The Plan year is the twelve-month period commencing July 1st and ending June 30th of each year.

Entry Date
The effective date and any July 1 or January 1 thereafter.

Eligibility
All full-time employees become participants on the first day of the month following the completion of 30 days of service, provided they agree to make the mandatory employee contributions.

Required Contributions

Participants	3.5 percent (2.5 percent before July 1, 2007) of total compensation.
Employer	Balance of cost determined by actuarial valuation.

Credited Service
A participant shall receive service credit for each month during which he is a participant in the Plan and makes the employee contributions. For new employees, credited service will begin as of their respective employment dates. The member can elect to have unused sick and/or annual leave added to credited service or age (but not both) in lieu of receiving payment for such leave.

Break in Service
With some exceptions, a break in service occurs when a participant has an interruption of continuous, full-time service with the County of more than three months.

Earnings and Average Earnings
Earnings shall mean basic annual compensation exclusive of overtime pay, longevity pay, and special payments.

Average earnings shall mean the average of the three consecutive years of highest basic annual earnings preceding the date of determination.

Normal Retirement

(1) DATE: For Law Enforcement and Emergency Medical Service Personnel hired before July 1, 2013, the first day of the calendar month following the attainment of age 55; for all other employees, the first day of the calendar month following the attainment of age 62.

(2) BENEFIT: The amount, payable monthly for the lifetime of the participant with sixty payments guaranteed and commencing at normal retirement date, equal to (on an annual basis):

2 percent of the final average earnings for each of the first 30 years of credited service plus 1 percent of final average earnings for the remaining number of years of credited service.

Delayed Retirement

(1) DATE: The first of the calendar year coinciding with or next following the participants actual retirement date, providing it is later than the normal retirement date.

(2) BENEFIT: The Normal Retirement Pension, using Average Earnings and Credited Service at the Delayed Retirement Date.

Early Retirement

(1) DATE: For Law Enforcement and Emergency Medical Service Personnel hired before July 1, 2013, the first day of the calendar month following the termination date after a participant has attained age 50 and completed 15 years of credited service; for all other employees, the first day of the calendar month following the termination date after a participant has attained age 55 and completed 10 years of credited service.

(2) BENEFIT: The Normal Retirement Benefit, using Average Earnings and Credited Service to the termination date, reduced by 1/4 of 1 percent for each month by which the Early Retirement Date precedes the Normal Retirement Date, with payment commencing on the Early Retirement Date. Any employee can elect early retirement after 25 years of service, and his benefit is not reduced for early commencement.

Deferred Vested Retirement

A participant hired before July 1, 2013 with at least 5 years of credited service who terminates his employment is entitled to a Deferred Retirement Pension commencing at his Normal Retirement Date, in an amount equal to the benefit he had accrued at the date of his termination. In lieu of this, he may elect a return of his contributions with credited interest.

Deferred Vested Retirement (continued)

A participant hired before July 1, 2013 and who terminates his employment prior to the completion of 5 years of credited service shall receive a return of his contributions plus credited interest. If he had made contributions for 12 months or less, no interest would have been credited.

Effective July 1, 2013, new hires require 10 years of service to be eligible for a deferred retirement pension.

Occupational Disability Retirement

A monthly Occupational Disability Pension benefit is payable to a participant who becomes totally and permanently disabled (as determined by the Pension Board) as a result of accident or illness incurred in performance of his duties as an employee. The benefit is computed as the Normal Retirement Pension, based on his completed years of credited service and average compensation to the disability date. The current plan pays the disability benefit immediately and without reduction for early commencement. Due to the change in disability provisions, disability benefits will no longer commence immediately. Instead, the disabled member will be paid from the long-term disability (LTD) plan and commence plan benefits in the future.

Non-Occupational Disability Retirement

A monthly Non-Occupational Disability Pension benefit is payable to a participant who becomes totally and permanently disabled (as determined by the Pension Board) due to a non-occupational accident or sickness after completing 5 or more years of credited service. The amount is the same as the Normal Retirement Pension, based on completed credited service and compensation at disability. As with the Occupational disability retirement, the disabled member will be paid from the LTD plan and commence plan benefits in the future.

Survivor's Benefit

A monthly Survivor's Benefit is payable to the spouse of a peace officer employee who dies as a result of an accident or illness incurred in the performance of his duties as an employee. The amount is 50 percent of the employee's salary at the time of death, with a maximum annual benefit of $20,000. If a minor child or children survive the spouse, the benefit is payable until the death or attainment of age 18 of the last surviving minor child.

Death Benefit

(1) Pre-Retirement: When a participant dies prior to completing the service required for an Early Retirement pension, his beneficiary shall receive a

lump sum benefit equal to the participant's contributions plus credited interest, if applicable. When a participant dies subsequent to meeting the service requirement for an Early pension or to being eligible for a Normal pension but before actually retiring, his surviving spouse shall receive the contingent portion of a 66 2/3% joint and contingent benefit option, calculated as if the participant retired the day before he or she died or a refund of contributions plus interest.

(2) Post-Retirement: The only death benefits payable, if any, are those associated with the form of benefit payment in effect.

Optional Forms of Payment
In lieu of the Normal, Delayed or Early Retirement Pensions, a participant may elect one of the following optional forms of retirement benefits:

A. Contingent Annuitant Option - a reduced monthly benefit shall be payable to the retiree with a continuation upon the death of the retiree of 100 percent, 66-2/3 percent or 50 percent to the contingent annuitant for the life of the contingent annuitant.

B. Ten Years Certain and Life Option - A reduced monthly benefit with 120 payments guaranteed instead of the 60 payments normally provided by the Plan.

C. Social Security Option - An increased monthly benefit from actual retirement to date of commencement of Social Security retirement benefits, with a reduced amount after that date so as to produce an approximately level income.

D. Life Annuity Option - An increased amount payable for Life, with no guarantee of a minimum number of monthly payments.

E. Lump Sum Option - A reduction of up to 10 percent of the monthly benefit, with payment of a lump sum of money to the participant at the time his monthly pension is first payable; the reduction must not result in a lump sum of less than $250 nor greater than $2,500.

Temporary Provisions
Early Retirement Window - There was an early retirement window in effect from January 1, 1996 through February 29, 1996. During that time, employees with ten or more years of service could retire with an additional five years of service or age credit.

Cost-of-Living Adjustments - The Plan has provided ad hoc cost-of-living adjustments (COLA) to annuitants. The following table lists the dates and amounts of the adjustments.

Date	COLA
October, 1997	3.0%
January, 1999	5.0%
May, 2000	5.0%
January, 2001	5.0%
July, 2002	1.5%
September, 2003	3.0%
September, 2004	5.0%
September, 2005	3.0%
September, 2006	5.0%
July, 2007	5.0%
July, 2008	5.0%

Schedule K - Actuarial Assumptions - Cost Calculations

Mortality - The RP-2000 Male and Female Combined Healthy Mortality Tables projected (using Projection Scale AA) to 2016 for males and to 2020 for females, and then further adjusted to ensure sufficient margin for improvement in certain age ranges. Each table includes a margin for future improvement in life expectancy.

Disability Mortality - The RP-2000 Male and Female Disabled Retiree Mortality Tables projected (using Projection Scale AA) to 2021 for males and to 2017 for females. Each table includes a margin for future improvement in life expectancy.

Withdrawal – Beginning with the 2011 Plan Year, the rates are based on actual termination experience from July 1, 2005 through July 1, 2010.

Disability – 20% of Hunter's disability rates were assumed for valuation purposes. The table was adjusted to reflect actual experience from July 1, 2005 through July 1, 2010.

Retirement - Beginning with the 2011 Plan Year, rates were based on actual retirement experience from July 1, 2005 to July 1, 2010.

Investment Return - 7.60 percent compounded annually.

Salary Progression - Beginning with the 2011 Plan Year, rates were adjusted to reflect actual compensation increases from 2005 to 2010.

Expense Loading - Plan expenses other than investment expenses, are assumed to be $300,000 per year.

Inflation Assumption – A 3 percent underlying inflation assumption is used for salary growth purposes.

Sick and Annual Leave Assumption – Participants are assumed to use on average 480 hours each of sick and annual leave for a total of 960 hours. This total is added to the credited service of all retirements from the active population based on 2,080 hour per year.

Sampling of Rates of Disability		
Age	Male	Female
20	0.000206	0.000412
25	0.000211	0.000422
30	0.000224	0.000449
35	0.000257	0.000514
40	0.000333	0.000666
45	0.000460	0.000921
50	0.000678	0.001357
55	0.001101	0.002202
60	0.002161	0.004322
65	0.000000	0.000000

Sampling of Rates of Mortality				
	Disability Mortality		Non-Disabled Mortality	
Age	Male	Female	Male	Female
30	0.020316	0.006280	0.000410	0.000216
35	0.020316	0.006173	0.000713	0.000381
40	0.019067	0.005762	0.000949	0.000522
45	0.017148	0.005663	0.001223	0.000814
50	0.019786	0.008618	0.001599	0.001189
55	0.023690	0.014432	0.002666	0.002314
60	0.029963	0.020056	0.005212	0.004573
65	0.037316	0.025736	0.010165	0.007902
70	0.045564	0.034561	0.017436	0.013630
75	0.061035	0.045563	0.030193	0.021541
80	0.088561	0.064172	0.054807	0.035879
85	0.122182	0.090458	0.092054	0.068664
90	0.168602	0.133075	0.159974	0.124002
95	0.256478	0.188001	0.259058	0.186875
100	0.337392	0.233462	0.339084	0.232763
105	0.397886	0.293116	0.397886	0.293116
110	0.400000	0.364617	0.400000	0.364617
115	0.400000	0.400000	0.400000	0.398308
120	1.000000	1.000000	1.000000	1.000000

Rates of Termination For Other Than Retirement, Disability, or Death				
	General		Law Enforcement	
Age	0-4 Years of Service	5+ Years of Service	0-4 Years of Service	5+ Years of Service
20	0.156	0.042	0.186	0.066
21	0.154	0.042	0.185	0.065
22	0.153	0.042	0.183	0.063
23	0.151	0.041	0.181	0.062
24	0.150	0.040	0.180	0.060
25	0.147	0.040	0.178	0.059
26	0.146	0.039	0.176	0.057
27	0.144	0.038	0.175	0.056
28	0.142	0.038	0.173	0.055
29	0.141	0.037	0.171	0.053
30	0.139	0.036	0.171	0.052
31	0.138	0.036	0.170	0.050
32	0.135	0.036	0.168	0.049
33	0.133	0.035	0.166	0.047
34	0.132	0.034	0.165	0.046
35	0.130	0.034	0.163	0.045
36	0.129	0.033	0.161	0.044
37	0.127	0.033	0.160	0.042
38	0.124	0.032	0.158	0.041
39	0.123	0.031	0.156	0.039
40	0.121	0.031	0.156	0.038
41	0.120	0.030	0.155	0.036
42	0.118	0.029	0.153	0.035
43	0.116	0.029	0.151	0.034
44	0.114	0.029	0.150	0.032
45	0.112	0.028	0.148	0.031
46	0.111	0.027	0.146	0.029
47	0.109	0.027	0.144	0.028
48	0.108	0.026	0.143	0.026
49	0.106	0.025	0.141	0.025
50	0.103	0.025	0.141	0.024
51	0.102	0.024	0.139	0.023
52	0.100	0.023	0.138	0.021
53	0.099	0.023	0.136	0.020
54	0.097	0.023	0.134	0.018
55	0.095	0.022	0.000	0.000
56	0.094	0.021	0.000	0.000
57	0.091	0.021	0.000	0.000
58	0.090	0.020	0.000	0.000
59	0.088	0.020	0.000	0.000
60+	0.000	0.000	0.000	0.000

Salary Scale			
Service	Real Salary Growth	Inflation Growth	Total Growth
0	3.00%	3.00%	6.00%
1	2.00%	3.00%	5.00%
2	1.50%	3.00%	4.50%
3	1.50%	3.00%	4.50%
4	1.50%	3.00%	4.50%
5	1.50%	3.00%	4.50%
6	1.00%	3.00%	4.00%
7	1.00%	3.00%	4.00%
8	1.00%	3.00%	4.00%
9	1.00%	3.00%	4.00%
10	1.00%	3.00%	4.00%
11	1.00%	3.00%	4.00%
12	1.00%	3.00%	4.00%
13	1.00%	3.00%	4.00%
14	1.00%	3.00%	4.00%
15	1.00%	3.00%	4.00%
16	0.50%	3.00%	3.50%
17	0.50%	3.00%	3.50%
18	0.50%	3.00%	3.50%
19	0.50%	3.00%	3.50%
20	0.50%	3.00%	3.50%
21	0.50%	3.00%	3.50%
22	0.50%	3.00%	3.50%
23	0.50%	3.00%	3.50%
24	0.50%	3.00%	3.50%
25	0.50%	3.00%	3.50%
26	0.50%	3.00%	3.50%
27	0.50%	3.00%	3.50%
28	0.50%	3.00%	3.50%
29	0.50%	3.00%	3.50%
30	0.50%	3.00%	3.50%
31	0.50%	3.00%	3.50%
32	0.50%	3.00%	3.50%
33	0.50%	3.00%	3.50%
34	0.50%	3.00%	3.50%
35+	0.00%	3.00%	3.00%

Assumed Rates of Retirement				
	General		Law Enforcement	
Age	Service Less than 25 Years	Service of 25 or more Years	Service Less than 25 Years	Service of 25 or more Years
50	NA	10%	5%	10%
51	NA	10%	5%	10%
52	NA	10%	5%	10%
53	NA	10%	5%	10%
54	NA	10%	25%	25%
55	10%	10%	35%	35%
56	5%	10%	10%	10%
57	5%	10%	10%	10%
58	5%	10%	10%	10%
59	5%	10%	15%	15%
60	5%	10%	15%	15%
61	25%	25%	15%	15%
62	20%	20%	50%	50%
63	20%	20%	50%	50%
64	40%	40%	100%	100%
65	30%	30%	100%	100%
66	30%	30%	100%	100%
67	50%	50%	100%	100%
68	50%	50%	100%	100%
69	50%	50%	100%	100%
70	50%	50%	100%	100%
71	100%	100%	100%	100%

Actuarial Assumptions - Actuarial Present Value of Accumulated Plan Benefits
Same as above, except no future increase in salaries was assumed.

Plan Benefits Not Valued
None.

Valuation Methods

(1) *Actuarial Cost Method* - The Entry-Age Normal Cost Method was used to determine liabilities and costs related to retirement, termination, disability and pre-retirement death benefits. The normal cost is calculated as a level annual funding cost from entry age to expected decrement date. Gains and losses are amortized over 15 years, plan assumption changes are amortized over 30 years, and plan amendments are amortized over 20 years.

The Unit Credit Actuarial Cost Method was used to determine the actuarial present value of accumulated plan benefits (both vested and non-vested) as of the valuation date.

(2) *Actuarial Asset Valuation* – Effectively, this method recognizes a gain or loss over five years at 20 percent per year. For this purpose, a gain or loss is the difference between the actual return and the expected long-term investment return (currently 7.6 percent). Any future gains and losses are also recognized over five years. After the method is in place in its fifth year, the asset value recognizes 20 percent of the current year's gain or loss and 20 percent of each of the prior four years of gains and losses. By combining five years of gains and losses, the asset fluctuations are dampened from experiencing drastic upward and downward swings in value.

Schedule L - Plan Governance Information

1. The Chatham County Employees' Retirement Plan ("the retirement plan") was established in July, 1972.

2. The plan is administered by a Pensions Board consisting of nine members, including four County officials, two county employees, two county retirees, and one citizen. The Pensions Board is responsible for administrative oversight of the retirement plan. Administrative duties and responsibilities of the Pensions Board include:

    - Establishment of a funding policy consistent with the objective of the plan.
    - Enactment of uniform and nondiscriminatory rules and regulations to carry out the provisions of the plan.
    - Appointment of actuaries, accountants, attorneys, and other consultants as needed to render advice.
    - Establishment of an investment policy.

3. An investment policy would typically describe:

    - the long range investment objectives,
    - the Board's tolerance for volatility of investment performance, target long-term asset allocations and allowable short-term deviations,
    - the Board's attitudes toward market timing and short term allocation shifts,
    - performance objectives including benchmark indices and desired level of value added
    - limits for unallocated cash,
    - rebalancing among asset classes and allocation of net contributions,
    - minimum diversification and liquidity standards,
    - prohibited investment categories,
    - manager selection and termination,
    - portfolio turnover,
    - reporting frequency,
    - proxy voting.

4. Funding Policy

    Chatham County has, since July 1, 2003, followed a policy of funding each year an amount at least equal to the normal cost plus an amount sufficient to amortize the unfunded actuarial accrued liability in accordance with the Public Retirement Systems Standards Law. This allows the amortization of July 1, 2003 unfunded actuarial accrued liability over 30 years, increases or decreases in actuarial accrued liability due to plan amendments over 20 years, actuarial gains/losses over 15 years, and changes in the actuarial accrued liability due to assumption changes over 30 years. If the plan amendment applies to retired members only, the change is amortized over 10 years. The resulting contribution can be reduced by prior year contributions in excess of the amount determined in accordance with the policy.

5. Auditor

   The trust fund assets and accounts are audited by Karp, Ronning, & Tindol, P.C.

6. Actuary

   The plan's actuary is Korn Ferry Hay Group. The actuary determines the minimum contribution amount needed to satisfy Georgia Code.